



STANDARD AGREEMENT

(version 2-20-2018)

This AGREEMENT (“Agreement”) is entered by and between **CDM Smith Inc.** (“Contractor”), located at **11490 Westheimer Road, Suite 700** and **City of League City** (“City”), a municipal corporation, located at 300 W. Walker, League City, Texas 77573 on the date set forth below.

Terms:

1. **Scope of Services:** Contractor will perform the designated services and/or provided the designated products, as set forth in **Exhibit A**, which is attached and incorporated herein, and which can be generally described as **professional engineering services associated with the 16-Inch Waterline from South Shore Harbor Booster Pump Station to FM 2094 project (WT1909)**. If there is a conflict between the terms of this Agreement and Exhibit A, the terms of this Agreement will prevail.
2. **Term and Termination:** This Agreement shall begin on **May 28, 2019** and shall terminate on **November 30, 2020**. This City reserves the right to terminate this Agreement for convenience upon seven (7) days-notice to the Contractor. Upon such termination, the City shall pay Contractor, at the rate set out in **Exhibit A**, for services satisfactorily performed or products satisfactorily provided up through the date of termination. Notwithstanding any provision in this Agreement to the contrary, the City will not be required to pay or reimburse Contractor for any services performed or for expenses incurred by Contractor after the date of the termination notice that could have been avoided or mitigated by Contractor. This Agreement is eligible for **NA** renewal option(s) with a term of **NA** year.
3. **Compensation:** Contractor shall be paid for the services, as set forth in **Exhibit A**, attached and incorporated for all purposes. In no event shall the total compensation exceed **\$152,000.00** during the term of this Agreement. The City shall pay Contractor in accordance with the Texas Government Code 2251. Contractor must submit invoices for all services, which invoices must include dates of service and details of services provided. Payment for delivery of services rendered shall not be unreasonably withheld or delayed. If the City disapproves any amount submitted for payment by Contractor, the City shall give Contractor specific reasons for disapproval in writing. Upon resolution of any disputed charges, Contractor shall submit an amended invoice covering any remaining charges to the City.
4. **Insurance:** The Contractor **is** required to maintain insurance through the term of this Agreement.

If required by the City, Contractor shall maintain Comprehensive General Liability insurance coverage of \$1,000,000 per occurrence or medical malpractice insurance (whichever applies) throughout the entire term of the Agreement. If at any point during the Agreement, Contractor will enter City property, Contractor shall also maintain the following insurance: (i) Worker’s Compensation coverage with statutory limits for the State of Texas, including Employers Liability coverage of \$500,000 per accident; (ii) Commercial Automobile Liability coverage of \$1,000,000 Combined Single Limit; (iii) for engineers and architects only: Professional Liability coverage of \$5,000,000 per occurrence; and (iv) for builders only: Builder’s Risk coverage in the amount of the construction cost, including protection against named windstorm and flood. All policies must contain a waiver of subrogation against City. Comprehensive General Liability and Commercial Automobile Liability policies must name the City as Additional Insured. Contractor shall pay all insurance deductibles and deductibles must not exceed \$10,000 unless approved in advance by City.

Contractor shall provide City Certificates of Insurance evidencing these insurance requirements prior to the start of work.

5. **Independent Contractor:** Contractor is an independent contractor and is not an employee, partner, joint venture, or agent of the City. Contractor understands and agrees that he/she will not be entitled to any benefits generally available to City of League City employees. Contractor shall be responsible for all expenses necessary to carry out the services under this Agreement and shall not be reimbursed by the City for such expenses except as otherwise provided in this Agreement.
6. **Intellectual Property:** This Agreement shall be an Agreement for services and the parties intend and consider any work created as a result of this Agreement, including any and all documentation, images, products or results, to be a work for hire under federal copyright law. Ownership of the work shall belong to and remain the exclusive property of the City. The work may be edited at any time within the City's discretion. If the work would not be considered a work-for-hire under applicable law, Contractor hereby assigns, transfers, and conveys any and all rights, title and interest to City of League City, including without limitation all copyrights, patents, rights of reproduction, rights to ownership, and right to secure registrations, renewals, reissues and extensions thereof. As the sole copyright holder of the work, the City maintains and asserts the rights to use, reproduce, make derivative works from, and/or edit the Work in any form of medium, expression or technology now known or hereafter developed, at any time within the City's discretion. Contractor shall not sell, disclose or obtain any other compensation for the services provided herein. If the work is one to which the provisions of 17 U.S.C. § 106A apply, the Contractor hereby waives and appoints the City to assert on the Contractor's behalf the Contractor's moral rights or any equivalent rights regarding the form or extent of any alteration to the work (including, without limitation, removal or destruction) or the making of any derivative works based on the Work, including, without limitation, photographs, drawings or other visual reproductions of the work, in any medium, for the City's purposes.
7. **Confidentiality:** During the course of the work and/or services to be provided under this Agreement, Contractor may come in contact with confidential information of the City. Contractor agrees to treat as confidential the information or knowledge that becomes known to Contractor during performance of this Agreement and not to use, copy, or disclose such information to any third party unless authorized in writing by the City. This provision does not restrict the disclosure of any information that is required to be disclosed under applicable law. Contractor shall promptly notify the City of any misuse or unauthorized disclosure of its confidential information and upon expiration of this Agreement shall return to the City all confidential information in Contractor's possession or control. Contractor shall further comply with all information security policies of the City that may apply and shall not make any press releases, public statements or advertisement referring to the services provided under this Agreement or the engagement of Contractor without the prior written approval of the City.
8. **Warranties and Representations:** Contractor warrants and agrees that Contractor shall perform the Services and conduct all operations in conformity with all applicable federal, state, and local laws, rules, regulations, and ordinances. For any Service performed on premises owned or controlled by the City, Contractor warrants and agrees that Contractor will perform the Services in compliance with all City Rules, including but not limited to, prohibitions related to tobacco use, alcohol, and other drugs.
9. **Licenses/Certifications:** Contractor represents and warrants that it will obtain and maintain in effect, and pay the cost of all licenses, permits or certifications that may be necessary for Contractor's performance of this Agreement. If Contractor is a business entity, Contractor warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation; and is duly authorized and in good standing to conduct business in the State of Texas, that it has all necessary power and has received all necessary approvals to execute and deliver the Agreement and is authorized to execute this Agreement according to its terms on behalf of Contractor.
10. **Performance/Qualifications:** Contractor agrees and represents that Contractor has the personnel, experience, and knowledge necessary to qualify Contractor for the particular duties to be performed under

this Agreement. Contractor warrants that all services performed under this Agreement shall be performed consistent with generally prevailing professional or industry standards.

