



**NOTICE OF A SPECIAL SESSION OF THE
VINEYARD CITY COUNCIL
November 24, 2020 at 12:00 PM (noon)**

PUBLIC NOTICE is hereby given that the Vineyard City Council will hold a special session on Tuesday November 24, 2020 at 12:00 PM (noon). *This meeting will be held electronically because of the gathering restrictions in force due to the COVID-19 Pandemic. This meeting can be viewed live through Zoom.*

Please click on this link

<https://zoom.us/j/99036966671?pwd=S0hkcnNRbEZmL2oxK2w2VWZucHI4UT09> or dial 1-301-715-8592 US or 1-253-215-8782 to join the meeting. You can also view the meeting on our [YouTube Channel](#).

AGENDA

Presiding Mayor Julie Fullmer

SPECIAL SESSION

1. CALL TO ORDER/INVOCATION/INSPIRATIONAL THOUGHT/PLEDGE OF ALLEGIANCE – *to be announced.*

WRITTEN DETERMINATION

This meeting will be an electronic meeting according to Vineyard Municipal Code Section 3.08.030.

I, Julie Fulmer, as the Mayor of the Vineyard City Council, do hereby find and declare as follows:

1. Due to the Emergency conditions which currently exist in the State of Utah, and specifically in Utah County and Vineyard City as a result of the COVID-19 Pandemic and the recent surge in COVID-19 infections across the state and in Utah County, the holding of public meetings with an anchor location as defined in the *Utah Open and Public Meetings Act*, presents a substantial risk to the health and safety of those who may be present at the anchor location; and
2. The risk to those who may be present at an anchor location can be substantially mitigated by holding public meetings of the City Council pursuant to electronic means that allow for public participation via virtual means; and
3. The City has the means and ability to allow virtual participation in the public meetings in accordance with the *Utah Open and Public Meetings Act*;

NOW THEREFORE, BASED UPON THE FOREGOING,

For thirty days from the date of this Order, meetings of the Vineyard City Council shall be conducted by virtual means without an anchor location.

2. BUSINESS ITEMS

2.1 DISCUSSION AND ACTION – Temporary Construction Easement

Public Works Director/City Engineer Don Overson will present a temporary construction easement for Utah Department of Transportation (UDOT)/Utah Transit Authority (UTA). The UTA double tracking project is moving forward and is needed to complete and open our frontrunner station. The contractor is waiting for a notice to proceed, and in order to do that they need a temporary construction easement from the city on the property. They will be making some site improvements for us in exchange for the construction easement. The mayor and City Council will take appropriate action.

2.2 DISCUSSION AND ACTION – Tank Design Contract Approval

Public Works Director/City Engineer Don Overson will present a proposal from Terracon for a geotechnical study on the nine acre Public Works' site, to determine the soil stability needed for the design of the water tank. The mayor and City Council will take appropriate action.

3. ADJOURNMENT

The next regularly scheduled meeting is December 9, 2020.

The Public is invited to participate in all City Council meetings. In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the City Recorder at least 24 hours prior to the meeting by calling (801) 226-1929.

I the undersigned duly appointed Recorder for Vineyard, hereby certify that the foregoing notice and agenda was emailed to the Salt Lake Tribune, posted at the Vineyard City Offices, the Vineyard website, the Utah Public Notice website, and delivered electronically to city staff and to each member of the Governing Body.

AGENDA NOTICING COMPLETED ON: November 21, 2020

CERTIFIED (NOTICED) BY: /s/ Pamela Spencer
PAMELA SPENCER, CITY RECORDER

**ORDER ON PUBLIC MEETINGS OF THE
VINEYARD CITY COUNCIL**

I, Julie Fulmer, as the Mayor of the Vineyard City Council, do hereby find and declare as follows:

1. Due to the Emergency conditions which currently exist in the State of Utah, and specifically in Utah County and Vineyard City as a result of the COVID-19 Pandemic and the recent surge in COVID-19 infections across the state and in Utah County, the holding of public meetings with an anchor location as defined in the *Utah Open and Public Meetings Act*, presents a substantial risk to the health and safety of those who may be present at the anchor location; and
2. The risk to those who may be present at an anchor location can be substantially mitigated by holding public meetings of the City Council pursuant to electronic means that allow for public participation via virtual means; and
3. The City has the means and ability to allow virtual participation in the public meetings in accordance with the *Utah Open and Public Meetings Act*;

NOW THEREFORE, BASED UPON THE FOREGOING,

For thirty days from the date of this Order, meetings of the Vineyard City Council shall be conducted by virtual means without an anchor location.

DATED this ____ day of November, 2020.