11. **Conflict of Interest:** Contractor warrants, represents, and agrees that Contractor presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of the Services hereunder. Contractor further warrants and affirms that no relationship or affiliation exists between Contractor and the City that could be construed as a conflict of interest with regard to this Agreement.
12. **INDEMNIFICATION: CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE CITY, AND EACH OF ITS DIRECTORS, OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS, PROCEEDINGS, COSTS, DAMAGES AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND REASONABLE LITIGATION COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF CONTRACTOR OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF CONTRACTOR IN THE EXECUTION OR PERFORMANCE OF THIS CONTRACT, TO THE EXTENT THE CLAIM ARISES FROM NEGLIGENCE, WILLFUL ACT, BREACH OF CONTRACT OR VIOLATION OF LAW.**
13. **Force Majeure:** Neither the City nor Contractor shall be liable for any delay in the performance of this Agreement, nor for any other breach, nor for any loss or damage arising from uncontrollable forces such as fire, theft, storm, war, or any other force majeure that could not have been reasonably avoided by exercise of due diligence.
14. **Notices:** Any notice given under this contract by either party to the other may be affected either by personal delivery in writing or by mail, registered or certified postage prepaid with return receipt requested. Mailed notices shall be addressed to the addresses of the parties as they appear in the contract. Notices delivered personally shall be deemed communicated at the time of actual receipt. Mailed notice shall be deemed communicated three (3) days after mailing.
15. **Texas Family Code Child Support Certification:** Pursuant to Section 231.006, *Texas Family Code*, Contractor certifies that it is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated, and payment may be withheld if this certification is inaccurate.
16. **State Auditor:** Contractor understands that acceptance of funds under the Agreement constitutes acceptance of the authority of the Texas State Auditor's Office, or any successor agency (collectively, "Auditor"), to conduct an audit or investigation in connection with those funds. Contractor agrees to cooperate with the Auditor in the conduct of the audit or investigation, including without limitation providing all records requested. Contractor will include this provision in all contracts with permitted subcontractors.
17. **Jurisdiction:** Any disputes under this Agreement shall be brought in a court of competent jurisdiction in Galveston, Texas and governed by Texas law.
18. **Alternative Dispute Resolution:** To the extent that Chapter 2260, Texas Government Code, is applicable to this Contract and is not preempted by other applicable law, the dispute resolution process provided for

in Chapter 2260 and the related rules adopted by the Texas Attorney General Pursuant to Chapter 2260, shall be used by the City and the Contractor to attempt to resolve any claim for breach of contract made by Contractor that cannot be resolved in the ordinary course of business. The Director of Finance of the City shall examine Contractor's claim and any counterclaim and negotiate with Contractor in an effort to resolve such claims. The parties hereto specifically agree that (i) neither the occurrence of an event giving rise to a breach of contract claim nor the pendency of a claim constitute grounds for the suspension of performance by Contractor, (ii) neither the issuance of this Contract by the City nor any other conduct, action or inaction of any representative of the City relating to this contract constitutes or is intended to constitute a waiver of the City's or the state's sovereign immunity to suit; and (iii) the City has not waived its right to seek redress in the courts.

19. **Entire Agreement:** This Agreement contains the entire Agreement between the parties and supersedes all prior agreements, arrangements, and understanding, oral or written between the parties relating to this Agreement. This Agreement may not be modified except by mutual written agreement of the parties executed subsequent to this Agreement.
20. **Eligibility to Receive Payment:** Contractor certifies that, as a matter of State law, it is not ineligible to receive the Agreement and payments pursuant to the Agreement and acknowledges that the Agreement may be terminated, and payment withheld if this representation is inaccurate.
21. **Payment of Debt/Delinquency to State:** Contractor certifies that it is not indebted to the City of League City and is current on all taxes owed to the City of League City. Contractor agrees that any payments owing to Contractor under the Agreement may be applied directly toward any debt or delinquency that Contractor owes the City of League City regardless of when it arises, until such debt or delinquency is paid in full.
22. **Products and Materials Produced in Texas:** If Contractor will provide services under the Agreement, Contractor covenants and agrees that in performing its duties and obligations under the Agreement, it will purchase products and materials produced in Texas when such products and materials are available at a price and delivery time comparable to products and materials produced outside of Texas.
23. **Risk of Loss:** If applicable, all work performed by Contractor pursuant to the Agreement will be at Contractor's exclusive risk until final and complete acceptance of the work by City. In the case of any loss or damage to the work prior to City's acceptance, such loss or damage will be Contractor's responsibility.
24. **Publicity:** Contractor shall not use City's name, logo or likeness in any press release, marketing materials or other public announcement without receiving City's prior written approval.
25. **Legal Construction/Severability:** In the event that any one or more of the provisions contained in this contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision, and this contract shall be construed as if such invalid, illegal or unenforceable provisions had never been contained in it. To this end, the provisions of this contract are declared to be severable. The Parties may mutually agree to renegotiate the contract to cure such illegality/invalidity or unconstitutionality if such may be reasonably accomplished.
26. **Limitations:** The Parties are aware that there are constitutional and statutory limitations on the authority of City to enter into certain terms and conditions of the Agreement, including, but not limited to, those terms and conditions relating to liens on City's property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers and limitations of legal rights, remedies, requirements and processes; limitations of periods to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorneys' fees; dispute resolution; indemnities; and confidentiality (collectively, the "Limitations"), and terms and conditions related to the Limitations will not be binding on City except to the extent authorized by the laws and Constitution of the State of Texas.

27. **Sovereign Immunity:** Except as otherwise provided by Texas law, neither the execution of the Agreement by City nor any other conduct, action or inaction of any City representative relating to the Agreement is a waiver of sovereign immunity by City.
28. **Authority:** Contractor warrants and represents that Contractor has full power and authority to enter into and perform this Agreement and to make the grant of rights contained herein. The person signing on behalf of the City represents that he/she has authority to sign this Agreement on behalf of City.
29. **Non-Waiver:** No covenant or condition of this Agreement may be waived except by written consent of the waiving party. Forbearance or indulgence by one party in any regard whatsoever shall not constitute a waiver of the covenant or condition to be performed by the other party.
30. **Prohibition on Boycotting Israel:** Pursuant to Section 2270.002, Texas Government Code, by executing this Agreement Contractor verifies that Contractor: (1) does not boycott Israel; and (2) will not boycott Israel during the term of this Agreement.
31. **Prohibition Against Business with Iran, Sudan or Foreign Terrorists Organizations:** Contractor warrants, covenants, and represents that Contractor is not engaged in business with Iran, Sudan, or any company identified on the list referenced in Section 2252.152, Texas Government Code.

Executed on this ____ day of _____, _____. *(date to be filled in by City Secretary)*

CDM SMITH INC. - "Contractor"

Amber Batson, Principal Engineer

CITY OF LEAGUE CITY - "City"

John Baumgartner, City Manager

Attest:

Diana Stapp, City Secretary

Approved as to Form:

Office of the City Attorney

Exhibit A

Scope of Services/Description of Products
(27 number of pages, including this page)

See attached proposal.