By: _____

Julie Fullmer, Mayor

ATTEST: _____

Pamela Spencer, City Recorder





Public Works Property

UTA Front Runner Track

N00°20'34"W 50.00'

N89°39'26"E 433.82'

N00°14'18"E 341.83'

S27°16'04"E 459.45'

UDOT Temporary Construction Easement

636.28' S89°39'26"W

1600 North

November 17, 2020



City of Vineyard
125 South Main Street
Vineyard, Utah 84058

Attn: Mr. Chris Wilson, P.E.
P: (801) 592-3437
E: chrisw@vineyardutah.gov

Re: Proposal for Geotechnical Engineering Services
City of Vineyard Water Tank
4400 West Vineyard Road
Vineyard, Utah
Terracon Proposal 61205229

Dear Mr. Wilson:

We appreciate the opportunity to submit this proposal to City of Vineyard (Vineyard) to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached Agreement for Services.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Exploration Plan

Our base fee to perform the Scope of Services described in this proposal is \$38,420. See Exhibit C for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Supplement to Agreement for Services to our office.

Sincerely,

Terracon Consultants, Inc.

A handwritten signature in dark ink, reading 'Justin Krieg' in a cursive script.

Justin M. Krieg, P.E.
Geotechnical Project Manager

John Mancini, P.E.
Senior Associate

AGREEMENT FOR SERVICES

This AGREEMENT is between Vineyard City ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Vineyard City Water Tank project ("Project"), as described in Consultant's Proposal dated 11/16/2020 ("Proposal"), including but not limited to the Project Information section, unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Proposal, including but not limited to the Scope of Services section ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the Project.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Proposal, including but not limited to the Compensation section, unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties other than those who have executed Consultant's reliance agreement, subject to the prior approval of Consultant and Client.
6. **LIMITATION OF LIABILITY. CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$250,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION IN THE FORM OF A SURCHARGE TO BE ADDED TO THE AMOUNT STATED IN THE COMPENSATION SECTION OF THE PROPOSAL. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S), OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.**
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's Services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of Services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

10. **CONSEQUENTIAL DAMAGES. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.**
11. **Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
12. **Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
13. **Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client shall cause all tests and inspections of the site, materials, and Services performed by Consultant to be timely and properly scheduled in order for the Services to be performed in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss or damage or injury shall be brought against Consultant by Client or any third party unless all tests and inspections have been so performed and Consultant's recommendations have been followed. Unless otherwise stated in the Proposal, Client assumes sole responsibility for determining whether the quantity and the nature of Services ordered by Client is adequate and sufficient for Client's intended purpose. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by Services not performed due to a failure to request or schedule Consultant's Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods. The extension of unit prices with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the Services. The quantities, when given, are estimates based on contract documents and schedules made available at the time of the Proposal. Since schedule, performance, production, and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost.
14. **Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of the testing procedures (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Materials unless specifically provided in the Services, and that Client is responsible for directing such disposition. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site and Consultant shall not be responsible for any claims, losses, or damages allegedly arising out of Consultant's performance of Services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
15. **Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
16. **Utilities.** Unless otherwise stated in the Proposal, Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
17. **Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

Consultant: Terracon Consultants, Inc.
 By: _____ Date: 11/18/2020
 Name/Title: Kent R. Wheeler / Regional Manager
 Address: 6949 S High Tech Dr Ste 100
Midvale, UT 84047-3707
 Phone: (801) 545-8500 Fax: (801) 545-8600
 Email: Kent.Wheeler@terracon.com

Client: Vineyard City
 By: _____ Date: _____
 Name/Title: Chris Wilson / Assistant City Engineer
 Address: 125 S. Main Street
Vineyard City, UT 84058
 Phone: (801) 592-3437 Fax: _____
 Email: chrisw@vineyardutah.org

EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by Vineyard and the expected subsurface conditions as described below. We have visited the project site to observe the site conditions. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project is located at 4400 West Vineyard Road in Vineyard, Utah and consists of an 8.5-acre parcel. Latitude/Longitude: 40.326557/-111.760347 (approximate) (See Exhibit D)
Existing Improvements	Empty field with existing Utah Transit Authority (UTA) and Union Pacific Railroad (UPRR) Tracks to the east, Vineyard Road to the south and Rocky Mountain Power Transmission lines near the west and east property lines.
Current Ground Cover	Earthen, lightly-vegetated.
Existing Topography	Relatively flat
Site Access	We expect the site, and all exploration locations, are accessible with our truck-mounted drilling equipment.
Expected Subsurface Conditions	Terracon previously conducted a geotechnical investigation for this subject site in 2019. Based on our experience and geologic mapping, the site soils consist of interbedded lacustrine silt, clay and sand soils. Groundwater is expected within about 5 feet of the ground surface

Planned Construction

Item	Description
Information Provided	Email with and conversation with Chris Wilson of Vineyard on 11/12/2020, and a site plan and conceptual tank design provided by Hansen Allen & Luce, Inc.
Project Description	The project consists of a new 6-million-gallon water tank with be constructed in the southeast corner of the parcel.
Storage Tank	The proposed water storage tank will be approximately 235 feet in diameter and approximate height of 20 feet. Tank bottom is expected to be at or near existing ground surface.
Estimated Start of Construction	Unknown

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

Terracon recommends a field exploration program consisting of the following:

Boring or CPT	Planned Boring Depth (feet) ¹	Planned Location
B-01 ²	150 or auger refusal	Center of Water Tank
B-02, B-03	100 or auger refusal	Perimeter of Water Tank
SCPT-01, CPT-02	100 or CPT refusal	Perimeter of Water Tank

1. Below ground surface.

2. If borings need to be extended deeper due to soft soils, the client will be contacted for approval. Fees per foot of drilling are provided in Exhibit C under additional services.

Boring and Cone Penetrometer Test (CPT) Layout: We will drill and push CPTs in locations staked by Vineyard. If the stake is not accessible, the boring will be drilled as near to the stake as possible and the location will be staked to be surveyed by Vineyard. Elevations, latitudes and longitudes of each exploration will be obtained from Vineyard and provided on individual boring and CPT logs.

Boring Subsurface Exploration Procedures: Borings will advance with a truck-mounted drill rig using continuous flight hollow stem augers with mud rotary techniques. Four soil samples will be obtained in the upper 10 feet of each boring, at 5-foot intervals thereafter to a depth of 100 feet and at 10-foot intervals below a depth of 100 feet. Soil sampling is typically performed using thin-wall tube and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). When thin-wall tubes are used to obtain undisturbed samples of cohesive soil, torvane and pocket pens will be used in the field to estimate shear strength and consistency. The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials encountered 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.

SCPT and CPT Subsurface Exploration Procedures: one Seismic Cone Penetrometer Test (SCPT) and one standard CPT will be advance with a truck-mounted CPT rig. A minimum of one pore pressure dissipation test per CPT or SCPT will be completed in a granular layer below the water table, if available. Shear wave velocity profiling will be completed at 1-meter intervals in the SCPT to develop Site Class.

Our exploration team will prepare CPT logs that include tip resistance, sleeve friction, pore pressure, friction ratio, and the soil behavior type (SBT) for the length of the CPT.

Property Disturbance: We will backfill borings with cement-bentonite grout. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the borehole.

Safety

Terracon is not aware of 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 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 will comply with local regulations to request a utility location service through Blue Stakes of Utah 811. We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

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 not disclosed to us. If the owner/client is unable to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating services. Fees associated with the additional services are not included in our current Scope of Services and will be forwarded to our client for approval prior to initiating. 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: Terracon must be granted access to the site by the property owner. 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.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of field work. The anticipated laboratory testing may include the following:

- Water content
- Unit dry weight
- Atterberg limits
- Unconsolidated undrained triaxial compression
- One dimensional consolidation
- Grain size analysis
- Direct shear
- Chemical analyses – pH, sulfates, chloride ion, electrical resistivity, REDOX
- Organic content

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be supervised and evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

A draft geotechnical report will be submitted to the Owner for review and comment, as soon as, geotechnical analysis and recommendations have been developed.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When services are complete, we will upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents

our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction. A hard copy and pdf format of the final report will be submitted to the Owner.

The geotechnical engineering report will provide the following:

- Boring and CPT logs with field and laboratory data
- Stratification based on CPT data and visual soil classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Deep foundation recommendations and engineering design parameters
- Shallow foundation supported on ground improvement recommendations
- Estimated settlement of foundations and nearby railroad embankment
- Seismic site classification
- Subgrade preparation/earthwork recommendations

Additional Services

In addition to the services noted above, the following are often associated with geotechnical engineering services. Fees for services noted above do not include the following:

Review of Plans and Specifications: Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation, foundation, and pavement construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

Observation and Testing of Pertinent Construction Materials: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. This is based on widely spaced exploration locations, and assuming construction methods will be performed in a manner sufficient to meet our expectations, and is consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. This allows a more comprehensive understanding of subsurface conditions and necessary documentation of construction, to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

Amendment for Geotechnical Engineering Services

City of Vineyard Water Tank ■ Vineyard, Utah

November 17, 2020 ■ Terracon Proposal 61205229



Perform Environmental Assessments: Our Scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about the potential for such conditions, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.

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 fee is shown in the following table:

Task	Lump Sum Fee
Field Exploration (3 borings and 2 CPT's)	\$24,250
Laboratory Testing	\$5,720
Geotechnical Consulting & Reporting	\$8,450
Total	\$38,420

The following table provides additional drilling footage rates if borings are added or need to be extended deeper:

Additional Drilling	Cost ^{1,2}
0 to 50 feet	\$50/ft
50 to 100 feet	\$55/ft
100 to 150 feet	\$65/ft
150 to 200 feet	\$75/ft
200 to 250 feet	\$90/ft

1. Assumes drill rig and crew are on-site and an additional mobilization is not required.

2. Includes laboratory testing of samples and drafting boring logs.

Additional services not part of the base fee include the following:

Additional Services	Fee	Initial for Authorization
Construction Materials Testing Services	TBD	

Our Scope of Services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, 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.