11490 Westheimer Rd, Suite 700
Houston, TX 77077
tel: 713-423-7300
fax: 281-589-8295

May 8, 2019

Mr. Jacques Gilbert
Project Manager
City of League City
300 W. Walker St.
League City, Texas 77573

Subject: Proposal for Engineering Services – 16-Inch Waterline SSH BPS to FM 2094

Dear Mr. Gilbert:

We are pleased to submit this proposal to provide the City with Engineering Services associated with the new 16-Inch Waterline from South Shore Harbour (SSH) Booster Pump Station (BPS) to FM 2094. Attached are the following:

- Exhibit A – Proposed Scope, Schedule, and Fee
- Exhibit B – Proposed Waterline Location Map
- Exhibit C – Geotechnical Engineering Subconsultant Scope of Work
- Exhibit D – Preliminary Schedule
- Exhibit E – Detailed Cost Breakdown

We also, as a courtesy, have provided an updated construction cost estimate for your use in the CIP budget planning process for FY2020, as we understand you are currently updating it.

If the scope and fee proposal described herein are acceptable to the City, please provide a copy of your latest engineering services contract for review and execution. Should you have any questions on the enclosed documents, please do not hesitate to give me a call at 713-423-7312 (direct) at any time.

Very truly yours,

A handwritten signature in blue ink that reads "Amber M. Batson".

Amber M. Batson, P.E.
Principal Engineer
CDM Smith Inc.
TX PE Firm Registration-F3043





Exhibit A: Proposed Scope, Schedule, Fee

EXHIBIT “A”
To Agreement between Owner and Engineer
(Engineering Services for 16-Inch Waterline SSH BPS to FM 2094)

This is an exhibit attached to and made a part of the Agreement dated ____ between the City of League City (Owner) and CDM Smith Inc. (Engineer) for professional services.

PROJECT DESCRIPTION

The Owner has requested the Engineer to provide data collection, engineering design, permitting, bidding assistance, and engineering services during construction for the installation of a 16-inch polyvinyl chloride (PVC) water line running south to north from South Shore Harbour (SSH) Booster Pump Station (BPS) to Farm to Market Road (FM) 2094. The new water line will be approximately 3,800 linear feet and will be installed in a dedicated easement. This new water line is intended to increase system capacity, improve hydraulic efficiencies, provide additional redundancy, and improve pressure capabilities to the SSH service area. Included as **Exhibit B** is an approximate location for the proposed pipeline.

SCOPE OF SERVICES

Task 1 Project Kickoff and Data Collection

1.1 Project Kickoff Meeting

Engineer shall participate in a project kickoff meeting with City staff to review scope elements, discuss project concerns/critical success factors, and confirm roles/responsibilities and overall schedule. Staff from Engineer may participate in person or via Skype pending date/time the meeting is scheduled. Engineer will prepare the agenda for the meeting and distribute notes following the meeting.

1.2 Existing Data Review

The Engineer shall research, review, and study record information, GIS database information, and other pertinent information of the existing facilities within the project limits including as-built information for both connection points.

1.3 Survey Verification

Owner is obtaining survey of relevant areas of the project under separate contract. Engineer shall review and provide comments on the survey prepared by others (Survey and Mapping, LLC). If it is determined that additional survey data needs to be collected, then the Owner will obtain the information and provide to Engineer in a timely manner. Owner-supplied survey will include all above-ground and below-ground appurtenances within the pipeline permeant and temporary construction easement including existing oil and gas and utility pipeline locations including depth. Survey will include any tree lines,

fences, driveways, waterways, etc. within the pipeline easement or temporary work area. Survey will include any low points and high points with the permanent and temporary work easement. Survey deliverable to engineer will be an AutoCAD Civil 3D surface prepared by the Owner's surveyor. Engineer is not responsible for obtaining any survey or for completing SUE investigations.

1.4 Geotechnical Evaluation

Engineer shall furnish the services of a professional geotechnical engineer to provide subsurface investigations of the project area that will include:

- Five standard penetration tests (SPTs) boring along the project corridor to a depth range of 10 to 20 feet (75 total drilling footage). Borings may be taken in the residential cul-de-sac about 120 ft from the proposed water line alignment. Existing concrete will be augered/cored to access the underlying subgrade.
- Laboratory testing including ASTM D2216, ASTM D4318, ASTM D1140, ASTM D2166, and ASTM D7263.
- Development of a signed and sealed Geotechnical Report shall be provided to the Owner.

The proposal from Terracon specifying the scope of work is attached as **Exhibit C**.

Task 2 Design Services

2.1 Utility Coordination

Engineer shall coordinate with the utility agencies identified within the pipeline alignment by the surveyor to collect record information (may include electric, phone, gas, cable tv, fiber optics, and others). The task includes reconciling apparent discrepancies between Owner-supplied survey data and record information from applicable utilities for proper documentation of existing utilities within the proposed pipeline alignment.

2.2 Design Document Preparation

Engineer shall prepare and submit design documents include applicable drawings and specifications for the project. Owner will supply relevant front-end specifications (Division 00) and Engineer shall furnish all technical specifications for the project.

It is assumed the following drawings will be needed:

| Sheet Number | Sheet Name |
|--------------|--------------------------|
| 1 | Cover Sheet |
| 2 | Index Sheet |
| 3 | Legend and Abbreviations |

| | |
|----|--|
| 4 | General Notes I |
| 5 | General Notes II |
| 6 | Survey Control Plan |
| 7 | Plan and Profile Sheet 1 Sta 00+00 to 15+00 |
| 8 | Plan and Profile Sheet 2 Sta 15+00 to 20+00 |
| 9 | Plan and Profile Sheet 3 Sta 20+00 to 25+00 |
| 10 | Plan and Profile Sheet 4 Sta 25+00 to 30+00 |
| 11 | Plan and Profile Sheet 5 Sta 30+00 to 35+00 |
| 12 | Plan and Profile Sheet 6 Sta 35+00 to 40+00 |
| 13 | South Shore Harbour Booster Pump Station Tie-In Plan |
| 14 | FM 2094 Tie-In Plan |
| 15 | Civil Details I - Restrained Joint Details/Bore Casing Details |
| 16 | Civil Details II - Crossing/Bedding Details |
| 17 | Civil Details III - Manhole/Flushing Hydrant |
| 18 | Civil Details IV - Air Release Valve Details |
| 19 | Civil Details V - Valve Details |
| 20 | Civil Details VI - Thrust Harness/Isolation Flange Details |
| 21 | Traffic Control Standard Details I |
| 22 | Traffic Control Standard Details II |
| 23 | Traffic Control Standard Details III |
| 24 | SWPPP Standard Details* |

*SWPPP Sheets Not Included

60-Percent Design Submittal and Review (Design Development)

Engineer shall prepare and submit design drawings at the 60-percent completion level. These drawings will generally consist of a cover sheet, key sheet, plan and profile sheets, civil sheets and detail sheets. Engineer shall provide a list of specification sections. Engineer will also provide an Opinion Probable Construction Cost (OPCC). Engineer shall provide one (1) (full-sized drawing) and two (2) (half-sized drawings) hard copies and an electronic PDF version of each deliverable. Engineer shall meet with Owner to review 60-percent submittal. Owner shall provide one compiled set of comments to Engineer. Engineer will review comments and incorporate into 90-percent submittal. Engineer will compile all Owner-supplied comments into a log and provide responses to comments with 90-percent submittal.

90-Percent Design Submittal and Review (Pre-Final)

Engineer shall prepare and submit drawings at the 90-percent completion level, which will include all drawings and specifications as well as an updated OPCC. Engineer will provide one (1) (full-sized drawing) and two (2) (half-sized drawings) hard copies and an electronic PDF version of each deliverable. Engineer shall meet with Owner to review 90%

completion submittal. Owner shall provide one compiled set of comments to Engineer. Engineer will review comments and incorporate changes into the 100-percent Issued for Bid set.

100-Percent Design Submittal (Final, Issued for Bid)

Engineer shall provide final design phase deliverables consisting of Issued for Bid drawings, specifications, and OPCC in hard copy and PDF format. This will include one (1) full size set and two (2) half size sets. Engineer will also provide two (2) copies of the final specifications and the OPCC.

Task 3 Permitting Support

Concurrent with the design phase, the Engineer shall coordinate with the potential permitting and other interested agencies to determine project permitting requirements. Agencies anticipated to have interest in the project include:

- GENCO
- TxDOT
- CCISD (Clear Creek Independent School District)
- Oil and Gas Pipeline Crossings (assumption 10 crossings)
- TCEQ

Engineer shall develop and submit permit applications for each of the permitting agencies as further detailed in the subtasks below. Associated permit application fees shall be determined by Engineer and paid by Owner. In addition to preparing the permit applications for appropriate agencies, Engineer shall assist Owner in consultations with the appropriate authorities. Consultant services shall include the following:

- Attend up to two (2) meetings/site visits/conference calls with each of the regulatory agencies during review of the permit applications for a total not to exceed ten (10) meetings/site visits for all permit application reviews in entirety.
- Respond to up to one (1) request for additional information from each regulatory agency.
- If permitting agencies require special exhibits certified by surveyor, Owner is responsible for obtaining these documents. Engineer is not responsible for surveyor-supplied exhibits required for permitting.

3.1. GENCO Canal Permit

Consultant shall prepare and submit permit application for the waterline to cross the GENCO canal via jack and bore construction.

3.2. TxDOT Permitting

Consultant shall prepare and submit a permit application to TxDOT for the waterline to cross FM 2094 via jack and bore construction.

3.3. CCISD

Engineer shall coordinate with CCISD for approval of waterline construction plans.

3.4. Oil and Gas Pipeline Crossings

Engineer shall prepare and submit applications to cross up to 10 oil and gas pipeline crossings that traverse the proposed waterline easement. Engineer will coordinate and assist the City in acquiring "Letters of No Objection" from pipeline companies for each crossing. Engineer will incorporate crossing requirements in the contract documents.

3.5. TCEQ

Engineer shall prepare and submit permit application to the Texas Commission of Environmental Quality (TCEQ) Technical Review Team for review and approval. Engineer shall respond to TCEQ comments and acquire approval to construct.

Task 4 Bid Phase Services

4.1. Assistance in Bid Advertisement Process

Owner will be responsible for coordinating and paying for the formal advertisement of the bid in accordance with procurement requirements. Engineer will assist with the bid advertisement by reviewing the ad language and uploading relevant documents to Owner's Civicast account.

4.2. Pre-Bid Conference

Engineer shall attend the pre-bid conference and assist the Owner's purchasing department with facilitating the meeting. Engineer shall conduct a site tour immediately following the pre-bid conference if desired by the potential bidders. Any questions that arise during the pre-bid conference must be formally submitted by potential bidders via official channels to be addressed via addenda.

4.3. Bid Clarifications/Addenda

Engineer will provide clarifications to technical questions that arise during the bid process. This includes preparing one (1) addenda to the construction contract documents.

4.4. Assistance in Bid Tabulation Process

Owner will preside over the bid opening and receive all formal bids. Engineer will receive bids from Owner and review to determine the lowest responsible and responsive bidder. Engineer will prepare a bid tabulation and recommendation of award letter.

4.5. Preparation of Conformed Documents

Engineer shall incorporate all clarifications issued via addenda into conformed documents (issued for construction). Engineer shall produce and transmit to the selected Contractor three (3) sets of project manuals for execution by Contractor and City. Engineer will retain one executed project manual. Engineer will provide one executed project manual, one (1) full-sized plans, three (3) half-sized plans, three (3) project manuals, and PDF versions of all documents to the Contractor. Owner will retain one executed project manual. Engineer will provide Owner with one (1) full-sized plans, three (3) half-sized plans, three (3) project manuals, and PDF versions of all conformed documents.

Task 5 Construction Phase Services

It is anticipated that the Engineer will support the Owner with engineering services during construction for a duration of 7 months from NTP to final completion, plus approved rain days and contract time change order(s). The following subtasks detail Engineer-provided services during construction and do not include part-time or full-time construction inspection services from a resident project representative (RPR). If Owner requires RPR services or if construction exceeds the duration indicated above, a contract amendment or special services agreement will be required to cover additional services.

5.1. Construction Contract Administration

Engineer shall administer the Contract between the Owner and the Contractor. This includes the issuance of all formal construction correspondence with the Contractor. Engineer will maintain logs for all submittals, RFIs, potential change order items, and any other relevant change management related documents. Engineer shall monitor progress of the project, review monthly schedules, advise Owner of potential schedule concerns, and issue notifications of non-conformance to the Contractor if needed. Engineer will review the Contractor's monthly applications for payment and provide recommendations to the Owner for processing/payment.

5.2. Coordination Meetings

Engineer will prepare for and attend construction coordination meetings including the pre-construction conference and up to seven (7) monthly construction progress meetings. Engineer will provide one member in person with applicable supporting team member(s) via skype for meetings. Following the meeting, Engineer will prepare and distribute meeting notes to attendees.

5.3. Permitting Agency Coordination

Permitting agencies may require notification of construction activities and certification of construction completion. Contractor will be responsible for notification of construction activities which will be stipulated in the contract documents. Engineer will coordinate with permitting agencies where required to certify construction completion in accordance with the plans and specifications for close-out of permits.

5.4. Shop Drawing Reviews

Engineer shall review shop drawing submittals for proposed materials and equipment for conformance with the contract documents. It is assumed that the project will require 5 submittal reviews at 3 hrs/submittal (inclusive of any re-submittals).

5.5. Interpretations and Clarifications

Engineer, after consultation with Owner, shall issue interpretations and clarifications of the Contract Documents. This may include Requests for Information (RFIs), field orders, or work change notifications. It is assumed that five RFIs and two field orders/work change directives will be issued.

5.6. Periodic Site Visits

Engineer will complete site visits to observe and document construction activities in accordance with the plans and specifications. This shall include one site visit per month in conjunction with each monthly progress meeting. Each visit assumed to include one person and last up to 2 hours.

5.7. Substantial Completion/Punch-lists

The Engineer will, together with the Contractor and Owner, determine when substantial completion occurs, defined as the ability of the Owner to achieve beneficial use of the Project. Engineer will conduct one substantial completion site visit (2 hours assumed) and will prepare and distribute the Certificate of Substantial Completion to the Owner for execution by Owner and Contractor along with associated punch-lists of remaining work.

5.8. Final Completion Walk-Through/Follow-up

The Engineer will perform one final completion walk-through with the Contractor and Owner for facilities completed to determine final completion and resolution of all punch-list items.

5.9. Record Drawings Compilation

Contractor will provide as-built documentation and survey data to Engineer following substantial completion of construction. Engineer shall prepare record drawings based on as-built markups provided by the contractor. Owner or his inspection personnel (RPR) will review Contractor's as-builts for accuracy based upon their routine inspection services, if applicable. Engineer will not maintain a set of field drawings and will require the

Contractor's markups to produce record drawings. Engineer will submit one (1) set of full size and two (2) sets of half size Record Drawings, plus one electronic copy of the final Record Drawings in PDF format.

Task 6 Project and Quality Management

Engineer shall provide overall project and quality management which includes monitoring progress of work on a weekly basis for billing and compliance with established schedule, budget and work quality requirements, and coordination with Owner and team subconsultant to ensure timely project deliverables and budget management. The Engineer will prepare a project management plan at the beginning of the project and shall submit monthly status reports summarizing the progress of the project along with an updated project schedule (estimated 14-month project duration). Quality management reviews will be completed at design milestones prior to submittal to Owner in accordance with Engineer's Quality Management System.

Assumptions

1. Owner will provide Engineer record drawings of all available existing facilities which shall serve as the basis of design in this project. The information will be provided to Consultant within 10 calendar days of NTP.
2. Hydraulic modeling is not included as part of the project.
3. Owner will provide AutoCAD Civil 3D survey surface file for use in plan/profile development.
4. Owner's staff will provide on-site daily observation of the construction progress for general conformance of the contract documents. Resident inspection services by Engineer is not include in this scope of work.
5. Engineer assumes that there are no contaminated soils or groundwater in or around the project area.
6. Owner is responsible for paying all permitting fees including costs of public notifications in local newspapers (if required).
7. A single bidding effort is assumed. Re-bidding of the project is considered an Additional Services item not currently included in this Scope of Work.
8. Scope does not include services for addressing a bid protest.
9. Scope of services does not include any environmental work including but not limited to:; archaeology studies including coordination with the Texas Historic Commission, fault evaluations, wetlands delineation, environmental permitting including a USACOE permit, Phase 1 and 2 ESAs, United States Fish and Wildlife Studies (USFWS) and Texas

Parks and Wildlife Department (TPWD) coordination, and coordination with associated with protected trees. Permitting services are limited to the agencies listed in Task 3.

10. Scope of services does not include construction startup services, public outreach services, and easement acquisition services.
11. Scope of services assumes that the Owner will be responsibility for clearing the wooded area from South Shore Harbour Pump Station to the Genco Canal on Clear Creek ISD property. Clearing will take place prior to the start of this project allowing access for field work including survey and geotechnical work.
12. Utility locates will be completed by others.

Schedule

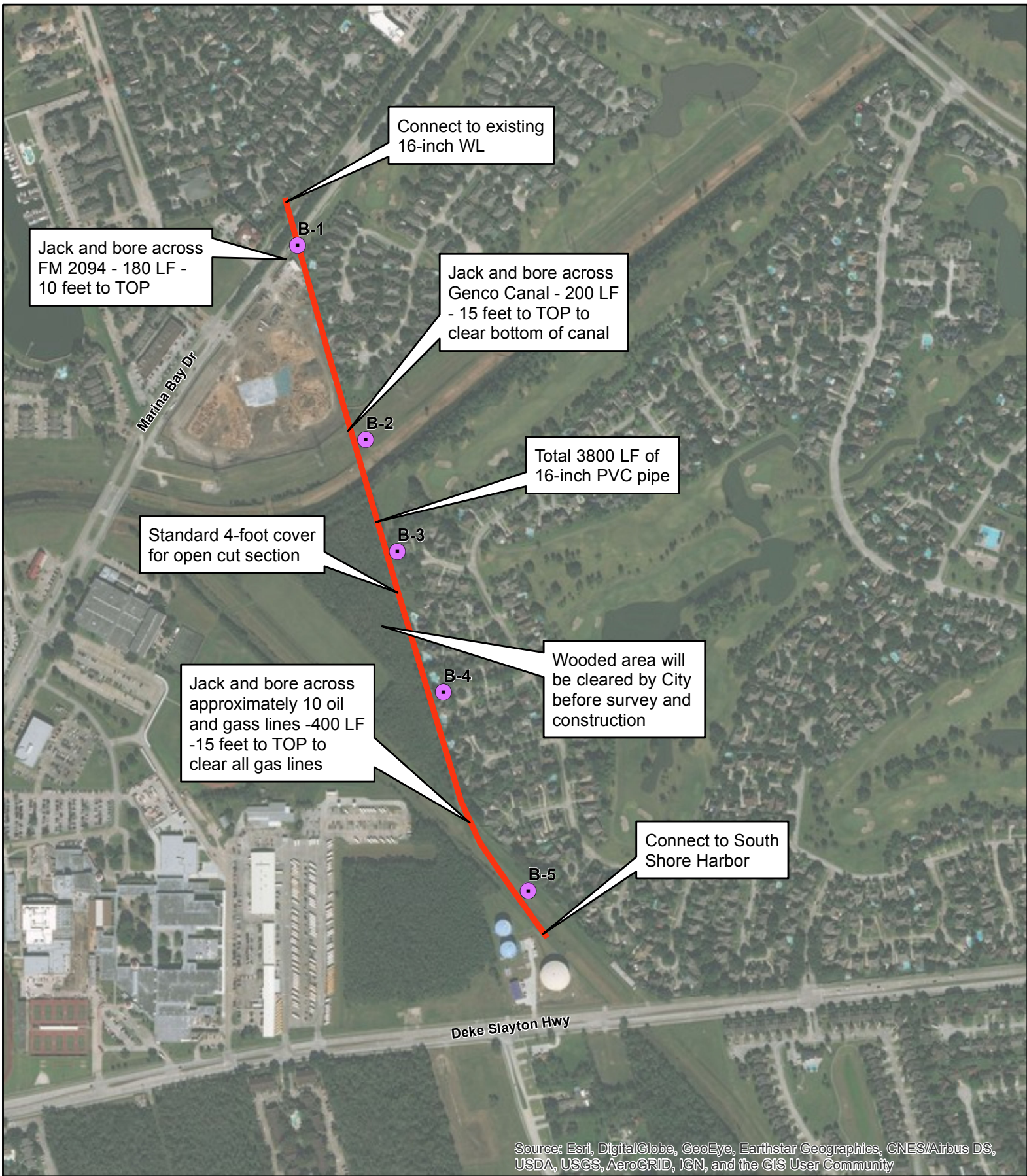
The Engineer shall commence immediately upon receipt of the Notice to Proceed. An estimated project schedule, which includes assumed review time by others, has been included as **Exhibit D**. It is assumed that construction will be substantially completed within 6 months from issuance of NTP to the Contractor. If construction duration exceeds that time, Engineer shall be eligible for additional compensation for time-dependent services.

Payment Terms

It is proposed that these services detailed herein are completed on a lump sum basis for an amount of \$152,000.00. A detailed breakdown of costs is provided in **Exhibit E**.



Exhibit B: Proposed Water Line Location




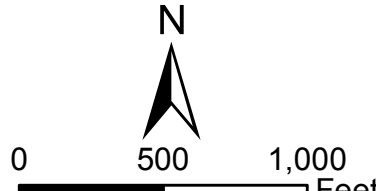


| | | | |
|--|--|--|---|
|  | <p>Installation of a 16-inch Waterline SSHBPS to FM 2094</p> <p>Location Map</p> |  | <p>Legend</p> <p> Borings</p> <p> Pipe</p> |
|--|--|--|---|



Exhibit C: Geotechnical Engineering Subconsultant Scope of Work

EXHIBIT A - PROJECT UNDERSTANDING

Our scope of work is based on our understanding of the project after discussion with the client and the expected subsurface conditions as described below. We request the design team provide input to verify this information prior to our initiation of field exploration activities.

Site Location

| Item | Description |
|---------------------|---|
| Site location | The proposed waterline will run from South Shore Harbour booster pump station (SSH BPS) to FM 2094 (Marina Bay Drive) about 500 feet east of its intersection with Constellation Boulevard in League City, Texas. |
| Existing conditions | Based on a site visit, the alignment of the proposed waterline is mostly wooded. The proposed waterline will cross a canal about 1,100 feet south of FM 2094. Residential buildings were observed to the east of the site. |
| Site access | The portion of the proposed waterline in between the canal and SSH BPS is currently inaccessible to our drilling rig due to the site being wooded. Therefore, two of our borings are planned to be drilled in the residential cul-de-sacs to the east of the site. This proposal assumes that no drilling permit is required to drill in the residential neighborhoods. |

Planned Construction

| Item | Description |
|-----------------------------|---|
| Proposed improvements | Approximately 3,800 linear feet of PVC 16-inch diameter waterline to provide additional flow and pressure capabilities to the SSH marina area as well as additional redundancy. |
| Proposed waterline depth | Information regarding the depth of installation of the proposed waterline was not available at the time of this proposal. We have assumed that the depth of installation at any location is at least 4 feet shallower than the requested boring depth near that location. |
| Utility installation method | Open cut excavation except at the canal crossing where trenchless methods will be utilized. |

EXHIBIT B - SCOPE OF SERVICES

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

As requested, the field exploration program is planned to consist of the following:

| Number of Borings | Boring Depth (feet) ¹ |
|-------------------|-------------------------------------|
| 2 | 10 |
| 2 | 20 |
| 1 | 15 |

¹. Below existing grade.

The total drilling footage is planned to be 75 feet. Borings B-3 and B-4 (see attached Anticipated Exploration Plan) are planned to be drilled in the residential cul-de-sacs which is about 120 feet away from the proposed waterline alignment. The existing concrete at B-3 and B-4 will be augered/cored to access the underlying subgrade.

Boring Layout and Elevations: We use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-25 feet. Field measurements from existing site features are also utilized.

Subsurface Exploration Procedures: We plan to advance soil borings with an ATV-mounted drilling equipment using continuous flight augers (solid stem). Five samples are obtained in the upper 10 feet and at intervals of 5 feet thereafter. Soil samples are generally recovered using open-tube samplers. Hand penetrometer tests are performed on samples of cohesive soils to serve as a general measure of consistency. Granular soils and soils for which good quality open-tube samples could not be recovered are generally sampled by means of the Standard Penetration Test (SPT). This test consists of measuring the number of blows (N) required for a 140-pound hammer free falling 30 inches to drive a standard split-spoon sampler 12 inches into the subsurface material after being seated six inches. This blow count or SPT N-value is used to evaluate the stratum.

The samples are placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. In addition, we observe and record groundwater levels during drilling and sampling.

Cost Estimate for Geotechnical Engineering Services

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Our exploration team prepares field boring logs as part of standard drilling operations. Field boring logs also include sampling depths, penetration distances and other relevant sampling information. Field logs include visual classifications of materials observed during drilling and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the geotechnical engineer's interpretation and include modifications based on observations and laboratory tests.

Property Disturbance: We backfill borings with auger cuttings. Our services do not include repair of the site beyond backfilling our borings. Excess auger cuttings are dispersed in the general vicinity of the boring. Because backfill material often settles below the surface after a period, we recommend borings be checked periodically and backfilled, if necessary. We can provide this service or grout the holes for additional fees, at your request.

Laboratory Testing

The project engineer reviews field data and assigns various laboratory tests to better understand the engineering properties of various soil strata. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practices and professional judgement. Standards noted below include reference to other related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D1140 Standard Test Methods for Amount of Materials in Soils Finer than the No. 200 Sieve
- ASTM D2166/D2166M Standard Test Method for Unconfined Compressive Strength of Cohesive Soil
- ASTM D7263 Standard Test Method for Laboratory Determination of Density (Unit Weight) of Soil Specimens

Our laboratory testing program also includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Proposal for Geotechnical Engineering Services

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Safety

Terracon is currently not aware of any environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our scope of services does not include any level of environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings into the subsurface, therefore Terracon complies with local regulations to request a utility location service through Texas 811. We consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

All private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are not made aware to us. If the owner/client is not able to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating services. Fees associated with these additional services are not included in our current scope of services. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

Site Access: By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.

Engineering and Project Delivery

Results of our field and laboratory programs are evaluated by a professional engineer licensed in the State of Texas. The engineer develops a geotechnical site characterization, performs the engineering calculations necessary to evaluate foundation alternatives, and develops appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our [GeoReport](#) system. Upon initiation we will provide you and your design team the necessary link and password to access the website (if you don't already have one). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to all project documents as they are uploaded to the site, and a collaboration portal. A typical delivery process includes three basic stages:

Proposal for Geotechnical Engineering Services

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- Stage 1: Project Planning
- Stage 2: Site Characterization
- Stage 3: Geotechnical Engineering

When utilized, a collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we will upload a printable version of our complete final geotechnical engineering report. This includes the professional engineer's seal and signature, which documents our services. All previous submittals, collaboration, and final report will be maintained in our system indefinitely. This allows future reference and integration into subsequent aspects of our services, as the project goes through final design and construction.

The final Geotechnical Engineering report provides the following:

- Boring logs with field and laboratory data;
- Stratification based on visual soil classification;
- Groundwater levels observed in borings during and after completion drilling; and
- Waterline construction considerations.

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in **Exhibit A** and our planned scope of services outlined in **Exhibit B**, our base fees for different type of rigs are shown in the following table:

| Task | Lump Sum Fee |
|---|--------------|
| Subsurface Exploration, Laboratory Testing, Geotechnical Consulting & Reporting | \$5,400 |

Our scope of services does not include services associated with surveying of boring locations, special equipment for wet ground conditions, or repair of damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services.

Additional consultation (such as attendance on a project conference call, engineering analysis, review of project documents, etc.) requested will be performed on a time-and-materials basis. The fee to provide additional consultation services will be in excess of the above provided fee to complete the geotechnical services and will not be incurred without prior approval of the client.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require scope of work revisions and/or result in higher fees, we will contact you for approval, prior to initiating these services. A supplemental proposal stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the Supplemental Agreement for Services form.

Project Schedule

We developed a schedule to complete the scope of services, based upon our existing availability and understanding of your project schedule. However, this does not account for any delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

| GeoReport Stage | Posting Date from Notice to Proceed ^{1, 2} |
|--------------------------|---|
| Project Planning | 3 working days |
| Site Characterization | 17 working days |
| Geotechnical Engineering | 22 working days |

Proposal for Geotechnical Engineering Services

Capital Improvement Plan Waterline ■ League City, Texas

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| GeoReport Stage | Posting Date from Notice to Proceed ^{1, 2} |
|---|---|
| <ol style="list-style-type: none">1. Upon receipt of your notice to proceed we will activate the schedule component of our GeoReport website with specific, anticipated working dates for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.2. We will maintain a current calendar of activities within our GeoReport website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery. | |

Anticipated Exploration Plan

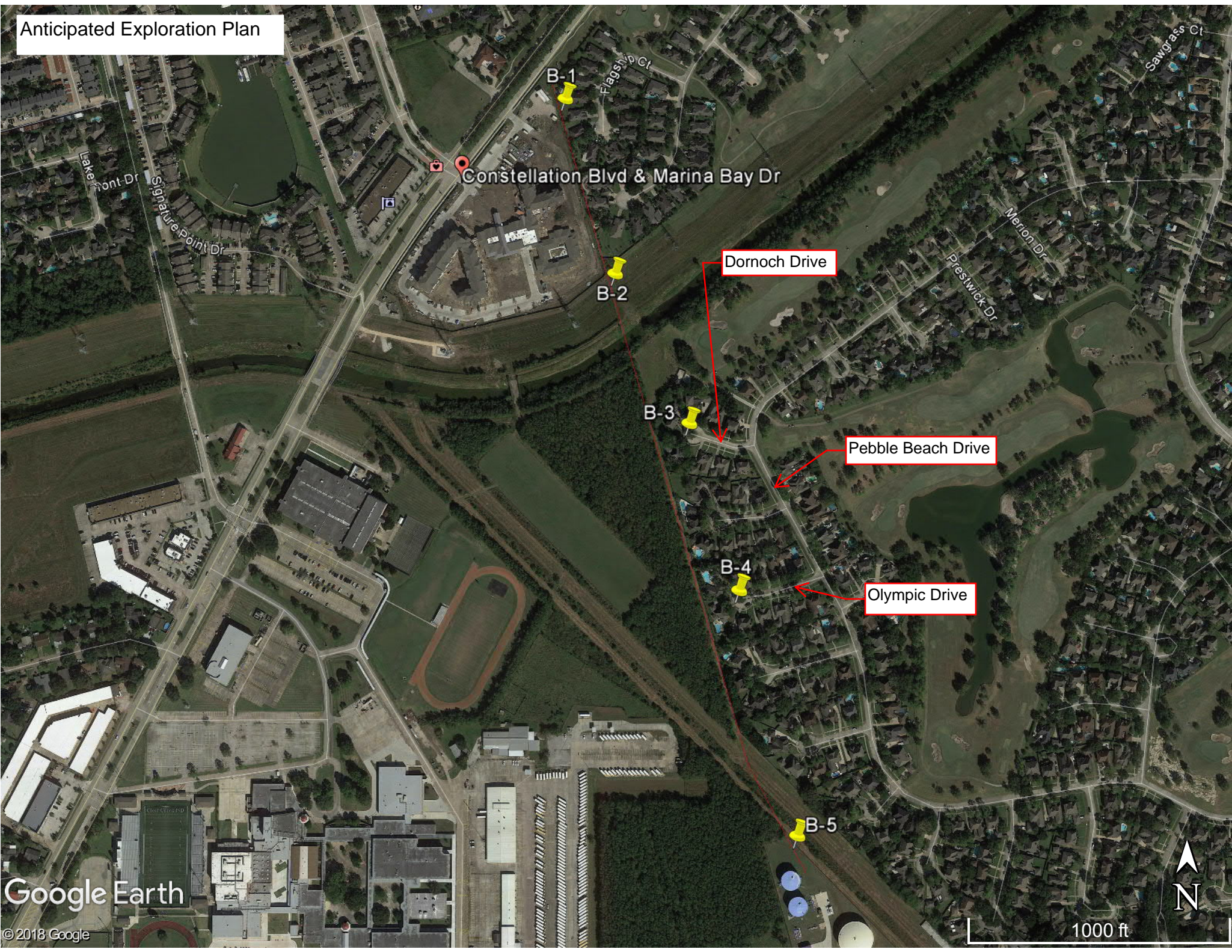




Exhibit D: Preliminary Schedule

| ID | Task Name | Duration | Start | Finish | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|---|---|-----------|--------------|--------------------|-------------|--------------------|-------------|-----------------------|-------------|-----------------|-------------|-------------|
| 1 | Project Initiation Activities | 6 days | Thu 6/13/19 | Thu 6/20/19 | | | | | | | | |
| 2 | Notice to Proceed | 0 days | Thu 6/13/19 | Thu 6/13/19 | | | | | | | | |
| 3 | Initiate Project Management Tasks | 2 days | Thu 6/13/19 | Fri 6/14/19 | | | | | | | | |
| 4 | Schedule internal kickoff meeting | 2 days | Mon 6/17/19 | Tue 6/18/19 | | | | | | | | |
| 5 | Schedule kickoff meeting with League City | 2 days | Wed 6/19/19 | Thu 6/20/19 | | | | | | | | |
| 6 | Design and Permitting Phase | 120 days | Fri 6/21/19 | Thu 12/5/19 | | | | | | | | |
| 7 | Data Collection | 7 days | Fri 6/21/19 | Mon 7/1/19 | | | | | | | | |
| 8 | Record Drawing Review | 5 days | Fri 6/21/19 | Thu 6/27/19 | | | | | | | | |
| 9 | Survey Verification | 5 days | Fri 6/21/19 | Thu 6/27/19 | | | | | | | | |
| 10 | Geotechnical Evaluation | 7 days | Fri 6/21/19 | Mon 7/1/19 | | | | | | | | |
| 11 | 60 Percent Design | 53 days | Fri 6/21/19 | Tue 9/3/19 | | | | | | | | |
| 12 | Commence utility coordination with other utilities | 4 days | Fri 6/28/19 | Wed 7/3/19 | | | | | | | | |
| 13 | Preliminary discussions with permitting agencies/Commence preparation of applications | 2 days | Fri 6/21/19 | Mon 6/24/19 | | | | | | | | |
| 14 | Prepare 60% Plans for review | 15 days | Fri 6/28/19 | Thu 7/18/19 | | | | | | | | |
| 15 | Prepare 60% OPCC | 1 day | Fri 6/21/19 | Fri 6/21/19 | | | | | | | | |
| 16 | Prepare table of contents for specifications | 1 day | Fri 6/21/19 | Fri 6/21/19 | | | | | | | | |
| 17 | Internal review of 60% design submittal | 4 days | Fri 7/19/19 | Wed 7/24/19 | | | | | | | | |
| 18 | Incorporate internal review comments | 5 days | Thu 7/25/19 | Wed 7/31/19 | | | | | | | | |
| 19 | Submit 60% design submittal to League City | 1 day | Thu 8/1/19 | Thu 8/1/19 | | | | | | | | |
| 20 | Submit permit applications to GENCO, TxDOT, CCISD, and Oil & Gas (60% plans) | 1 day | Thu 8/1/19 | Thu 8/1/19 | | | | | | | | |
| 21 | Review meeting with League City | 20 days | Fri 8/2/19 | Thu 8/29/19 | | | | | | | | |
| 22 | Prepare comment responses to 60% design submittal | 3 days | Fri 8/30/19 | Tue 9/3/19 | | | | | | | | |
| 23 | 90 Percent Design | 47 days | Wed 9/4/19 | Thu 11/7/19 | | | | | | | | |
| 24 | Prepare 90% OPCC | 15 days | Wed 9/4/19 | Tue 9/24/19 | | | | | | | | |
| 25 | Prepare 90% Design Plans for review | 15 days | Wed 9/4/19 | Tue 9/24/19 | | | | | | | | |
| 26 | Prepare 90% Specifications for review | 15 days | Wed 9/4/19 | Tue 9/24/19 | | | | | | | | |
| 27 | Internal review of 90% design submittal | 4 days | Wed 9/25/19 | Mon 9/30/19 | | | | | | | | |
| 28 | Incorporate internal review comments | 5 days | Tue 10/1/19 | Mon 10/7/19 | | | | | | | | |
| 29 | Submit 90% design submittal to League City | 1 day | Tue 10/8/19 | Tue 10/8/19 | | | | | | | | |
| 30 | Submit updated plans to other permitting agencies | 1 day | Wed 10/9/19 | Wed 10/9/19 | | | | | | | | |
| 31 | Submit permit application to TCEQ (90% plans) + (90 day review period) | 1 day | Wed 10/9/19 | Wed 10/9/19 | | | | | | | | |
| 32 | Review meeting with League City | 19 days | Wed 10/9/19 | Mon 11/4/19 | | | | | | | | |
| 33 | Prepare comment responses to 90% submittal. Finalize all comments | 3 days | Tue 11/5/19 | Thu 11/7/19 | | | | | | | | |
| 34 | 100 Percent Design | 20 days | Fri 11/8/19 | Thu 12/5/19 | | | | | | | | |
| 35 | Finalize all design drawings, specifications, and OPCC | 10 days | Fri 11/8/19 | Thu 11/21/19 | | | | | | | | |
| 36 | Internal review of 100% design submittal | 5 days | Fri 11/22/19 | Thu 11/28/19 | | | | | | | | |
| 37 | Incorporate internal review comments | 2 days | Fri 11/29/19 | Mon 12/2/19 | | | | | | | | |
| 38 | Sign and seal final design products | 1 day | Tue 12/3/19 | Tue 12/3/19 | | | | | | | | |
| 39 | Submit final design deliverable, issued for bid | 2 days | Wed 12/4/19 | Thu 12/5/19 | | | | | | | | |
| 40 | Submit final plans to permitting agencies | 2 days | Wed 12/4/19 | Thu 12/5/19 | | | | | | | | |
| 41 | Bidding Services | 31 days | Tue 12/10/19 | Tue 1/21/20 | | | | | | | | |
| | | | | | | | | | | | | |
| Project: Project Schedule_Baselin Date: Tue 5/7/19 | | Task | | Project Summary | | Inactive Milestone | | Manual Summary Rollup | | Deadline | | |
| | | Split | | External Tasks | | Inactive Summary | | Manual Summary | | Progress | | |
| | | Milestone | | External Milestone | | Manual Task | | Start-only | | Manual Progress | | |
| | | Summary | | Inactive Task | | Duration-only | | Finish-only | | | | |
| Page 1 | | | | | | | | | | | | |

| ID | Task Name | Duration | Start | Finish | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|----|---|----------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 42 | Bid advertised (by League City) | 0 days | Tue 12/10/19 | Tue 12/10/19 | | | | | | | | |
| 43 | Respond to RFIs/issue addenda | 22 days | Tue 12/10/19 | Wed 1/8/20 | | | | | | | | |
| 44 | Attend pre-bid conference | 0 days | Tue 12/17/19 | Tue 12/17/19 | | | | | | | | |
| 45 | Bid opening | 0 days | Mon 1/13/20 | Mon 1/13/20 | | | | | | | | |
| 46 | Evaluate bids | 7 days | Mon 1/13/20 | Tue 1/21/20 | | | | | | | | |
| 47 | TCEQ permit approval deadline | 0 days | Tue 1/7/20 | Tue 1/7/20 | | | | | | | | |
| 48 | Construction Phase Services | 150 days | Mon 2/17/20 | Fri 9/11/20 | | | | | | | | |
| 49 | League City to Issue Construction Notice To Proceed | 0 days | Mon 2/17/20 | Mon 2/17/20 | | | | | | | | |
| 50 | Substantial Completion | 120 days | Mon 2/17/20 | Fri 7/31/20 | | | | | | | | |
| 51 | Final Completion | 30 days | Mon 8/3/20 | Fri 9/11/20 | | | | | | | | |

Project: Project Schedule_Baselin
Date: Tue 5/7/19

Task

Split

Milestone

Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Deadline

Progress

Manual Progress

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Exhibit E: Detailed Cost Breakdown

| | |
|---|------------------|
| BASIC SERVICES | |
| Preliminary & Final Design (lump sum) | \$93,000 |
| Bidding (lump sum) | \$10,000 |
| Construction Phase Services (lump sum) | \$30,000 |
| <i>Subtotal</i> | <i>\$133,000</i> |
| | |
| ADDITIONAL SERVICES | |
| Geotechnical Investigation (cost plus 10% markup) | \$6,000 |
| Permitting Assistance (lump sum) | \$13,000 |
| <i>Subtotal</i> | <i>\$19,000</i> |
| | |
| TOTAL CONTRACT AMOUNT | \$152,000 |