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 Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental

Amendment for Geotechnical Engineering Services

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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.

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 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® Delivery	Posting Date from Notice to Proceed ^{1, 2}
Project Planning	5 days
Site Characterization	20 days
Draft Geotechnical Engineering Report	30 days
Final Geotechnical Engineering Report	10 days after comment are received from Vineyard

1. Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport®** website with specific, anticipated calendar days 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.

EXHIBIT D – SITE LOCATION

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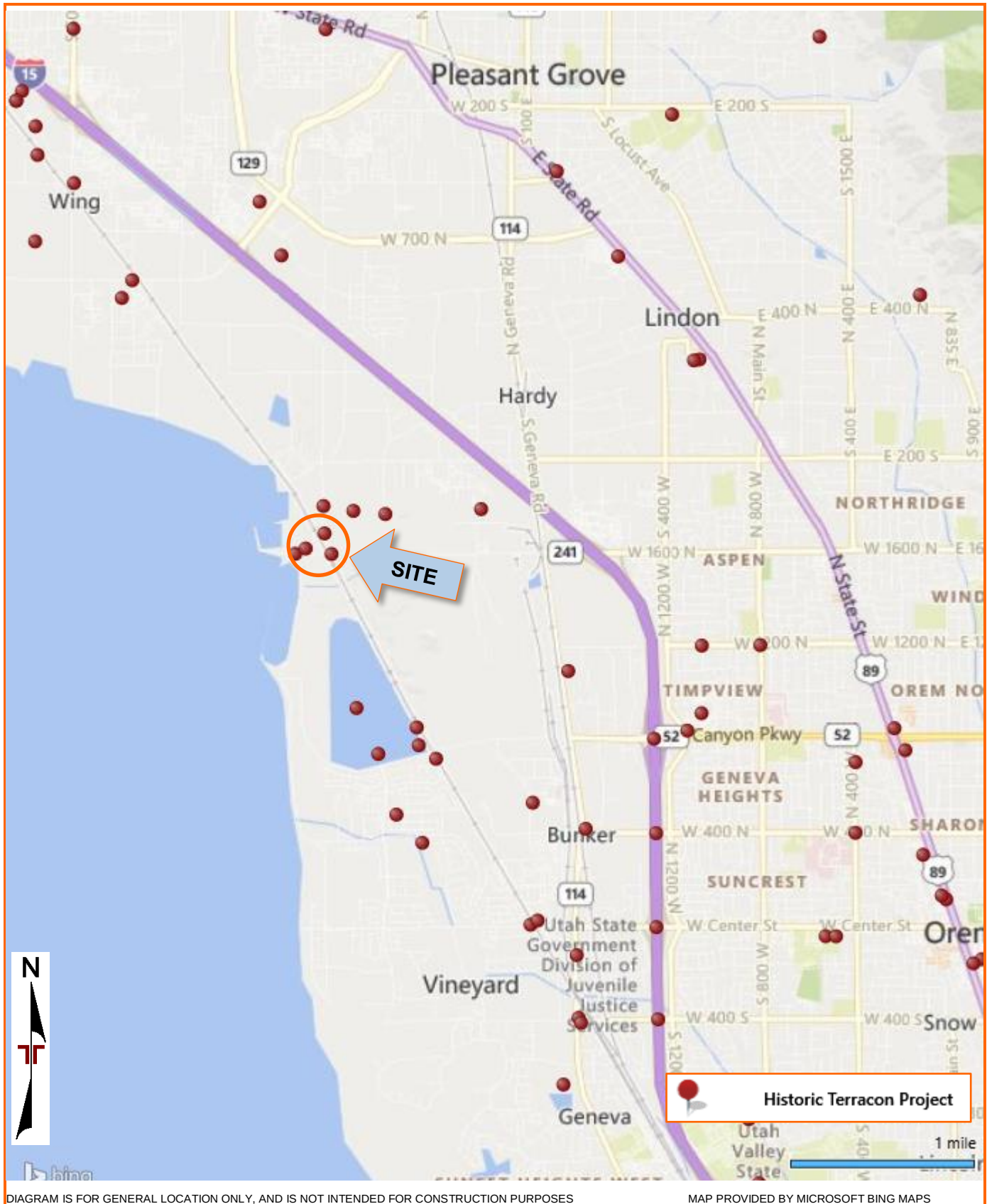


EXHIBIT E – ANTICIPATED EXPLORATION PLAN

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DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS