

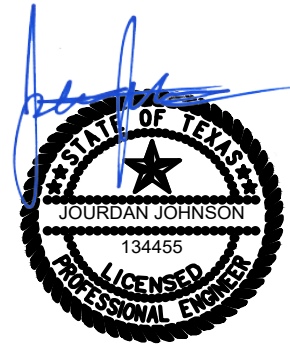


SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR THE CONSTRUCTION OF
**LAKES OF ALEDO GST FOUNDATION &
GRADING IMPROVEMENTS**
FOR THE
TOWN OF ANNETTA, TEXAS

Mayor
Sandy Roberts

City Secretary
Jamee Long

November 2022



11/9/2022



Registration No.: 312

4000 Fossil Creek Blvd.
Fort Worth, TX 76137
(817) 847-1422

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PLEASE NOTE: For this project, the Standard Specifications for Public Works Construction North Central Texas, (Fifth Edition) as prepared by the North Central Texas Council of Governments and the Town of Annetta Standard Construction Details shall govern all work to be done, together with any additional details, Special Specifications, or Specific Project Requirements included herein.

**SECTION 1
BIDDING
DOCUMENTS**

NOTICE TO BIDDERS

TOWN OF ANNETTA LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS

Notice is hereby given that the Town of Annetta is now calling for bids for construction of the LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS project. All bids must be sealed and clearly marked "SEALED BID - LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS" and returned to the Town of Annetta, 450 Thunder Head Lane, P.O. Box 1150, Annetta, TX 76008, prior to **10:00 AM, CST, Friday, December 16, 2022** at which time they will be publicly opened and read. The Town of Annetta reserves the right to reject any or all bids received.

The project includes the clearing and grubbing, excavation, and construction of a 60,000-gallon ground storage tank foundation (tank to be provided by others) at an existing pump station facility within the Town of Annetta. Contractor shall also provide general site services, which including the construction of a graded swale nearby the proposed tank foundation, including re-grassing. The proposed tank foundation shall include all site grubbing, staking, excavation, off-site hauling and disposal, select fill and compaction, and the placement of a foundation tank band, per manufacturers recommendations. Contractor shall provide all labor, materials, and equipment to provide a complete and in place installation of the work described above, and as indicated within the Contract Documents.

The Contract Documents, consisting of Advertisement for Bids, Information for Bidders, Bid Proposal, Bid Bond, Contract, Performance and Payment Bonds, General Conditions, Notice of Award, Notice to Proceed, Plans, Specifications, Addenda (if any) and Project Contracting and Compliance Provisions may be downloaded from the Town of Annetta's website (www.annettatx.org) directly. Potential Bidders may examine the Contract Documents at the Engineers office, at the following address and location:

**Halff Associates, Inc.
4000 Fossil Creek Blvd.
Fort Worth, Texas 76137**

The cost for Contract Documents is \$50.00 per half size set. The cost of Contract Documents is not refunded. Submit check, cashier check or money order for payment. Cash will not be accepted.

Direct questions regarding distribution of Contract Documents, and the design of the Lakes of Aledo GST Foundation & Grading Improvements Project to Jourdan Johnson, P.E., Halff Associates, Inc., at (817) 764-7442.

The Owner reserves the right to waive any informalities and to reject any or all bids, and to accept the bid they consider most advantageous to the Owner. Bids may be held by the Owner for a period not to exceed sixty (60) days from the date of bid opening for the purpose of reviewing the bids and investigating the qualifications of Bidders prior to awarding of the contract. Award of the contract will be made as a whole to one Bidder. The contract shall be awarded to the lowest, responsive, and responsible bidder. The City reserves the right to throw out any and all bids which are not complete.

A certified check or bank draft, payable to the order of **TOWN OF ANNETTA**, negotiable U.S. Government bonds (at par value) or a satisfactory Bid Bond executed by the Bidder and an acceptable surety in an amount equal to five percent (5%) of the total bid shall be submitted with the bid.

The party to whom the contract is awarded shall be required to furnish performance and payment bonds for 100% of the contract price, from a surety company holding a permit from the State of Texas to act as surety.

TOWN OF ANNETTA

Dates: _____

By: _____

INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS

Terms used in these Instructions to Bidders have the meanings assigned to them in the General Conditions.

2. QUALIFICATIONS OF BIDDERS

- A. Submit documentation within five (5) days of Owner's request to demonstrate that the Contractor is qualified by experience and capability to successfully construct the project within the Contract Time and for the Contract Amount. Include the following information:
1. Qualifications and experience of the Bidders, including key personnel to be assigned to the project.
 2. Qualifications and experience of Subcontractors.
 3. Qualifications of manufacturers proposed to furnish the principal items of material or equipment.
 4. Financial data consisting of audited financial statements for the last five years.
 5. Previous experience with public contracts and present reference contacts.
 6. List of available equipment.
 7. Evidence of authority to conduct business in the jurisdiction where the project is located.

3. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- A. Examine Contract Documents, make observations and investigations, correlate knowledge and observations with the requirements of the Contract Documents and consider these in preparation of a bid for the project.
1. Read the Contract Documents and related technical data and reports thoroughly. Use a complete set of Contract Documents in preparing Bids. Assume responsibility for errors or misinterpretations resulting from the use of partial or incomplete contract documents.
 2. Visit the site to become familiar with general, local and site conditions that may affect cost, progress or performance of the work in any manner.
 3. Become familiar with federal, state and local laws, ordinances, rules and regulations affecting cost, progress or performance of the work.
- B. Surveys and investigation reports of subsurface or latent physical conditions at the site, or conditions or situations affecting the design of the Project used by the Engineer in preparing the Contract Documents are referenced in the Supplementary Conditions.
1. These reports are available for information only and neither the Owner nor Engineer guarantees their accuracy or that any opinions expressed in the report are correct.
 2. Make additional surveys and investigations as necessary to determine the bid price for performance of the work in compliance with the terms of the Contract Documents before submitting a bid.
 3. Cost for these investigations is to be paid by the Bidders.
- C. Acknowledge sole responsibility for job site safety, including trench excavation and confined space entry safety, by the submission of a Bid for this project.

4. INTERPRETATIONS

Submit all questions about the meaning or intent of the Contract Documents to the Engineer in writing. Replies are issued by Addenda to all parties recorded by Engineer as having received the bidding documents. Only questions answered by formal written Addenda are to be binding. Oral and other interpretations or clarifications will be without legal effect. Questions received less than two days prior to the date for opening of Bids may not be answered.

5. BID SECURITY

A. Submit a bid security in the amount of five (5%) percent of the amount of the maximum total bid as a guarantee that the Bidder will promptly enter into a Contract and execute a Performance, Payment and Maintenance Bonds on the forms included in the Contract Documents if awarded the contract.

B. Acceptable Bid security are:

1. Certified or cashier's check made payable to the Owner.
2. An approved Bidder's Bond underwritten by a surety named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

C. Bid securities will be returned to bidders when the contract award is made or bids are rejected.

6. CONTRACT TIME

Time is of the essence on this project. The Lakes of Aledo GST Foundation & Grading Improvements project are to be completed within 30 consecutive calendar days from the date of the notice to proceed. Liquidated damages are set forth in the Supplementary Conditions.

7. BID FORM

A. Submit bids on the Bid forms provided with the Contract Documents for each contract Bid. Include supplemental data to be furnished in the same sealed envelope with Proposal.

B. Bid forms must be completed in ink or electronic bid forms will be proved upon request. The Bid price of each item on the form must be stated in words and numerals. Words take precedence in case of a conflict.

C. Execute bids by corporations in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. Affix the corporate seal and attest by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

D. Execute bids by partnerships in the partnership name. Forms are to be signed by a partner. Print the name below the signature. Write the title of the Partner and show the official address of the partnership shown below the signature.

E. Acknowledge receipt of all Addenda on the bid form by signing beside the Addenda number. The contractor must acknowledge receipt of Addenda on sealed bid envelop.

8. SUBMISSION OF BIDS

Submit bids at the time and place indicated in the Invitation for Bids. Submit bids in a sealed envelope, marked with the Project title and name and address of the Bidder. Include the bid security and other required documents in the envelope.

9. **MODIFICATION AND WITHDRAWAL OF BIDS**
Modify or withdraw bids by submitting an appropriate document executed in the manner that a Bid must be executed. Deliver the modification or withdrawal to the place where Bids are to be submitted at any time prior to the opening of Bids.
10. **OPENING OF BIDS**
- A. Bids will be opened as indicated in the Invitation for Bids.
- B. All Bids shall remain open for the period of time set forth in the Invitation for Bids, but Owner may, in his sole discretion, release any Bid and return the Bid Security prior to that date.
11. **AWARD OF CONTRACT**
- A. Owner may reject Bids, waive formalities, or disregard nonconforming, conditional Bids or counter proposals.
- B. Owner may consider the following in evaluating the bids and awarding the contract:
1. Contractor's qualifications and ability to demonstrate current capability to complete the project in conformance with the requirements of the contract documents.
 2. Compliance of the Bids with requirements of the Contract Documents
 3. Alternates and unit prices if requested in the Bid forms.
 4. The amount bid.
- C. The contract will be awarded to the lowest responsible Bidder whose evaluation by Owner indicates that the award will be in the best interests of the Project if a contract is to be awarded.
12. **EXECUTION OF CONTRACT**
- A. The successful Bidder must execute the formal Contract Agreement and required Bonds on the forms prepared and submitted by the Owner within fifteen (15) days after the Notice of Award.
- B. A Notice to Proceed authorizing the Contractor to commence work will be issued after the Contract Documents have been executed.
13. **WAGE RATES**
Contractor must pay no less than the general prevailing rates for the Project location as determined in accordance with statutory requirements. The minimum rates for various labor classifications as established by the Owner are included in the Contract Documents.
14. **BONDS**
Performance, Payment and Maintenance Bonds are required for this project and shall be provided in accordance with the General Conditions.
15. **SALES TAXES**
The Owner qualifies as an exempt agency as defined by the statutes of the State of Texas. Owner's purchasing department will issue exemption certificates. Comply with all statutes and rulings of the State Comptroller.

BID FORM

_____ Town of Annetta _____, Texas
_____, 2022

PROPOSAL OF _____

, A Corporation organized and existing under the laws of the State of Texas , a partnership consisting of
, the business name of _____, an individual.

TO: TOWN OF ANNETTA

PROPOSAL FOR: Lakes of Aledo GST FOUNDATION & Grading Improvements

The undersigned Bidder has carefully examined the Invitation for Bids, Instructions to Bidders, this Proposal, the Supplemental Conditions, the form of Contract Agreement and Bonds, the General Conditions of the Agreement, the Specifications, the Drawings, and the site of the work, and will provide all necessary labor, superintendence, machinery, equipment, tools, materials, services and other facilities to complete fully all the work as provided in the Contract Documents; and will execute the contract and bonds in the Contract Documents upon formal acceptance of his Proposal for the unit prices and amounts shown in the following table. Bidder shall provide base bid and alternate bids.

The undersigned bidder will execute the Contract Agreement within fifteen (15) days after receiving a Notice of Award and will furnish approved bonds and insurance as required by the Contract Documents for the faithful performance of the Contract. The attached bid security in the amount of five (5) percent of the amount bid is to become the property of the Owner as liquidated damages for the delay and additional work caused by the failure of the bidder to enter into a contract in the event the Contract Agreement and bonds are not executed within fifteen (15) days.

The undersigned agrees to complete all work covered by these Contract Documents within 30 consecutive calendar days from the day established for the start of the work in a written Notice to Proceed. The date established for the start of work will be not less than ten (10) days or not more than thirty (30) days after the date of the Contract Agreement, except by mutual agreement of the Owner and the Contractor.

Receipt is acknowledged of the following addenda:

	DATE	BY
Addendum No. 1	_____	_____
Addendum No. 2	_____	_____
Addendum No. 3	_____	_____
Addendum No. 4	_____	_____
Addendum No. 5	_____	_____
Addendum No. 6	_____	_____

Respectfully submitted,

By _____

(Print Name and Title)

Attested By:

Secretary

Address

(SEAL) If Bidder is a Corporation

NOTE: Do not detach bid forms from other papers. Fill in with ink and submit complete with attached papers.

ALL BIDDERS ARE NOTIFIED THAT THE FOLLOWING QUALIFICATION STATEMENT MUST BE COMPLETED AND SUBMITTED WITH THE BID PROPOSAL.

Contractor's Qualifications

The contractor shall show that he has experience with similar projects that require working in confined areas in close proximity to many physical features (fences, utility poles, guy lines, gas lines and meters, sewer manholes and cleanouts etc.), as applicable to the project, which requires the contractor to plan work efforts and equipment needs with these limitations in mind. The contractor shall submit a list of Public Works Projects successfully completed within the last five years. This list shall include the names of supervisors and type of equipment used to perform this work.

**PROPOSAL/UNIT PRICE BID SCHEDULE
LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT**

Item No.	Description	Unit	Quantity	Unit Cost	Amount
1	Mobilization and General Site Preparation	LS	1	\$	\$
2	Traffic Control including Barricades, Warning and Detour Signs, and Fences	LS	1	\$	\$
3	Erosion Control and Storm Water Pollution Prevention Plan	LS	1	\$	\$
4	Trenching/Shoring Safety Plan	LS	1	\$	\$
5	Temporary Sediment Control (Silt Fence)	LF	100	\$	\$
6	Site Clearing & Grubbing	LS	1	\$	\$
7	Site Excavation (Existing Soil to Be Removed and Replaced with Flexible Base Material, Including All Necessary Hauling, Disposal, Etc.)	CY	205	\$	\$
8	Flexible Base Material (To Replace Line-Item No. 7, Including All Hauling, Compaction, & Testing)	CY	205	\$	\$
9	Tank Foundation (1-ft Depth, Graded Stone or Flex Base Material Per Geotechnical Report)	CY	24	\$	\$
10	Install Tank Band	LS	1	\$	\$
11	Grade Swale to North End of Existing Site	LS	1	\$	\$
12	Re-grass Disturbed Areas with Hydromulch Seeding	LS	1	\$	\$
13				\$	\$
14				\$	\$
15				\$	\$
16				\$	\$
17				\$	\$
18				\$	\$
19				\$	\$
20				\$	\$
21				\$	\$
22				\$	\$
23				\$	\$
24				\$	\$
25				\$	\$
26				\$	\$
27				\$	\$
28				\$	\$
29				\$	\$
30				\$	\$

TOTAL BID AMOUNT: \$ _____

SUMMARY

A. Materials Incorporated into Work	\$
B. Materials Not Incorporated into Work	\$
C. Other, Labor, Etc.	\$

NOT TO EXCEED TOTAL AMOUNT OF BID (A+B+C)
\$ _____

BIDDER'S QUALIFICATION STATEMENT

Project: _____

Contractor: _____

Indicate One: ___ Sole Proprietor ___ Partnership ___ Other
 ___ Corporation ___ Joint Venture

Name: _____

Title: _____

Address: _____

City: _____

State & Zip: _____

Phone: _____

State and Date of Incorporation, Partnership, Ownership, Etc. _____

Location of Principal Office: _____

Contact and Phone at Principal Office: _____

Liability Insurance Provided and Limits of Coverage: _____

Workers Compensation Insurance Provider: _____

Surety Bonding Company (Performance,
Payment, & Maintenance) _____

Insurance Agency Name: _____

Insurance Agency Address: _____

Contact Person: _____

Phone Number: _____

Total Number of Employees to be Associated with this Job:

___ Managerial ___ Administrative ___ Professional
___ Skilled ___ Semi-Skilled ___ Other

Percentage of Work to be Done by Bidder's Employees (Based on Dollars Bid): _____

Type(s) of Work to be Done by Bidder's Employees (Examples: Concrete Paving, Structural Concrete, Water Lines, Sanitary Sewer Lines, Storm Pipe, Storm Inlets, Excavation, Lime, Bridge, Fencing, etc.)

Access to Tools and Equipment: Percent Owned _____ Percent Rented _____

Number of Years in Business as a Contractor on Above Types of Work: _____

Type(s) of Work to be Done by Sub-Contractors:

Include Name, Address, and Phone Number of Sub-Contractor. (Use Additional Sheets, if needed.)

Type of Work	Sub-Contractor

List your most current completed projects, with information, similar to the type of work bid.
(Use Additional Sheets, if necessary.)

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Project: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Trade References (List Company, Address, Contact Person, and Phone):

Bank References (List Institution, Address, Contact Person, and Phone):

Claims and Suits (If the answer to any of the questions is yes, please attach details):

Has your organization ever failed to complete any work awarded to it?

Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or its officers?

Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?

Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract?

STATE RECIPROCAL REQUIREMENT

The Town of Annetta, as a governmental agency of the State of Texas, may not award a contract for general construction, improvements, services or public works projects or purchases of supplies, materials, or equipment to a non-resident bidder unless the non-resident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a non-resident bidder to obtain a comparable contract in the state in which the non-resident's principal place of business is located (Article 601g v.t.c.s.). Bidder shall answer all the following questions by encircling the appropriate response or completing the blank provided.

1. Where is your principal place of business? _____

2. Only if your principal place of business is not in the state of Texas, please indicate:
 - A. In which state is your principal place of business located? _____

 - B. Does that state favor resident bidders (bidders in your state) by some dollar increment or percentage? YES NO

 - C. If "YES", what is that dollar increment or percentage? _____

NON-COLLUSION STATEMENT

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employer or agent to any other person engaged in this type of business prior to the official opening of this bid.

Vendor: _____
Address: _____
City, State, Zip: _____
Phone: _____
Email Address: _____
Bidder (Print name) _____
Bidder Signature _____
Position with Company _____
Signature of company official authorizing this bid: _____
Company Official (Print name): _____
Position with company: _____

**TOWN OF ANNETTA DISCLOSURE
AND CONFLICT OF INTEREST STATEMENT**

Name of person/entity ("the Filer") that contracts or seeks to contract for the sale or purchase of property, goods, or services with the Town of Annetta or who is an agent of any such person/entity: _____

Address: _____ City _____ State _____ Zip _____

DISCLOSURE QUESTIONS

Name each City employee that has a financial interest in the Filer.

Name each City employee who will receive any compensation for or as a result of the desired business dealings.

CONFLICT OF INTEREST QUESTIONS

1. Describe each affiliation or business relationship with a City employee or contractor who makes recommendations to the City Manager or City Council regarding expenditures of money, including identifying the employee or contractor. _____

2. Describe each affiliation or business relationship with the City Manager, Mayor, or a City Councilmember who appoints or employs the City Manager or the City Council, including identifying the City Manager, Mayor, or individual Councilmember. _____

3. Identify the City Manager, Mayor, or City Councilmember with whom the Filer has an affiliation or business relationship. This question and its subparts must be completed for each person with whom an affiliation or other relationship exists. _____

A. Is the person identified in question #3 receiving or likely to receive taxable income from the Filer?
____ Yes ____ No

B. Is the Filer receiving or likely to receive taxable income from or at the direction of the person identified in question #3 which is not from the City? ____ Yes ____ No

C. Is the Filer affiliated with a corporation or other business entity in which the City Manager, Mayor, or a City Councilmember serves as an officer or director, or holds an ownership of ten percent (10%) or more? ____ Yes ____ No

D. Describe each affiliation or business relationship that the Filer has with the City Manager, Mayor, or City Council members. _____ Yes ____ No

4. Describe any other affiliation or business relationship that might cause a conflict of interest.

CERTIFICATION

I certify that all information provided is true and correct, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City as changes occur.

Print or Type Name

Signature

Date

FORM 1295 INSTRUCTIONS

Form 1295 – Certificate of Interested Parties Pursuant to Texas Government Code §2252.908 the successful vendor must file a Certificate of Interested Parties (Form 1295) with the Texas Ethics Commission prior to award of the contract. Failure to file and send the completed form within five (5) business days of request may be grounds for declaring vendor non-responsive to specifications.

Information regarding this form may be found on the Texas Ethics Commission’s website at www.ethics.state.tx.us. Form 1295 Sample:

CERTIFICATE OF INTERESTED PARTIES		FORM 1295	
Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.		OFFICE USE ONLY	
1 Name of business entity filing form, and the city, state and country of the business entity's place of business.			
2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.			
3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.			
4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary
5 Check only if there is NO Interested Party. <input type="checkbox"/>			
6 AFFIDAVIT I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.			
_____ Signature of authorized agent of contracting business entity			
AFFIX NOTARY STAMP / SEAL ABOVE			
Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.			
_____ Signature of officer administering oath Printed name of officer administering oath Title of officer administering oath			
ADD ADDITIONAL PAGES AS NECESSARY			

BID AFFIDAVIT

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the Specifications of the Invitation to Bid. The period of acceptance of this bid will be 90 calendar days from the date of the bid opening. (Period of acceptance will be ninety (90) calendar days unless otherwise indicated by Bidder.)

STATE OF TEXAS COUNTY OF _____ BEFORE ME, the undersigned authority, a Notary Public in and for the State of TEXAS, on this day personally appeared _____ who after being by me

Name

duly sworn, did depose and say:

"I, _____ am a duly authorized office/agent for

Name

_____ and have been duly authorized to execute the

Name of Firm

foregoing on behalf of the said _____.

Name of Firm

I hereby certify that the foregoing bid has not been prepared in collusion with any other Bidder or individual(s) engaged in the same line of business prior to the official opening of this bid. Further, I certify that the Bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool, agreement or combination thereof, to control the price of services/commodities bid on, or to influence any individual(s) to bid or not to bid thereon."

Name and Address of Bidder: _____

Telephone: _____

by: _____

Title: _____ Signature: _____

SUBSCRIBED AND SWORN to before me by the above named _____
on this the _____ day of _____ 2022.

Notary Public in and for the State of TEXAS

If BIDDER IS:

An Individual

By _____ (Seal)

(Individual's Name)

doing business as _____

Business address _____

_____ Phone No. _____

A Partnership

By _____ (Seal)

(Firm Name)

(General Partner)

Business address _____

Phone No. _____

A Corporation

By _____

(Corporation Name)

(State of Incorporation)

By _____

(Name of person authorized to sign)

(Title)

(Corporate Seal)

Attest _____

(Secretary)

Business address _____

Phone No. _____

A Joint Venture

By _____

(Name) (Address)

By _____

(Name) (Address)

(Each joint venture must sign. The manner of signing for each individual, partnership and corporation that is a partner to the joint venture should be in the manner indicated above.)

***SECTION 2
CONTRACT
DOCUMENTS***

STANDARD FORM OF AGREEMENT

**STATE OF TEXAS
COUNTY OF PARKER**

THIS CONTRACT, made and entered into the ____ day of _____ A.D. 2022, by and between the Town of Annetta of the County of Parker and State of Texas, hereinafter “the City”, and ____ of the City of _____, County of _____ and State of Texas, hereinafter “the Contractor”.

In consideration of the mutual covenants, promises, and agreements herein contained, the City and the Contractor hereby agree that the Contractor will commence and complete the construction of certain improvements described as follows:

LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT

and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at the Contractor’s own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore, as prepared by the City and attached hereto, together with the Contractor’s written Proposal, the General Conditions of the Agreement, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

The Contractor hereby agrees to commence work within ten (10) calendar days after the date of the written notice to commence work and to fully complete the same within 30 consecutive calendar days after the date of the written notice to commence work for Lakes of Aledo GST Foundation & Grading Improvements Project subject to such extensions of time as are provided by the General and Specific Conditions.

The Town agrees to pay the Contractor in current funds the price or prices shown in the proposal, which forms a part of this contract, such payments to be subject to the General and Special Conditions of the contract.

IN WITNESS WHEREOF, the parties hereto have executed this contract in the year and day first above written.

APPROVED BY THE TOWN OF ANNETTA, TEXAS:

By: _____
SANDY ROBERTS, Mayor

ATTEST

APPROVED AS TO FORM:

By: _____
(Signature)

(Full Name), (Title)

[Insert Contractor's Company Name]

By: _____
(Signature)

(Full Name), (Title)

**PREVAILING WAGE RATES FOR MUNICIPAL CONSTRUCTION IN PARKER
COUNTY (ZONE TX25)**

The wage rates below, in accordance with statutory requirements and prevailing local wages, have been compiled by Texas Department of Transportation (TXDOT) for ZONE TX25, Parker County, Texas based off predetermined wage rates from the Secretary of Labor and State Statute. The CONTRACTOR shall comply with all State and Federal Laws applicable to such work. The proceeding are minimum rates. Bidders shall base their bids on rates they expect to pay, if in excess of those listed. The OWNER will not consider claims for extra payment to CONTRACTOR on account of payment of wages higher than those specified.

The wage rates listed herein are those predetermined by the Secretary of Labor and State Statute and listed in the United States Department of Labor's (USDOL) General Decisions dated 02-25-2022 and are the minimum wages to be paid accordingly for each specified classification. To determine the applicable wage rate zone, a list entitled "TEXAS COUNTIES IDENTIFIED BY WAGE RATE ZONES" is provided in the contract. Any wage rate that is not listed herein and not in the USDOL's general decision, must be submitted to the Engineer for approval. IMPORTANT NOTICE FOR STATE PROJECTS: only the controlling wage rate zone applies to the contract. Effective 02-25-2022.

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 (TX20220002)	ZONE TX03 (TX20220003)	ZONE TX04 (TX20220004)	ZONE TX05 (TX20220005)	ZONE TX06 (TX20220006)	ZONE TX07 (TX20220007)	ZONE TX08 (TX20220008)	ZONE TX24 (TX20220024)	ZONE TX25 (TX20220025)	ZONE TX27 (TX20220027)	ZONE TX28 (TX20220028)	ZONE TX29 (TX20220029)	ZONE TX30 (TX20220030)	ZONE TX37 (TX20220037)	ZONE TX38 (TX20220038)	ZONE TX42 (TX20220042)	
1428	Agricultural Tractor Operator																	
1300	Asphalt Distributor Operator	\$14.87	\$13.48	\$13.88	\$15.72	\$15.58	\$15.55	\$15.72	\$13.28	\$15.32	\$15.02	\$14.36	\$14.25	\$14.03	\$13.75	\$14.06	\$14.40	
1303	Asphalt Paving Machine Operator	\$13.40	\$12.25	\$12.35	\$13.87	\$14.05	\$14.36	\$14.20	\$13.26	\$13.99	\$14.68	\$12.92	\$13.44	\$12.53	\$14.00	\$14.32	\$12.99	
1106	Asphalt Paver	\$12.28	\$10.61	\$12.02	\$14.21	\$11.65	\$12.12	\$11.64	\$11.44	\$12.69	\$12.05	\$11.34	\$11.67	\$11.40	\$12.59	\$12.56	\$11.78	
1112	Batching Plant Operator, Asphalt																	
1115	Batching Plant Operator, Concrete																	
1214	Blaster																	
1615	Boom Truck Operator						\$18.36											
1444	Boring Machine Operator																	
1305	Broom or Sweeper Operator	\$11.21	\$10.33	\$10.08	\$11.99		\$11.04	\$11.62	\$11.74	\$11.41	\$10.30	\$10.30	\$10.23	\$10.60	\$12.68	\$11.05		
1144	Communications Cable Installer																	
1124	Concrete Finisher, Paving and Structures	\$13.55	\$12.46	\$13.16	\$12.85	\$12.64	\$12.56	\$12.77	\$12.44	\$14.12	\$13.04	\$13.38	\$12.64	\$12.80	\$12.79	\$12.98	\$13.32	
1318	Concrete Pavement Finishing Machine Operator				\$16.05		\$15.48			\$16.05		\$19.31			\$13.07			
1315	Concrete Paving, Curing, Hoist, Texturing Machine Operator											\$16.34			\$11.71	\$13.99		
1333	Concrete Saw Operator				\$14.67					\$14.48	\$17.33							
1399	Concrete/Gunite Pump Operator																	
1344	Crane Operator, Hydraulic 80 Tons or less				\$18.22		\$18.36		\$18.12	\$18.04	\$20.21				\$18.63	\$13.86		
1345	Crane Operator, Hydraulic Over 80 Tons																	
1342	Crane Operator, Lattice Boom 80 Tons or Less	\$16.82	\$14.39	\$13.85	\$17.27	\$15.87	\$15.87	\$17.27	\$17.27	\$14.67	\$14.67	\$16.42	\$14.97	\$13.87	\$14.97	\$13.87		
1343	Crane Operator, Lattice Boom Over 80 Tons				\$20.52	\$19.38	\$19.38	\$20.52	\$20.52	\$17.49	\$17.49	\$25.13	\$15.80	\$15.80	\$13.68	\$13.50		
1306	Crawler Tractor Operator	\$13.96	\$16.63	\$13.62	\$14.26	\$15.67	\$15.67	\$14.07	\$13.15	\$13.38					\$14.60	\$13.68	\$13.50	
1351	Cusher or Screen Plant Operator																	
1446	Directional Drilling Locator						\$11.67											
1445	Directional Drilling Operator				\$20.32	\$17.24	\$11.24											
1139	Electrician	\$20.96	\$19.87	\$19.87	\$19.80	\$26.35	\$26.35	\$20.27	\$19.80		\$20.92				\$27.11	\$19.87		
1347	Excavator Operator, 50,000 pounds or less	\$13.46	\$12.56	\$13.67	\$17.19	\$12.88	\$14.38	\$13.49	\$17.19		\$13.88				\$14.09	\$12.71	\$14.42	
1348	Excavator Operator, Over 50,000 pounds		\$15.23	\$13.52	\$17.04	\$17.71	\$17.71	\$16.99	\$18.80	\$16.22					\$14.53	\$13.52		
1150	Flagger	\$9.30	\$9.10	\$8.50	\$10.28	\$8.81	\$9.45	\$8.70	\$10.06	\$9.71	\$9.03	\$8.81	\$9.08	\$9.08	\$9.90	\$10.33	\$8.10	
1151	Form Builder/Setter, Structures	\$13.52	\$12.30	\$13.38	\$12.91	\$12.71	\$12.87	\$12.38	\$13.84	\$12.98	\$13.07	\$13.61	\$12.82	\$14.73	\$12.23	\$12.25	\$12.25	
1160	Form Setter, Paving & Curb	\$12.36	\$12.16	\$13.93	\$11.83	\$10.71	\$12.94	\$12.54	\$13.16	\$12.54	\$11.33	\$10.69	\$13.33	\$12.34	\$13.33	\$12.34	\$13.93	
1360	Foundation Drill Operator, Crawler Mounted				\$17.99				\$17.99						\$17.43			
1363	Foundation Drill Operator, Truck Mounted		\$16.86	\$22.05	\$21.51	\$16.93	\$16.93	\$21.07	\$20.20	\$20.76				\$17.54	\$21.39	\$15.89	\$22.05	
1369	Front End Loader Operator, 3 CY or Less	\$12.28	\$13.49	\$13.40	\$13.85	\$13.04	\$13.04	\$13.15	\$13.29	\$13.69	\$12.64	\$12.89	\$13.51	\$13.32	\$13.51	\$13.32	\$12.17	
1372	Front End Loader Operator, Over 3 CY	\$12.77	\$13.69	\$12.33	\$14.96	\$13.21	\$13.21	\$12.86	\$13.57	\$14.72	\$13.75	\$12.32	\$13.19	\$13.17	\$13.17	\$13.02	\$13.02	
1329	Joint Sealer																	
1172	Laborer, Common	\$10.30	\$9.86	\$10.08	\$10.51	\$10.71	\$10.50	\$10.24	\$10.58	\$10.72	\$10.45	\$10.30	\$10.25	\$10.03	\$10.54	\$11.02	\$10.15	
1175	Laborer, Utility	\$11.80	\$11.53	\$12.70	\$12.17	\$11.81	\$12.27	\$12.11	\$11.33	\$12.32	\$11.80	\$11.53	\$11.23	\$11.50	\$11.95	\$11.73	\$12.37	

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 *(TX20220002)	ZONE TX03 *(TX20220003)	ZONE TX04 *(TX20220004)	ZONE TX05 *(TX20220005)	ZONE TX06 *(TX20220006)	ZONE TX07 *(TX20220007)	ZONE TX08 *(TX20220008)	ZONE TX24 *(TX20220024)	ZONE TX25 *(TX20220025)	ZONE TX27 *(TX20220027)	ZONE TX28 *(TX20220028)	ZONE TX29 *(TX20220029)	ZONE TX30 *(TX20220030)	ZONE TX37 *(TX20220037)	ZONE TX38 *(TX20220038)	ZONE TX42 *(TX20220042)
1346	Loader/Backhoe Operator	\$14.48	\$12.77	\$12.97	\$15.88	\$14.12	\$14.12	\$14.12	\$15.18	\$13.58	\$12.87	\$12.87	\$17.00	\$13.21	\$14.13	\$14.29	\$12.90
1187	Mechanic	\$20.14	\$15.47	\$17.47	\$17.74	\$17.00	\$17.10	\$17.10	\$17.88	\$18.94	\$18.94	\$18.58	\$17.00	\$16.61	\$18.46	\$16.96	\$17.47
1380	Milling Machine Operator	\$15.54	\$14.64	\$12.22	\$14.29	\$14.18			\$14.32	\$14.35	\$12.86			\$14.75	\$13.53	\$12.80	
1390	Motor Grader Operator	\$17.49	\$16.52	\$16.88	\$17.12	\$18.37	\$18.51	\$16.69	\$16.13	\$17.19	\$18.35	\$17.07	\$17.74	\$17.47	\$17.08	\$15.89	\$20.01
1393	Motor Grader Operator, Rough	\$16.15	\$14.62	\$15.83	\$16.20	\$17.07	\$14.63	\$18.50	\$16.02	\$16.44	\$16.44	\$15.12	\$16.85	\$14.47	\$17.39	\$14.23	\$15.53
1413	Off Road Hauler			\$10.08	\$12.26		\$11.88			\$12.25		\$12.23			\$13.00	\$14.60	
1196	Painter, Structures					\$21.29	\$18.34						\$21.29			\$18.62	
1396	Pavement Marking Machine Operator	\$16.42		\$13.10	\$13.55				\$13.63	\$14.60	\$13.17			\$16.65	\$10.54	\$11.18	\$13.10
1443	Pericussion or Rotary Drill Operator																
1202	Piledriver																\$14.95
1205	Pipelayer		\$11.87	\$14.64	\$13.17	\$11.17	\$12.79		\$11.37	\$13.24	\$12.66	\$13.24	\$11.17	\$11.67		\$12.12	\$14.64
1384	Reclaimner/Pulverizer Operator	\$12.85			\$11.90		\$12.88		\$11.01		\$10.46			\$10.46		\$12.12	
1500	Reinforcing Steel Worker	\$13.50	\$14.07	\$17.53	\$16.17		\$14.00		\$16.18	\$12.74	\$15.83		\$17.10	\$17.10	\$11.97	\$15.15	\$17.72
1402	Roller Operator, Asphalt	\$10.95		\$11.96	\$13.29		\$12.78		\$13.08	\$12.36	\$11.68		\$11.68	\$11.68	\$11.71	\$11.95	\$11.50
1405	Roller Operator, Other	\$10.36		\$10.44	\$11.82		\$10.50		\$11.51	\$10.59	\$10.30		\$12.04	\$12.85	\$11.57	\$10.66	\$10.66
1411	Scraper Operator	\$10.61	\$11.07	\$10.85	\$12.88		\$12.27		\$11.12	\$12.96	\$11.88	\$12.43		\$11.22	\$13.95	\$13.47	\$10.89
1417	Self-Propelled Hammer Operator																
1194	Service	\$13.98	\$12.34	\$14.11	\$14.74		\$14.51		\$15.56	\$14.58	\$14.31	\$13.83		\$12.43	\$13.72	\$13.97	\$14.11
1513	Sign Erector																
1708	Slurry Seal or Micro-Surfacing Machine Operator																
1341	Small Siftrom Machine Operator									\$15.96							
1515	Spreader Box Operator	\$12.60		\$13.12	\$14.71		\$14.04		\$14.73	\$13.84	\$13.68		\$13.45	\$11.83	\$13.58	\$14.05	
1705	Structural Steel Welder															\$12.85	\$12.85
1509	Structural Steel Worker						\$19.29									\$14.39	
1339	Subgrade Trimmer																
1143	Telecommunication Technician																
1145	Traffic Signal/Light Pole Worker						\$16.00										
1440	Trenching Machine Operator, Heavy						\$18.48										
1437	Trenching Machine Operator, Light																
1609	Truck Driver Lowboy-Floal	\$14.46	\$13.63	\$13.41	\$15.00	\$15.93	\$15.66		\$16.24	\$16.39	\$14.30	\$16.62	\$15.63	\$14.28	\$16.03	\$13.41	
1612	Truck Driver Transit-Mix				\$14.14				\$14.14								
1600	Truck Driver, Single Axle	\$12.74	\$10.82	\$10.75	\$13.04	\$11.61	\$11.79	\$13.53	\$13.16	\$12.31	\$13.40	\$10.30	\$11.61	\$11.97	\$11.46	\$10.75	
1606	Truck Driver, Tandem Axle	\$11.33	\$14.53	\$11.95	\$12.95	\$11.68	\$11.68	\$14.06	\$12.62	\$11.45	\$12.28	\$12.28	\$13.08	\$11.68	\$11.48	\$11.10	
1607	Truck Driver, Tandem Axle Tractor with Semi Trailer	\$12.49	\$12.12	\$12.50	\$13.42		\$12.81	\$13.16	\$12.86	\$16.22	\$12.50			\$13.80	\$12.27	\$12.50	
1441	Tunneling Machine Operator, Heavy																
1442	Tunneling Machine Operator, Light																
1706	Welder		\$14.02		\$14.86				\$13.74	\$14.84				\$13.78			
1520	Work Zone Barricade Servicer	\$10.30	\$12.88	\$11.46	\$11.70	\$11.57	\$11.85	\$10.77	\$11.68	\$12.20	\$11.22	\$11.51	\$12.96	\$10.54	\$11.67	\$11.76	

Notes:

*Represents the USDOL wage decision.

Any worker employed on this project shall be paid at the rate of one and one half (1-1/2) times the regular rate for every hour worked in excess of forty (40) hours per week.

For reference, the titles and descriptions for the classifications listed here are detailed further in the AGC of Texas' *Standard Job Classifications and Descriptions for Highway, Heavy, Utilities, and Industrial Construction in Texas* posted on the AGC's Web site for any contractor.

Certificate Of Insurance

After award of contract, Contractor will provide Owner with Certificate of Insurance which will be executed and bound here with final documents.

PERFORMANCE BOND

STATE OF TEXAS
COUNTY OF PARKER

KNOW ALL MEN BY THESE PRESENTS: That _____ of the Town of Annetta, County of Parker and State of Texas, as Principal, and _____ authorized under the laws of the State of _____ to act as Surety on bonds for Principal, are held and firmly bound unto the Town of Annetta (Owner), in the penal sum of _____ (\$ _____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the Owner, dated the _____ day of _____, 2022 to construct:

LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform said Contract and shall in all respects duly and faithfully observe and perform all and singular the covenants, conditions and agreements in and by said Contract agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said Contract and the Plans and Specifications hereto annexed, then this obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

Texas Water Code Sec. 17.183: Bond in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2022.

Principal

Surety

By:

By

Title:

Title:

Address:
Address:

Address:

The name and address of the Resident Agent of Surety is:

PAYMENT BOND

**STATE OF TEXAS
COUNTY OF PARKER**

KNOW ALL MEN BY THESE PRESENTS: That _____ of the Town of Annetta, County of Parker and State of Texas, as Principal, and _____ authorized under the laws of the State of _____ to act as Surety on bonds for Principal, are held and firmly bound unto the Town of Annetta (Owner), in the penal sum of _____ (\$ _____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the Owner, dated the _____ day of _____, 2022 to construct:

LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said Contract, then, this obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

Texas Water Code Sec. 17.183: Bond in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2022 .

Principal

Surety

By:

By

Title:

Title

Address:
Address:

Address:

The name and address of the Resident Agent of Surety is:

MAINTENANCE BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ (hereinafter called **Principal**), and _____ a corporation organized under the laws of the State of _____ and authorized to do a surety business in the State of Texas, (hereinafter called **Surety**), are held and firmly bound unto the Town of Annetta, Texas (hereinafter called the **City**) in the full and just sum of _____ (\$ _____) lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, said **Principal** has performed construction of water line improvements which have been or are about to be completed and accepted by the **City** for the project known as **LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT**, located in Annetta, Texas.

AND WHEREAS, it is required that the **Principal** should guarantee the project from defects caused by faulty or defective materials, workmanship, or design for a period of two years from and after the date of acceptance of the completed project by the **City**.

NOW, THEREFORE, if the **Principal** shall for a period of two years from and after the date of acceptance of the completed project by the **City** replace any and all defects arising in said work whether resulting from faulty or defective materials, workmanship, or design, then the above obligation shall be null and void; otherwise the obligation shall remain in full force and effect for two years from the date of acceptance of the completed project by the **City**.

The **City** shall notify the **Principal** in writing of any defects for which the **Principal** is responsible and shall specify in said notice a reasonable time within which the **Principal** shall have to correct said defects. If the **Principal** fails to correct said defects within the time specified in said notice, the **City**, in its discretion, may permit the **Surety** to correct said defects. If the **City** allows the **Surety** to correct said defects, the **Surety** shall have sixty (60) days thereafter within which to take such action as it deems necessary to insure performance of the **Principal's** obligation.

If such defects are not corrected after the time period specified in the notice or after the expiration of the sixty (60) day time period, whichever is applicable, the **City** shall have the right

to correct the defects, and the **Principal** and **Surety**, jointly and severally, shall pay all costs and expenses incurred by the **City** in correcting the defects, including, but not limited to, the engineer, legal and other costs, together with any damages either direct or consequential, which the **City** sustains, or may sustain, on account of the **Principal's** failure to correct the defects. In addition, the **City** shall have the right to

contract for the correction of said defects and, upon acceptance of a bid in accordance with the **City's** normal bidding process, the **Principal** and **Surety** shall become immediately liable for the amount of the bid. In the event that the **City** commences legal proceedings for the collection thereof, interest shall accrue on said amount at the rate of six (6) percent per annum, beginning at the commencement of said legal proceedings.

If the City commences suit for collection of any sums due hereunder, the **Principal** and **Surety**, jointly and severally, agree to pay all costs and expenses incurred by the **City**, including, but not limited to, attorney's fees.

IN WITNESS WHEREOF, the parties have caused this instrument to be signed and sealed by their respective authorized officers this ____ day of _____, 2022 .

Principal: _____

Surety: _____

By: _____

By: _____

Address: _____

_____, **Attorney-in-Fact**
Address: _____

Witness as to Principal

**SECTION 3
STANDARD
SPECIFICATIONS**

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STANDARD SPECIFICATIONS

The Standard Specifications for this project are the "Public Works Construction Standards" (Fifth Edition) as published under the authority of the North Central Texas Council of Governments.

A. Supplementary Conditions to the General Provisions of the Standard Specifications:

THESE SUPPLEMENTARY CONDITIONS AMEND THE STANDARD GENERAL PROVISIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION STANDARDS, NORTH CENTRAL TEXAS, FIFTH EDITION. ALL PROVISIONS WHICH ARE NOT AMENDED OR SUPPLEMENTED REMAIN IN FULL FORCE AND EFFECT. ALL PROVISIONS AMENDED REMAIN IN FULL FORCE AND EFFECT AS AMENDED.

1. Technical specifications (B. Special Provisions to Standard Specifications for Construction) in the Contract document package shall supersede the standard specifications.
2. Prospective bidders may make written request to the Engineer for clarification and alterations in the plans, specifications, and form of contract. Such request must be received by the Engineer no later than 11:00 a.m. on the Thursday first preceding the Friday on which the bids are to be opened. The Engineer will be the sole judge as to the necessity to an addendum or letter of clarification. Oral statements shall in no way be considered as part of the contract and will not be considered as binding.
3. Five (5) sets of the contract documents, exclusive of the "Public Works Construction Standards" referenced above will be furnished without charge to the CONTRACTOR for construction purposes. Additional copies may be obtained from the City at actual reproduction cost.
4. **Item 101.1. Definitions:** Delete the definitions of "Engineer" and "Owner" and replace with the following:
Engineer: The word "Engineer" in these contract documents and specifications shall be understood as referring to the Town of Annetta's Engineer of the Owner, or such other representatives as may be authorized by said owner to act in any particular position.

Owner: The word "Owner" in these contract documents and specifications refers to the Town of Annetta, acting through its authorized representatives.
5. **Item 102.4. Preparation of Proposal:** Sentence 4 shall be changed to read: "In the cases of discrepancy between unit prices and amounts, the unit price shown in figures shall stand and the amount and total will be adjusted to correspond to the unit price shown".

6. **Item 103.3.1.1. Performance Bonds: Paragraph (a) Performance Bond.** The last sentence of this paragraph is hereby deleted and replaced with: This bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appears within a period of two years from the date of acceptance of the improvements by the Town of Annetta.
7. **Item 103.3.1.3. Additional or Substitute Bonds:** Add following sentences: “Upon City acceptance, any Contractor doing work in or for the Town of Annetta is required to provide the Owner with a minimum Two (2) year Maintenance Bond. The maintenance bond shall be in the amount of one hundred (100) percent of the contract amount.”
8. **Item 103.3.3. Sureties: The following applies to Surety Bonds:**

Texas Government Code Title 10, Chapter 2253

“(d) A bond required by this section must be executed by corporate surety in accordance with Chapter 3503, Texas Insurance Code.”

Texas Insurance Code Section 3503.005. Additional Requirements for Certain Bonds

“(a) A bond that is made, given, tendered, or filed under Chapter 53, Property Code, or Chapter 2253, Government Code, may be executed only by a surety company that is authorized to write surety bonds in this state. If the amount of the bond exceeds \$100,000, the surety company must also:

- (1) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or
- (2) have obtained reinsurance for any liability in excess of \$100,000 from a reinsurer that:
 - (A) is an authorized reinsurer in this state; and
 - (B) holds a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

“(b) To determine whether the surety on the bond or the reinsurer holds a certificate of authority from the United States secretary of the treasury, a party may conclusively rely on the list published in the Federal Register by the United States Department of the Treasury, covering the date on which the bond was executed, of the companies holding certificates of authority as acceptable sureties on federal bonds and as acceptable reinsuring companies. A purchaser, insurer of title, or lender acquiring or insuring an interest in or title to real property may also conclusively rely on, and is protected by, a statement on a recorded bond or a sworn, recorded statement by the surety that refers to the specific recorded bond and states that, at the time the bond was executed, the surety complied with Subsection (a)(1) or (2).”

9. **Item 103.4.1. CONTRACTOR'S Insurance:** Rule 28 TAC Sec. 110.110, as follows, applies to this contract.

Item 103.4.1.1. Workers' Compensation Insurance Coverage:

- a. Definitions:

Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the CONTRACTOR has undertaken to perform on the project, regardless of whether that person contracted directly with the CONTRACTOR and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity that furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- b. The CONTRACTOR shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011 (44) for all employees of the CONTRACTOR providing services on the project, for the duration of the project.
- c. The CONTRACTOR must provide a certificate of coverage to the governmental entity prior to being awarded the contract.
- d. If the coverage period shown on the CONTRACTOR'S current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.
- e. The CONTRACTOR shall obtain from each person providing services on a project, and provide to the governmental entity:

- (1) A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and
 - (2) No later than seven days after receipt by the CONTRACTOR, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- f. The CONTRACTOR shall retain all required certificates of coverage for the duration of the project and for one year thereafter.
- g. The CONTRACTOR shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the CONTRACTOR knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.
- h. The CONTRACTOR shall post on each project site, a notice in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- i. The CONTRACTOR shall contractually require each person with whom it contracts to provide services on a project, to:
- (1) Provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;
 - (2) Provide to the CONTRACTOR, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
 - (3) Provide the CONTRACTOR, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (4) Obtain from each other person with whom it contracts, and provide to the CONTRACTOR:
 - (a) A certificate of coverage, prior to the other person beginning work on the project; and

- (b) A new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (5) Retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
 - (6) Notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
 - (7) Contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- j. By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the governmental entity that all employees of the CONTRACTOR who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- k. The CONTRACTOR'S failure to comply with any of these provisions is a breach of contract by the CONTRACTOR which entitles the governmental entity to declare the contract void if the CONTRACTOR does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.
- l. The required notice at the project shall be in text of at least a nineteen (19) point type, with a title in at least thirty (30) point type, and shall contain the following text, in English and Spanish:

REQUIRED WORKERS' COMPENSATION COVERAGE

The law requires that each person working on this site or providing services related to this construction project must be covered by workers' compensation insurance. This includes persons providing, hauling, or delivering equipment or materials, or providing labor or transportation or other service related to the project, regardless of the identity of their employer or status as an employee.

Call the Texas Workers; Compensation Commission at 512-440-3789 to receive information on the legal requirements for coverage, to verify whether your employer

has provided the required coverage, or to report an employer's failure to provide coverage.

1. **Item 103.4.5. Policy Endorsements and Special Conditions:** is amended by adding the following:

(6) The Certificate of Insurance shall be project specific and include the name of the project;

2. **Item 103.6. Notice to Proceed and Commencement of Work:** is amended by adding the following sentence to end:

"Before Contractor starts the Work at the site, a Pre-Construction Conference conducted by the Engineer and attended by Contractor, and others as appropriate will be held to discuss the schedules referred to in Items 105.3, 108.1 and 109.5, and to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work."

3. **Item 104.2.1. Increased or Decreased Quantities of Work:** is revised as follows: Amend the last sentence in Paragraph two of Item 104.2.1 to delete the following "except as provided below."

Add the following sentence to the end of paragraph two in Item 104.2.1: "The unit price of an item of Unit Price Work shall be subject to re-evaluation and adjustment under the following conditions:"

4. **Item 105.1.1. Priority of Contract Documents:** is revised as follows: Insert the words "addenda (last over first)" between "Proposal" and "Special Provision".

5. **Item 105.1.3. Contract Drawings and Specifications:** Obtaining copies of NCTCOG Public Works Construction Standards is the responsibility of the CONTRACTOR. Amend the first sentence of 105.1.3 by changing "such copies" to "five copies."

6. **Item 105.2.2. Special Warranty:** The first sentence of this paragraph is hereby deleted and replaced with:

"If within two years after the final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within a longer or shorter period of time as may be prescribed by law or by the terms of any other special warranty on designated equipment, any of the work is found to be defective or not in accordance with the contract documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so, at no additional cost to the contract".

7. **Item 105.3. Shop Drawings, Product Data and Samples:** add the following:

"Review of Shop Drawings by the Engineer shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformance with the plans and specifications and shall not relieve the CONTRACTOR of his duty as an independent contractor. It being understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby in relation to the safety of either person or property during the contractor's performance hereunder."

8. **Item 105.4. Construction Stakes:** Delete Item 105.4 in its entirety and insert the following in lieu thereof:

"Construction stakes/surveying shall be provided by the CONTRACTOR. The Contractor shall be responsible for establishing all lines and grades, and the precise location of all proposed facilities. The ENGINEER may make checks as the Work progresses to verify lines and grades established by the Contractor to determine the conformance of the completed Work as it progresses with the requirements of the construction documents. Such checking by the Engineer shall not relieve the Contractor of his responsibility to perform all Work in connection with the Contract Details and Specifications and the lines and grades given therein. Construction staking shall be considered as incidental work, and the cost thereof shall be included in such pay items as are provided in the Contract."

9. **Item 105.6. Supervision by Contractor:** The CONTRACTOR shall designate a full-time superintendent who shall be on the job site at all times during construction including times when work is being performed by subcontractors. The OWNER'S Representative will communicate only with the superintendent. The CONTRACTOR may replace the designated superintendent by written notification to the OWNER.

10. **Item 105.7.1. Authority of the Engineer:** add the following:

"The Engineer shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the Engineer shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the Engineer shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR'S or sub-contractor's agents, or employees or any other person, firm or corporation performing or attempting to perform any of the work."

11. **Item 106.5. Samples and Tests of Materials:** Delete the first and last paragraphs on Item 106.5 and replace with the following:

“The CONTRACTOR shall engage the services of an acceptable testing laboratory company to perform all required testing services. The CONTRACTOR (not the OWNER) shall pay all costs for these services, including any retesting after failure to pass tests. The CONTRACTOR shall obtain OWNER’S acceptance of the testing laboratory before having the services performed.”

Written reports of tests and engineering data furnished by CONTRACTOR for OWNER’S review shall be submitted as specified in Item 105.3, “Shop Drawings, Product Data and Samples” and as modified by the Special Specifications.

12. **Item 107.3. Indemnification:** Delete Item 107.3. in its entirety and substitute the following:

"The CONTRACTOR and his sureties shall indemnify, defend and save harmless the OWNER and all of their officers, agents and employees, Engineer and all of its officers and employees from all suits, actions or claims of any character, name and description brought for or on account of any injuries, including death or damages received or sustained by any person, persons or property on account of the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said contract; or on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER or Engineer growing out of such injury, including death or damage."

13. **Item 107.20.2. Protection of Persons and Property:** Add the following new Item 107.20.2.1. immediately after Item 107.20.2:

107.20.2.1 Should CONTRACTOR cause damage to the work or property of any separate Contractor at the site, or should any claim arise out of CONTRACTOR'S work, CONTRACTOR shall promptly attempt to settle with such other Contractor by agreement, or to otherwise resolve the dispute by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER, ENGINEER and Consulting Engineer harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate Contractor against OWNER, ENGINEER or Consulting Engineer to the extent based on a claim arising out of CONTRACTOR'S performance of the Work. Should a separate Contractor cause damage to the work or property of CONTRACTOR or should the performance of work be any separate Contractor at the site give rise to any other claim, CONTRACTOR shall not institute any action, legal or equitable, against OWNER, ENGINEER or Consulting Engineer or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from OWNER, ENGINEER or Consulting Engineer on account of any such damage or claim. If CONTRACTOR is delayed at any time in performing or furnishing Work by any act or neglect of a separate Contractor and OWNER and

CONTRACTOR are unable to agree as to the extent of any adjustment in Contract Time attributable thereto, CONTRACTOR may make a claim for an extension of time in accordance with Item 108.8. An extension of the Contract Time shall be CONTRACTOR'S exclusive remedy with respect to OWNER, ENGINEER and Consulting Engineer for any delay, disruption, interference or hindrance caused by any separate Contractor.

14. **Item 107.24.5. Existing Utilities and Service Lines:** Add the following new Item 107.24.5. immediately after Item 107.24.4.:

107.24.5. Existing Utilities and Service Lines: The Contractor shall be responsible for the protection of all existing utilities and service lines crossed or exposed by the construction operations. Where existing utilities and service lines are cut, broken or damaged, the CONTRACTOR shall replace the utilities and service lines with the same type of original construction, or better, at his own cost and expense.

If it is necessary to change or move the property of any owner or of a public utility, such property shall not be moved or interfered with until authorized by the ENGINEER. The right is reserved to the owner of any public utility to enter upon the limits of the project for the purpose of making such changes or repairs of their property that may be made necessary by the performance of this contract.

15. **Item 107.25. Project Clean-Up:** All objectionable surplus and waste material due to construction shall be removed from the site at the CONTRACTOR'S expense.

16. **Item 108.1. Progress Schedule:** Add the following paragraph:

“The CONTRACTOR shall submit to the OWNER a construction schedule setting out items of construction, road closings, detours, utility interruptions, limits, times and actual dates. If the schedule is acceptable to the OWNER, the OWNER will approve it; if the schedule is unacceptable, it will be returned to the CONTRACTOR for revision and resubmittal. If the CONTRACTOR wants to deviate from the approved schedule, he must submit a revised schedule to the OWNER for consideration. The entire work shall be prosecuted in a continuous manner in accordance with the approved schedule. Proposed stockpile locations must be approved by the OWNER prior to depositing material. The CONTRACTOR shall update this schedule on a weekly basis.”

17. **Item 108.3. Other Contractors; Obligation to Cooperate:** Delete the last sentence of the second paragraph and substitute the following in lieu thereof:

"In such event, Contractor shall be entitled to an extension of working time only for unavoidable delays verified by the Engineers, as provided in Item 108.8; however, no increase in the contract price shall be due the Contractor."

Insert the following sentence at the end of the second paragraph of Item 108.3:

"The ENGINEER shall coordinate such other work with the CONTRACTOR and schedule events to minimize delay caused to the CONTRACTOR. No additional time shall be given to the CONTRACTOR of such related work except as provided in Item 108.8."

18. **Item 108.5. Subcontracts:** Add the following paragraph:

"The CONTRACTOR shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than 50 percent of the value of all work embraced in the contract exclusive of items not commonly found in contract for similar work and exclusive of items that require highly specialized knowledge, craftsman and/or equipment not ordinarily available in the organization of CONTRACTORS performing work of the character embraced in the contract". For the purpose of evaluating the percentage of work performed by subcontractors, the cost of all equipment, supplies, and materials used or installed on the project by subcontractors shall be considered as part of the work of subcontractors. This will apply even if the contractor supplies and pays for some or all equipment, supplies, or materials used by subcontractors.

19. **Item 108.8. Delays; Extension of Time; Liquidated Damages:** Add the following at the end of the last paragraph in Item 108.8.:

"No extension of the contract time shall be allowed unless the CONTRACTOR can demonstrate the delay caused an adverse impact to the critical path and that loss of time cannot be made up by revising the sequence of the work of the project."

20. **Item 109.3. Payment for Extra Work:** Replace the first sentence of 109.3.1. General; with the following:

"No work shall be undertaken which requires extra payment without having executed a change order or field change approved by the CONTRACTOR and the OWNER, except when specifically ordered to do so in writing."

21. **Item 109.5. Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and Final Payment:**

Delete from the first paragraph of 109.5.1.:

"The monthly estimate may include acceptable non-perishable materials delivered to the work; such payment shall be allowed on same percentage basis of the net invoice value as provided hereinafter."

Add in its place, the following:

"No payment for materials on hand will be made"

B. Special Provisions to Standard Specifications for Construction:

LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS PROJECT

Bid Item No. 1 – Mobilization and General Site Preparation: The provisions of Items 105 (Contract Documents) and 203.1 (General Site Preparation) including the Town of Annetta’s supplementary conditions shall apply except as modified below:

- A. The CONTRACTOR shall be responsible for delivering acceptable bonds and insurance certificates, and mobilizing all equipment, materials and personnel to the job site in a timely fashion. The quantities of each are at the contractor’s discretion but shall be sufficient to maintain continuous progress toward a completed project. This bid item shall include all materials, equipment, gas, labor and incidentals necessary to provide an appropriate work force with the appropriate tools to complete the project. This item also includes all materials, equipment, gas, labor and incidentals necessary to remove all personnel and equipment from the site once construction is complete.
- B. The CONTRACTOR shall be responsible for all construction staking, general site layout, equipment laydown, and for establishing the lines and grades required for construction of the project. Contractor shall stake the center of the tank location and received approval from the Town or Engineer, regarding center stake location, prior to vertical construction.
- C. All Property Corners (I.R. - iron rods) disturbed shall be reinstalled by the CONTRACTOR at the exact same location as existing.
- D. This pay item shall consist of the preparation of the existing right-of-way for construction as required by the plans and specifications. It will include the area between the right-of-way limits, additional areas beyond the right-of-way such as temporary construction, slope, and drainage easements, and any other easements shown on the plans. Work shall be in accordance with NCTCOG Item 203.1 and shall include, but not be limited to: all obstructions above ground or below such as trees up to 12 inches in diameter, shrubs, stumps, brush, roots, vegetation, logs, trash concrete, concrete driveways, culverts, curb and gutter, asphalt pavement, fences, structures, foundations, lumber, scrap metal, abandoned appliances, sprinkler systems, abandoned utility pipes or conduits and any other items not included as pay items elsewhere in the contract documents, or identified in NCTCOG Item 203.1, but necessary for the preparation of the rights-of-way and/or permanent or temporary easements for construction. The maintenance/relocation of street signs and mailboxes shall be considered as part of this item. This item shall also include the protection of any trees, shrubs, fences, structures, signs or other items that are to be preserved and/or relocated as shown on the plans. All trees designated to be preserved shall be protected by fencing to the limits of the canopy and no parking, driving or moving of equipment in this area will be permitted. If pruning of protected trees is required, they shall be trimmed as directed by the Engineer and any cuts of two inches or more in diameter shall be treated as directed by the Engineer. All material and debris removed as described above shall become the property of the Contractor and shall be disposed of at contractor’s expense in a manner satisfactory to the Engineer and other

items identified in NCTCOG Item 203.1. All items relocated or replaced shall be in a condition equal to or better than the original condition. The Contractor shall videotape and/or photograph the existing right-of-way prior to construction.

- E. Any temporary gravel and/or asphalt pavement necessary to maintain access to all existing side streets, alleys, and driveways shall be subsidiary to this pay item.
- F. Payment of a portion of the lump sum amount shall be made monthly based on percentage complete of the overall contract. Payment shall include all labor, materials and incidentals to stake the project, including re-staking due to disturbance or removal of construction stakes during construction and to satisfactorily prepare the project site for the proposed improvements.

Bid Item No. 2 – Traffic Control including Barricades, Warning and Detour Signs, and Fences: The provisions of Item 801.1 shall apply except as modified below:

- A. Contractor shall submit a Traffic Control Plan to the Town of Annetta prior to beginning work. The traffic control plan shall be submitted to the City for approval at least one week prior to beginning construction. The plan shall be prepared by a licensed professional engineer in the State of Texas.
- B. All temporary traffic control devices, barricades and layouts shall be in accordance with the Texas Department of Transportation “Manual on Uniform Traffic Control Devices” latest edition.
- C. The Removal of existing and temporary pavement markings shall be subsidiary to this bid Item. All existing signs, barricades, etc. removed or disturbed during construction shall be placed back in equal or better shape as directed by the engineer.
- D. Access shall be maintained at all times to all businesses and facilities.
- E. The Contractor shall be paid under this item on a lump sum basis and shall include all labor, materials, equipment, and incidentals to assure proper traffic and pedestrian safety and flow during construction. Payment shall be made monthly based on the percentage of contract complete.

Bid Item No. 3 –Erosion Control and Storm Water Pollution Prevention Plan: The provisions of Item 202 shall apply except as modified below:

- A. This item consists of furnishing all labor and materials necessary for the installation and maintenance of erosion controls and implementation of the Storm Water Pollution Prevention Plan (SWPPP) for the entire project. The CONTRACTOR shall be considered the operator with day to day operational control of the construction site and SWPPP per Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR150000. All work shall conform to City standards, NCTCOG Standard

Specification Item 202, “Temporary Erosion, Sedimentation, and Water Pollution Prevention and Control”, and TPDES General Permit No. TXR150000.

- B. The CONTRACTOR will be responsible for preparing a SWPPP for all construction site areas in accordance with TPDES General Permit No. TXR150000 requirements. A statement within the SWPPP will identify the CONTRACTOR as the day-to-day operator responsible for the installation, inspection and maintenance of all erosion and sediment control best management practices (BMPs), devices and controls. An additional statement within the SWPPP will identify the CITY as the operator with control over construction plans and specifications. The CONTRACTOR shall submit a completed notice of intent (NOI) to the State at least 48 hours prior to any construction activity beginning. A construction site notice (CSN), signed in accordance with 30 TAC § 305.44, shall be posted at the site and a copy submitted to the City at least 48 hours prior to any construction activity beginning. The CONTRACTOR will be the operator of the ECP and SWPPP and can revise, update, amend or modify as necessary to remain in compliance with the TPDES permit. This item includes the installation, inspection and maintenance of BMP’s, devices and controls as detailed in the latest addition of NCTCOG’s Design Manual for Construction, November 2017, or other necessary controls as may be required to remain in compliance with the TPDES General Permit No. TXR150000.

- C. Measure and Payment for this item shall be made per the lump sum price bid for joint storm water pollution prevention plan for the limits of construction shown in the plans and shall be full payment for all materials, labor, equipment and other incidentals necessary to install and maintain the erosion controls complete and in place and fully comply with the SWPPP and the TPDES General Permit No. TXR150000. Payment of a portion of the lump sum amount shall be made monthly based on percentage complete of the overall contract. The costs of maintenance or any additional erosion controls above and beyond those described in the SWPPP and ECP necessary to maintain compliance with the TPDES permit are subsidiary to this pay item. The CONTRACTOR shall be responsible for conducting inspections of BMPs, devices and controls as prescribed in the SWPPP and in accordance with TPDES General Permit No. TXR150000.

- D. The CONTRACTOR must revise or update the SWPPP whenever: 1) there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge or pollutants and that has not been previously addressed in the SWPPP; or 2) results of inspections or investigations by site operators, CITY, TCEQ personnel, or a federal, state or qualified local agency indicate the SWPPP or ECP is proving ineffective in sediment control.

- E. The CONTRACTOR shall take all precautions required to prevent soil erosion during the construction. If excessive erosion occurs, the CONTRACTOR shall take immediate measures to prevent further erosion and correct the damages. The CONTRACTOR shall comply with the requirements of the SWPPP and the final TPDES Construction General Permits Regulations.

- F. The CONTRACTOR shall be responsible for the removal of all temporary BMPs, devices and controls used during the construction process to prevent erosion or sedimentation. All temporary BMPs, devices and controls shall be removed, and any disturbed areas stabilized, prior to a notice of termination (NOT) being submitted to the State for the construction project. A copy of the CONTRACTOR'S NOT shall be submitted to the CITY 48 hours prior to submittal of the NOT to the State.
- G. A Texas Registered Professional Engineer must sign and seal the Erosion Control Plan (ECP) submitted as part of the SW3P. The Contractor shall submit a Notice of Termination for City and Contractor upon completion of Project.
- H. This item shall also include the installation, maintenance and removal of:
 - a) Rock Check Dam
 - b) Erosion Control Logs
 - c) Construction Entrances
 - d) Any additional erosion control measures required by the SW3P

Bid Item No. 4 – Trench/Shoring Safety Plan: The provisions of Item 107.20.3 shall apply except as modified below:

- A. In addition to personnel safety, the Trench Safety Program developed by the Contractor must provide for sheeting and shoring procedures capable of providing support of the trenches, boring pits, or general deep excavation, giving due consideration to the proximity of existing site structures and other facilities, such as waterlines, conduit, etc.
- B. The Contractor shall abide by all applicable federal, state and local laws governing excavation. Trench side slopes shall meet Occupational Safety and Health Administration (OSHA) standards that are in effect at the time of Bid Opening. Sheeting, shoring and bracing will be required when side slope standards are not met. A trench box, meeting OSHA standards, will be acceptable. The low bidder must submit detailed plans and specifications for trench safety systems that meet OSHA standards that are in effect at the time of Bid Opening for all trench excavation regardless of depth. These plans will be sealed by an ENGINEER registered by the State of Texas and submitted to the City prior to formal execution of the contract.
- C. The cost of dewatering, if necessary, shall be incidental to this Bid Item.
- D. The Contractor shall be paid based on a lump sum basis, and shall include all labor, materials, equipment, and incidentals for a complete and sealed plan.

Bid Item No. 5 – Temporary Sediment Control (Silt Fence): The provisions of Item 202.5 shall apply except as modified below:

- A. Silt fence shall be installed according to the plan details or as required by governing agencies recommendations and/or requirements.

- B. This item shall include maintenance of protective measures until final acceptance of project by the Owner.
- C. Measurement and payment shall be made per linear foot of silt fence installed and shall include all labor, materials, equipment, and incidentals for a complete in place installation.

Bid Item No. 6 – Site Clearing & Grubbing: The provisions of Item 201 shall apply except as modified below:

- A. The Contractor shall be paid under this item on a lump sum basis and shall include all labor, materials, equipment, and incidentals.
- B. Contractor shall haul off and legally dispose all cleared and grubbed materials, confirming to all Town and local regulating authorities' requirements.

Bid Item No. 7 – Site Excavation: The provisions of Item 203.2 shall apply except as modified below:

- A. Site Excavation limits shall be limited to the minimum impacted area required to perform the work safely, as approved by the Engineer and Owner.
- B. Excavation work shall be constructed and performed as specified in the construction documents and conform to provisions of Item 203.2 (Unclassified Excavation), and generally adhere to the overall and applicable requirements of Item 203 (Site Preparation).
- C. Materials handling, hauling, shoring, trenching, compaction, disposal, and testing shall be considered as incidental work, and the cost thereof shall be included in such pay items as are provided in the Contract.
- D. It is the Contractor's responsibility to verify all existing utilities (location and depth) prior to commencing site excavation work.
- E. Contractor shall not spread excavated materials on site unless provided written approval by the Owner, prior to placement.
- F. Measurement and payment shall be made on a "per cubic yard" basis. Unit price shall include all materials, labor, and incidentals necessary for a complete in place installation.

Bid Item No. 8 – Flexible Base Material: The provisions of Item 203.4 shall apply except as modified below:

- A. Measurement and payment shall be made on a "per cubic yard" basis. Unit price shall include all materials, labor, equipment, and incidentals necessary for a complete in place installation. See Appendix A (Geotech Report) for additional information.

- B. Flexible Base indicated within the plans, shall be installed as specified in the construction documents and shall conform to provisions of Item 301.5 (Flexible Subbase or Base), and generally adhere to the overall and applicable requirements of Item 301 (Subgrade, Subbase, and Base Preparation).
- C. Contractor shall adhere to materials selection per the Contract Documents geotechnical report. All materials handling, hauling, compaction, and testing shall be considered as incidental work, and the cost thereof shall be included in such pay items as are provided in the Contract.

Bid Items No. 9 – Tank Foundation: The provisions of Item 203.2 shall apply except as modified below:

- A. Measurement and payment shall be made on a “per cubic yard” basis. Unit price shall include all materials, labor, equipment, and incidentals necessary for a complete in place installation.
- B. Flexible Base indicated within the plans, shall be installed as specified in the construction documents and shall conform to provisions of Item 301.5 (Flexible Subbase or Base), and generally adhere to the overall and applicable requirements of Item 301 (Subgrade, Subbase, and Base Preparation).
- C. Contractor shall adhere to materials selection per the Contract Documents geotechnical report. All materials handling, hauling, compaction, and testing shall be considered as incidental work, and the cost thereof shall be included in such pay items as are provided in the Contract.

Bid Item No. 10 & 11 – Tank Band & Swale:

- A. The Contractor shall be paid under this item on a lump sum basis and shall include all labor, materials, equipment, and incidentals necessary for a complete in place installation.

Bid Item No. 12 – Re-grassing Disturbed Areas w/ Hydromulch: The provisions of Item 204.6.4.4 (hydraulic mulching) shall apply except as modified below:

- A. The Contractor shall be paid under this item on a lump sum basis and shall include all labor, materials, equipment, and incidentals necessary for a complete in place installation.
- B. Contractor shall coordinate and seek approval from the Town or Engineer, regarding the grass seed species to be placed, prior to construction.

End of Section

SECTION 4
APPENDICES

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**APPENDIX A –
GEOTECH REPORT**

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Appendix A - Geotech Report

**GEOTECHNICAL ENGINEERING STUDY
GROUND STORAGE TANK
LAKES OF ALEDO – OLD ANNETTA ROAD
ANNETTA, TEXAS**

Presented To:
Town of Annetta

September 2022

PROJECT NO. 3003-22-01

September 2, 2022
Report No. 3003-22-01

Town of Annetta
P.O. Box 1150
Annetta, Texas 76008

Attn: Ms. Jamee Long, TRMC, City Secretary

**GEOTECHNICAL ENGINEERING STUDY
GROUND STORAGE TANK
LAKES OF ALEDO – OLD ANNETTA ROAD
ANNETTA, TEXAS**

Dear Ms. Long:

Submitted here are the results of a geotechnical engineering study for the referenced project. This study was performed in general accordance with CMJ Estimate 22-8593 (Revised) dated May 24, 2022. Authorization to proceed was given on June 16, 2022 by Ms. Sandy Roberts, Mayor, of Annetta, Texas.


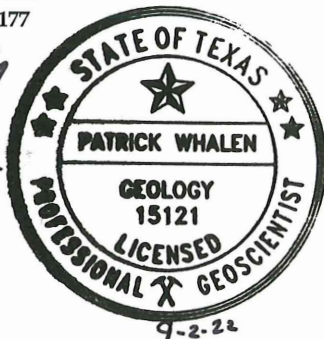
Engineering analyses and recommendations are contained in the text section of the report. Results of our field and laboratory services are included in the appendix of the report. We would appreciate the opportunity to be considered for providing the materials engineering and geotechnical observation services during the construction phase of this project.

We appreciate the opportunity to be of service to the Town of Annetta and their consultants. Please contact us if you have any questions or if we may be of further service at this time.

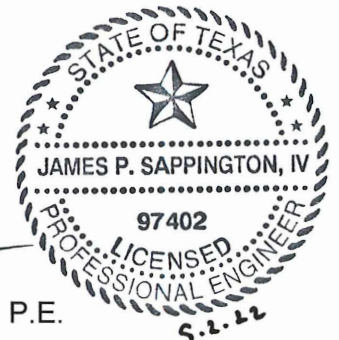
Respectfully submitted,
CMJ ENGINEERING, INC.
TBPELS REGISTRATION NO. F-9177
TBPG REGISTRATION NO. 50644



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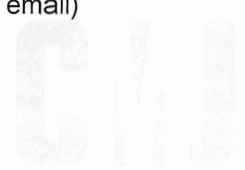


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1.0 INTRODUCTION

1.1 Project Description

The project site is located in the Town of Annetta on the north side of Old Annetta Road approximately 850 feet east of The Lakes Drive at the existing water tank site. The project, as currently planned, will consist of a bolted steel ground storage tank with a 60,000-gallon capacity and center pole support member. We understand such a tank will preferably rest atop a minimum 1-foot-thick gravel pad which is surrounded by a steel banding. Plate A.1, Plan of Borings, presents the approximate locations of the exploration borings.

1.2 Purpose and Scope

The purpose of this geotechnical engineering study has been to determine the general subsurface conditions, evaluate the engineering characteristics of the subsurface materials encountered, and develop recommendations for the type or types of foundations suitable for the project.

To accomplish its intended purposes, the study has been conducted in the following phases: (1) drilling sample borings to determine the general subsurface conditions and to obtain samples for testing; (2) performing laboratory tests on appropriate samples to determine pertinent engineering properties of the subsurface materials; and (3) performing engineering analyses, using the field and laboratory data to develop geotechnical recommendations for the proposed construction.

The design is currently in progress and the location and/or elevation of the structure could change. Once the final design is near completion (80-percent to 90-percent stage), it is recommended that CMJ Engineering, Inc. be retained to review those portions of the construction documents pertaining to the geotechnical recommendations, as a means to determine that our recommendations have been interpreted as intended.

1.3 Report Format

The text of the report is contained in Sections 1 through 8. All plates and large tables are contained in Appendix A. The alpha-numeric plate and table numbers identify the appendix in which they appear. Small tables of less than one page in length may appear in the body of the text and are numbered according to the section in which they occur.

Units used in the report are based on the English system and may include tons per square foot (tsf), kips (1 kip = 1,000 pounds), kips per square foot (ksf), pounds per square foot (psf), pounds per cubic foot (pcf), and pounds per square inch (psi).

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

Subsurface materials at the project site were explored by two (2) vertical soil borings. Borings B-1 and B-2 were drilled to a depth of 25 feet within the proposed tank footprint. The borings were drilled with a truck-mounted drilling rig using continuous flight augers at the approximate locations shown on the Plan of Borings, Plate A.1. The boring logs are included on Plates A.4 and A.5 and keys to classifications and symbols used on the logs are provided on Plates A.2 and A.3.

Undisturbed samples of cohesive soils were obtained with nominal 3-inch diameter thin-walled (Shelby) tube samplers at the locations shown on the logs of borings. The Shelby tube sampler consists of a thin-walled steel tube with a sharp cutting edge connected to a head equipped with a ball valve threaded for rod connection. The tube is pushed into the soil by the hydraulic pulldown of the drilling rig. The soil specimens were extruded from the tube in the field, logged, tested for consistency with a hand penetrometer, sealed, and packaged to limit the loss of moisture.

The consistency of cohesive soil samples was evaluated in the field using a calibrated hand penetrometer. In this test, a 0.25-inch diameter piston is pushed into the relatively undisturbed sample at a constant rate to a depth of 0.25 inches. The results of these tests, in tsf, are tabulated at respective sample depths on the logs. When the capacity of the penetrometer is exceeded, the value is tabulated as 4.5+.

Disturbed samples of the noncohesive granular or stiff to hard cohesive materials were obtained utilizing a nominal 2-inch O.D. split-barrel (split-spoon) sampler in conjunction with the Standard Penetration Test (ASTM D 1586). This test employs a 140-pound hammer that drops a free fall vertical distance of 30 inches, driving the split-spoon sampler into the material. The number of blows required for 18 inches of penetration is recorded and the value for the last 12 inches, or the penetration obtained from 50 blows, is reported as the Standard Penetration Value (N) at the appropriate depth on the logs of borings.

To evaluate the relative density and consistency of the harder formations, a modified version of the Texas Cone Penetration test was performed at selected locations. Texas Department of Transportation (TxDOT) Test Method Tex-132-E specifies driving a 3-inch diameter cone with a 170-pound hammer freely falling 24 inches. This results in 340 foot-pounds of energy for each blow. This method was modified by utilizing a 140-pound hammer freely falling 30 inches. This results in 350 foot-pounds of energy for each hammer blow. In relatively soft materials, the penetrometer cone is driven 1 foot and the number of blows required for each 6-inch penetration is tabulated at respective test depths, as blows per 6 inches on the log. In hard materials (rock or rock-like), the penetrometer cone is driven with the resulting penetrations, in inches, recorded for the first and second 50 blows, a total of 100 blows. The penetration for the total 100 blows is recorded at the respective testing depths on the boring logs.

2.2 Laboratory Testing

Laboratory soil tests were performed on selected representative samples recovered from the borings. In addition to the classification tests (liquid limits and plastic limits), moisture content, unit weight, and unconfined compressive strength tests were performed. Results of the laboratory classification tests, moisture content, unit weight, and unconfined compressive strength tests conducted for this project are included on the boring logs.

Free and absorption pressure swell testing was performed to check the expansive soil potential of onsite soils. These test results are summarized on Plate A.6.

The above laboratory tests were performed in general accordance with applicable ASTM procedures, or generally accepted practice.

3.0 SUBSURFACE CONDITIONS

3.1 Soil Conditions

Specific types and depths of subsurface strata encountered in the borings are shown on the boring logs in Appendix A. The generalized subsurface stratigraphy encountered in the borings is discussed below. Note that depths on the borings refer to the depth from the existing grade or ground surface present at the time of the investigation, and the boundaries between the various soil types are approximate.

Soils encountered consist of light brown, reddish brown, tan, and gray silty clays, sandy clays, and shaly clays. Bentonite seams were noted within the shaly clays in Boring B-1. A 1-foot thick fractured limestone layer was observed in Boring B-2 within the shaly clay at a depth of 9 feet and is considered soft (rock basis), with a Texas Cone Penetrometer (THD) test value of 7½ inches of penetration for 100 blows.

The various soils encountered at this site had tested Liquid Limits (LL) ranging from 33 to 58 with Plasticity Indices (PI) ranging from 17 to 34 and are classified as CL and CH by the Unified Classification System (USCS). The various clayey soils were generally hard (soil basis) in consistency with pocket penetrometer readings in excess of 4.5 tsf. Tested unit weight values varied from 106 to 125 pcf and tested unconfined compressive strengths ranged from 3,140 to 31,000 psf.

Tan and light brown limestone is next present in Borings B-1 and B-2 at a depth of 12 feet. The tan and light brown limestone contains clay seams and occasional sand seams in Boring B-1 and is considered hard (rock basis), with Texas Cone Penetrometer (THD) test values of 1¼ to 1¾ inches for 100 blows.

Gray sandy shale is next present at depths of 15 to 18 feet, below the tan limestone in Boring B-2 and below a 3-foot thick sand stratum in Boring B-1. The gray sandy shale is considered soft to moderately hard (rock basis), with Texas Cone Penetrometer (THD) test values of 5¼ to 8¼ inches for 100 blows. Tan sand is present in Borings B-1 and B-2 at depths of 20 to 21 feet and extends through boring termination. The tan sand is lightly cemented and contains clay seams in Boring B-2 and is considered very dense with Standard Penetration (SPT) test values of 5¾ inches of penetration for 50 hammer blows to 73 hammer blows for 1 foot of penetration.

The Atterberg Limits tests indicate the various clays encountered at this site vary from active to highly active with respect to moisture-induced volume changes. Active clays can experience volume changes (expansion or contraction) with fluctuations in their moisture content. Results of free swell testing indicate a high potential for moisture-induced movements from in-situ moisture levels.

3.2 Groundwater Observations

The borings were drilled using continuous flight augers in order to observe groundwater seepage during drilling. Groundwater seepage was not encountered during drilling operations and all borings were dry at drilling completion.

Fluctuations of the groundwater level can occur due to seasonal variations in the amount of rainfall; site topography and runoff; hydraulic conductivity of soil strata; and other factors not evident at the time the borings were performed. During wet periods of the year, seepage can occur in joints in the clays, atop or within the limestones, or in the more permeable sandy shales and sands. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

4.0 FOUNDATION RECOMMENDATIONS

4.1 General Foundation Considerations

Two independent design criteria must be satisfied in the selection of the type of foundation to support the proposed structure. First, the ultimate bearing capacity, reduced by a sufficient factor of safety, must not be exceeded by the bearing pressure transferred to the foundation soils. Second, due to consolidation or expansion of the underlying soils during the operating life of the structure, total and differential vertical movements must be within tolerable limits. A shallow foundation system should provide adequate support for the ground storage tank, provided the pad is prepared per the following report sections.

4.2 Potential Vertical Movements

The expansive soils encountered at this site can shrink and swell as the soil moisture content fluctuates during seasonal wet and dry cycles. Additionally, the site environment is impacted by grading and drainage, landscaping, groundwater conditions, paving, and many other factors which affect the structure during and after construction. Therefore, the amount of soil movement is difficult to determine due to the many unpredictable variables involved. The following estimates are based on conditions as if all recommendations are followed.

Estimates of soil movements for this site have been performed using data from the Texas Department of Transportation (TxDOT) procedure TEX-124-E for estimating Potential Vertical Rise (PVR), swell testing, and engineering judgment and experience. Vertical soil movements of approximately 3½ inches have been estimated for the clay soils in a dry condition.

The estimated soil movements are based on the subsurface conditions revealed by the borings and on seasonal moisture fluctuations. Soil movements, significantly larger than estimated, could occur due to inadequate site grading, poor drainage, ponding of rainfall, and/or leaking pipelines.

4.3 Shallow Spread Foundations

4.3.1 Design Criteria

Reinforced concrete spread foundations or continuous ring foundations may be used to support structural loads for the tank. The allowable bearing capacity given below is based upon spread foundations in the range of 2 to 5 feet in width.

The tank bottom will rest on fill material per Section 4.3.2 below. It is recommended that all fill consist of crushed stone flexible base (TxDOT Item 247, Type A, Grade 1 or 2 Stone) or graded crushed rock meeting gradation requirements of ASTM D 448, No. 467, 67 or similar gradation. Recommendations for rock fill thickness are provided in Section 4.3.2.

Continuous spread foundations should be founded at a minimum depth of approximately 1.5 feet below the ground surface into properly compacted and tested rock fill soils. The spread foundation may be designed for an allowable bearing capacity of 3.0 kips per square foot. This bearing pressure assumes a factor of safety of three.

We estimate long-term settlement and differential settlements on the order of 1 inch for footings placed upon the rock fill pad per Section 4.3.2. The following report section discusses pad preparation for the tank bottom.

4.3.2 Ground-Supported Tank Bottom

Reduction of differential movements between the outer tank walls and exterior soils will require site preparation to provide uniform support and reduced movement, the level of which is dependent upon construction type. Reduction of movements can be accomplished by using methods developed in this area to reduce on-grade slab movements. Removal and replacement of the existing clay soils with flexible base or graded stone may be utilized to reduce soil movements. The following table shows the anticipated soil movements corresponding to depths of existing soil removal and replacement.

Table 4.3.2-1 Tank Bottom Movements	
Depth of Existing Soil Removal and Replacement with Flexible Base (ft.)	Approximate Total Movements Due to Expansive Soil Uplift (in.)
6½	2
9½	1

After removal of the top 6½ (or 9½) feet, the exposed subgrade should be scarified and compacted at or above optimum moisture to a minimum of 95 percent of Standard Proctor density (ASTM D 698). Fill from the base of the excavation up to tank bottom should consist of flexible base or graded rock placed in lifts of approximately 6 inches at a minimum of minus 2 to plus 3 percentage points of the material's optimum moisture at a minimum of 95 percent of Standard Proctor density (ASTM D 698). A layer of course sand may be placed directly below the bottom of the tank to provide uniform support. In addition, the flexible base or graded rock pad should extend a minimum of 3 feet beyond the tank footing edge. It should be noted that this method of soil treatment is presented as an option for the owner's consideration. The designer should be aware that this method will not prevent movement of the soil-supported foundation elements and can only reduce the magnitude of the movement. Placement of structural elements on grade represents a compromise between construction cost and risk of distress.

4.3.3 Spread/Mat Foundation Construction

Spread foundation construction should be monitored by a representative of the geotechnical engineer to observe, among other things, the following items:

- Identification of bearing material
- Adequate penetration of the foundation excavation into the bearing layer
- The base and sides of the excavation are clean of loose cuttings
- If seepage is encountered, whether it is of sufficient amount to require the use of excavation dewatering methods

Precautions should be taken during the placement of reinforcing steel and concrete to prevent loose, excavated soil from falling into the excavation. Concrete should be placed as soon as practical after completion of the excavating, cleaning, reinforcing steel placement and observation. Excavation for a spread foundation should be filled with concrete before the end of the workday, or sooner if

required, to prevent deterioration of the bearing material. Prolonged exposure or inundation of the bearing surface with water will result in changes in strength and compressibility characteristics. If delays occur, the excavation should be deepened as necessary and cleaned, in order to provide a fresh bearing surface. If more than 24 hours of exposure of the bearing surface is anticipated in the excavations, a mud slab should be used to protect the bearing surfaces. If a mud slab is used, the foundation excavations should initially be over-excavated by approximately 4 inches and a lean concrete mud slab of approximately 4 inches in thickness should be placed in the bottom of the excavations immediately following exposure of the bearing surface by excavation. The mud slab will protect the bearing surface, maintain more uniform moisture in the subgrade, facilitate dewatering of excavations if required, and provide a working surface for placement of formwork and reinforcing steel.

The concrete should be placed in a manner that will prevent the concrete from striking the reinforcing steel or the sides of the excavation in a manner that would cause segregation of the concrete.

4.4 Piping Connections

Differential movements of piping systems entering the structure as a result of moisture-induced volume changes can occur. Horizontal pipe runs near to the surface (1- to 2-foot depths) could experience potential movements on the order of 3 to 3½ inches or more. The piping should be designed to accommodate the potential moisture-induced movements. For flexible connections, the preferred method of connection would be to connect the piping and to provide connections to accommodate differential upward movements. The piping could be sleeved to provide a suitable clear space beneath the piping to prevent abrupt differential pipe movements at the connections.

5.0 SEISMIC CONSIDERATIONS

Based on the conditions encountered in the borings for the above referenced project the IBC-2018 site classification is TYPE D for seismic evaluation.

6.0 EARTHWORK

6.1 Site Preparation & Material Requirements

The area should be stripped of existing pavements, vegetation, roots, old construction debris, and other organic material. It is estimated that the depth of stripping will be on the order of 6 to 8 inches.

The actual stripping depth should be based on field observations with attention given to old drainage areas, uneven topography, and excessively wet soils. The stripped areas should be observed to determine if additional excavation is required to remove weak or otherwise objectionable materials that would adversely affect the fill placement or other construction activities.

The subgrade should be firm and able to support the construction equipment without displacement. Soft or yielding subgrade should be corrected and made stable before construction proceeds. The subgrade should be proof rolled to detect soft spots, which if exist, should be excavated to provide a firm and otherwise suitable subgrade. Proof rolling should be performed using a heavy pneumatic tired roller, loaded dump truck, or similar piece of equipment. The proof rolling operations should be observed by the project geotechnical engineer or his/her representative.

The on-site soils are suitable for use in general site grading. Imported general fill material beyond the tank area should be clean soil with a Liquid Limit less than 50 and no rock greater than 4 inches in maximum dimension. The fill materials should be free of vegetation and debris.

6.2 Placement and Compaction

Fill material should be placed in loose lifts not exceeding 8 inches in uncompacted thickness. The uncompacted lift thickness should be reduced to 4 inches for structure backfill zones requiring hand-operated power compactors or small self-propelled compactors. The fill material should be uniform with respect to the material type and moisture content. Clods and chunks of material should be broken down and the fill material mixed by disking, blading, or plowing, as necessary, so that a material of uniform moisture and density is obtained for each lift. Water required for sprinkling to bring the fill material to the proper moisture content should be applied evenly through each layer.

The fill material should be compacted to a density ranging from 95 to 100 percent of maximum dry density as determined by ASTM D 698, Standard Proctor. In conjunction with the compacting operation, the fill material should be brought to the proper moisture content. The moisture content for general earth fill should range from 2 percentage points below optimum to 5 percentage points above optimum (-2 to +5). These ranges of moisture contents are given as maximum recommended ranges. For some soils and under some conditions, the contractor may have to maintain a narrower range of moisture content (within the recommended range) in order to consistently achieve the recommended density.

Field density tests should be taken as each lift of fill material is placed. As a guide, one field density test per lift for every 5,000 square feet of compacted area is recommended. For small areas or critical areas, the frequency of testing may need to be increased to one test per 2,500 square feet. A minimum of 2 tests per lift should be required. The earthwork operations should be observed and tested on a continuing basis by an experienced geotechnician working in conjunction with the project geotechnical engineer.

Each lift should be compacted, tested, and approved before another lift is added. The purpose of the field density tests is to provide some indication that uniform and adequate compaction is being obtained. The actual quality of the fill, as compacted, should be the responsibility of the contractor and satisfactory results from the tests should not be considered as a guarantee of the quality of the contractor's filling operations.

6.3 Trench Backfill

Trench backfill for pipelines or other utilities should be properly placed and compacted. Overly dense or dry backfill can swell and create a mound along the completed trench line. Loose or wet backfill can settle and form a depression along the completed trench line. Distress to overlying structures, pavements, etc. is likely if heaving or settlement occurs. On-site soil fill material is recommended for trench backfill. Care should be taken not to use free draining granular material, to prevent the backfilled trench from becoming a french drain and piping surface or subsurface water beneath the structures, pipelines, or pavements. If a higher-class bedding material is required for the pipelines, a lean concrete bedding will limit water intrusion into the trench and will not require compaction after placement. The soil backfill should be placed in approximately 4- to 6-inch loose lifts. The density and moisture content should be as recommended for fill in Section 6.2, Placement and Compaction, of this report. A minimum of one field density test should be taken per lift for every 150 linear feet of trench, with a minimum of 2 tests.

6.4 Excavation

The side slopes of excavations through the overburden soils should be made in such a manner to provide for their stability during construction. Existing structures, pipelines, or other facilities, which are constructed prior to or during the currently proposed construction and which require excavation, should be protected from loss of end bearing or lateral support.

Temporary construction slopes and/or permanent embankment slopes should be protected from surface runoff water. Site grading should be designed to allow drainage at planned areas where erosion protection is provided, instead of allowing surface water to flow down unprotected slopes.

Trench safety recommendations are beyond the scope of this report. The contractor must comply with all applicable safety regulations concerning trench safety and excavations including, but not limited to, OSHA regulations.

6.5 Acceptance of Imported Fill

Any soil imported from off-site sources should be tested for compliance with the recommendations for the application and approved by the project geotechnical engineer prior to the materials being used. The owner should also require the contractor to obtain a written, notarized certification from the landowner of each proposed off-site soil borrow source stating that to the best of the landowner's knowledge and belief there has never been contamination of the borrow source site with hazardous or toxic materials. The certification should be furnished to the owner prior to proceeding to furnish soils to the site. Soil materials derived from the excavation of underground petroleum storage tanks should not be used as fill on this project.

6.6 Soil Corrosion Potential

Specific testing for soil corrosion potential was not included in the scope of this study. However, based upon experience on other projects in the vicinity, the soils at this site may be corrosive. Standard construction practices for protecting metal pipe and similar facilities in contact with these soils should be used.

6.7 Erosion and Sediment Control

All disturbed areas should be protected from erosion and sedimentation during construction, and all permanent slopes and other areas subject to erosion or sedimentation should be provided with permanent erosion and sediment control facilities. All applicable ordinances and codes regarding erosion and sediment control should be followed.

7.0 CONSTRUCTION OBSERVATIONS

In any geotechnical investigation, the design recommendations are based on a limited amount of information about the subsurface conditions. In the analysis, the geotechnical engineer must assume the subsurface conditions are similar to the conditions encountered in the borings. However, quite often during construction anomalies in the subsurface conditions are revealed. Should such anomalies be discovered the Town of Annetta or their consultants should immediately notify CMJ Engineering, Inc. before proceeding further with construction to allow CMJ Engineering, Inc. to reconsider its recommendations as necessary. It is also recommended that the Town of Annetta retain CMJ Engineering, Inc. to observe earthwork and foundation installation and perform materials evaluation during the construction phase of the project. This enables the geotechnical engineer to stay abreast of the project and to be readily available to evaluate unanticipated conditions, to conduct additional tests if required and, when necessary, to recommend alternative solutions to unanticipated conditions. Until these construction phase services are performed by the project geotechnical engineer, the recommendations contained in this report on such items as final foundation bearing elevations, proper soil moisture condition, and other such subsurface-related recommendations shall only be considered as preliminary, and not final, recommendations.

It is proposed that construction phase observation and materials testing commence by the project geotechnical engineer at the outset of the project. Experience has shown that the most suitable method for procuring these services is for the owner or the owner's design engineers to contract directly with the project geotechnical engineer. This results in a clear, direct line of communication between the owner and the owner's design engineers and the geotechnical engineer.

8.0 REPORT CLOSURE

The boring logs shown in this report contain information related to the types of soil encountered at specific locations and times and show lines delineating the interface between these materials. The logs also contain our field representative's interpretation of conditions that are believed to exist in those depth intervals between the actual samples taken. Therefore, these boring logs contain both factual and interpretive information. Laboratory soil classification tests were also performed on samples from selected depths in the borings. The results of these tests, along with visual-manual procedures were used to generally classify each stratum. Therefore, it should be understood that the classification data on the logs of borings represent visual estimates of classifications for those portions of each stratum on which the full range of laboratory soil classification tests were not

performed. It is not implied that these logs are representative of subsurface conditions at other locations and times.

With regard to groundwater conditions, this report presents data on groundwater levels as they were observed during the course of the field work. In particular, water level readings have been made in the borings at the times and under conditions stated in the text of the report and on the boring logs. It should be noted that fluctuations in the level of the groundwater table can occur with the passage of time due to variations in rainfall, temperature, and other factors. Also, this report does not include quantitative information on rates of flow of groundwater into excavations, on pumping capacities necessary to dewater the excavations, or on methods of dewatering excavations. Unanticipated soil conditions at a construction site are commonly encountered and cannot be fully predicted by mere soil samples, test borings or test pits. Such unexpected conditions frequently require that additional expenditures be made by the owner to attain a properly designed and constructed project. Therefore, provision for some contingency fund is recommended to accommodate such potential extra cost.

The analyses, conclusions, and recommendations contained in this report are based on site conditions as they existed at the time of our field investigation and further on the assumption that the exploratory borings are representative of the subsurface conditions throughout the site; that is, the subsurface conditions everywhere are not significantly different from those disclosed by the borings at the time they were completed. If during construction, different subsurface conditions from those encountered in our borings are observed, or appear to be present in excavations, we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary. If there is a substantial lapse of time between submission of this report and the start of the work at the site (more than twelve months is considered a substantial lapse of time; however, depending on the circumstances, less than six months may be considered a substantial lapse of time), if conditions have changed due either to natural causes or to construction operations at or adjacent to the site, or if structures locations, structural loads or finish grades are changed, we urge that we be promptly informed and retained to review our report to determine the applicability of the conclusions and recommendations, considering the changed conditions and/or time-lapse. In this regard, if (a) construction at the site does not start within twelve months of the date of this report and (b) CMJ Engineering, Inc. is not present at the site when construction starts to confirm that conditions have not changed since the date of this report, the information in this report cannot be relied upon or used for any purpose.

Further, it is urged that CMJ Engineering, Inc. be retained to review those portions of the plans and specifications for this particular project that pertains to earthwork and foundations as a means to determine whether the plans and specifications are consistent with the recommendations contained in this report. In addition, we are available to observe construction, particularly the compaction of structural fill, or backfill and the construction of foundations as recommended in the report, and such other field observations as might be necessary.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around the site.

This report has been prepared for use in developing an overall design concept. Paragraphs, statements, test results, boring logs, diagrams, etc. should not be taken out of context, nor utilized without knowledge and awareness of their intent within the overall concept of this report. The reproduction of this report, or any part thereof, supplied to persons other than the owner, should indicate that this study was made for design purposes only and that verification of the subsurface conditions for purposes of determining the difficulty of excavation, trafficability, etc. are responsibilities of the contractor.

This report has been prepared for the exclusive use of the Town of Annetta and their consultants for specific application to design of this project only, and not for additions or modifications to the project. The only warranty made by us in connection with the services provided is that we have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended.

* * * *




CMJ ENGINEERING, INC.

CMJ PROJECT No. 3003-22-01

PLAN OF BORINGS

GROUND STORAGE TANK
 OLD ANNETTA ROAD
 ANNETTA, TEXAS

**PLATE
 A.1**

Major Divisions		Grp. Sym.	Typical Names	Laboratory Classification Criteria		
Coarse-grained soils (more than half of the material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3 Not meeting all gradation requirements for GW Liquid and Plastic limits below "A" line or P.I. greater than 4 Liquid and plastic limits plotting in hatched zone between 4 and 7 are borderline cases requiring use of dual symbols $C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3 Not meeting all gradation requirements for SW Liquid and Plastic limits below "A" line or P.I. less than 4 Liquid and plastic limits plotting between 4 and 7 are borderline cases requiring use of dual symbols Liquid and Plastic limits above "A" line with P.I. greater than 7	
		Gravels with fines (Appreciable amount of fines)	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		
			GM	Silty gravels, gravel-sand-silt mixtures		
		Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW		Well-graded sands, gravelly sands, little or no fines
			Sands with fines (Appreciable amount of fines)	SP		Poorly graded sands; gravelly sands, little or no fines
		Sands with fines (Appreciable amount of fines)		SM		Silty sands, sand-silt mixtures
	SC		Clayey sands, sand-clay mixtures			
	Fine-grained soils (More than half of material is smaller than No. 200 sieve)	Sils and clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	Determine percentages of sand and gravel from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows: Less than 5 percent.....GW, GP, SW, SP More than 12 percent.....GM, GC, SM, SC 5 to 12 percent.....Borderline cases requiring dual symbols	
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, and lean clays		
			OL	Organic silts and organic silty clays of low plasticity		
		Sils and clays (Liquid limit greater than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
			CH	Inorganic clays of high plasticity, fat clays		
OH			Organic clays of medium to high plasticity, organic silts			
Highly Organic soils		Pt	Peat and other highly organic soils			
<p>The Plasticity Chart plots Plasticity Index (Y-axis, 0 to 60) against Liquid Limit (X-axis, 0 to 100). A diagonal 'A' line is shown. Regions are labeled: CH (top right), OH and MH (middle right), CL (middle left), ML and OL (bottom left), and CL-ML (hatched area at bottom left). The A-line is labeled 'A' Line'.</p>						

SOIL OR ROCK TYPES											
	GRAVEL		LEAN CLAY		LIMESTONE						
	SAND		SANDY		SHALE						
	SILT		SILTY		SANDSTONE						
	HIGHLY PLASTIC CLAY		CLAYEY		CONGLOMERATE	Shelby Tube	Auger	Split Spoon	Rock Core	Cone Pen	No Recovery

TERMS DESCRIBING CONSISTENCY, CONDITION, AND STRUCTURE OF SOIL

Fine Grained Soils (More than 50% Passing No. 200 Sieve)

Descriptive Item	Penetrometer Reading, (tsf)
Soft	0.0 to 1.0
Firm	1.0 to 1.5
Stiff	1.5 to 3.0
Very Stiff	3.0 to 4.5
Hard	4.5+

Coarse Grained Soils (More than 50% Retained on No. 200 Sieve)

Penetration Resistance (blows/foot)	Descriptive Item	Relative Density
0 to 4	Very Loose	0 to 20%
4 to 10	Loose	20 to 40%
10 to 30	Medium Dense	40 to 70%
30 to 50	Dense	70 to 90%
Over 50	Very Dense	90 to 100%

Soil Structure

Calcareous	Contains appreciable deposits of calcium carbonate; generally nodular
Slickensided	Having inclined planes of weakness that are slick and glossy in appearance
Laminated	Composed of thin layers of varying color or texture
Fissured	Containing cracks, sometimes filled with fine sand or silt
Interbedded	Composed of alternate layers of different soil types, usually in approximately equal proportions

TERMS DESCRIBING PHYSICAL PROPERTIES OF ROCK

Hardness and Degree of Cementation

Very Soft or Plastic	Can be remolded in hand; corresponds in consistency up to very stiff in soils
Soft	Can be scratched with fingernail
Moderately Hard	Can be scratched easily with knife; cannot be scratched with fingernail
Hard	Difficult to scratch with knife
Very Hard	Cannot be scratched with knife
Poorly Cemented or Friable	Easily crumbled
Cemented	Bound together by chemically precipitated material; Quartz, calcite, dolomite, siderite, and iron oxide are common cementing materials.

Degree of Weathering

Unweathered	Rock in its natural state before being exposed to atmospheric agents
Slightly Weathered	Noted predominantly by color change with no disintegrated zones
Weathered	Complete color change with zones of slightly decomposed rock
Extremely Weathered	Complete color change with consistency, texture, and general appearance approaching soil

Project No. 3003-22-01	Boring No. B-1	Project Ground Storage Tank - Lakes of Aledo Annetta, Texas
Location See Plate A.1		Water Observations No seepage encountered during drilling; dry at completion
Completion Depth 25.0'	Completion Date 7-23-22	

Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
			B-53, w/ CFA											
Stratum Description														
				SILTY CLAY , light brown, hard			4.5+		33	16	17	5		
				- grades tan below 2'			4.5+					6	106	3140
							4.5+		35	14	21	6		
				SHALY CLAY , tan, gray, and reddish brown, w/ bentonite seams, hard			4.5+					2	108	3340
							4.5+					9		
5														
							4.5+		42	15	27	13	118	
							4.5+					11	125	31000
10														
				LIMESTONE , light brown, w/ sand seams and clay seams, hard										
							100/1.75"					9		
15				SAND , tan										
				SANDY SHALE , gray, moderately hard			100/5.25"					11		
20														
				SAND , tan, very dense										
25							73					13		

LOG OF BORING 3003-22-01.GPJ CMJ.GDT 9/2/22

Project No. 3003-22-01	Boring No. B-2	Project Ground Storage Tank - Lakes of Aledo Annetta, Texas
Location See Plate A.1		Water Observations No seepage encountered during drilling; dry at completion
Completion Depth 25.0'	Completion Date 7-23-22	

Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
				B-53, w/ CFA										
Stratum Description														
				SANDY CLAY , tan, gray, and reddish brown, hard			4.5+					8		
				SHALY CLAY , reddish brown, gray, and tan, hard			4.5+		40	15	25	9	112	
							4.5+					9	115	7420
							4.5+					13		
							4.5+		58	24	34	17	106	
5														
				LIMESTONE , tan, fractured, w/ clay seams, soft			100/7.5"					9		
				SHALY CLAY , tan, gray, and reddish brown										
				LIMESTONE , tan, hard										
10														
							100/1.25"					6		
15														
				SANDY SHALE , gray, soft										
				SAND , tan, lightly cemented, w/ clay seams, very dense			100/8.25"					12		
20														
25							50/5.75"					15		

LOG OF BORING 3003-22-01.GPJ CMJ.GDT 9/2/22

FREE SWELL TEST RESULTS

Project: Ground Storage Tank
Lakes of Aledo – Annetta, Texas

Project No.: 3003-22-01

Boring No.	Depth Interval (ft.)	Sample Description	Liquid Limit LL	Plastic Limit PL	Plasticity Index PI	Moisture Content %		Percent Swell (%)
						Initial	Final	
B-1	7-8	Shaly Clay	42	15	27	12.6	17.8	4.0
B-2	1-2	Sandy Clay	40	15	24	9.0	18.4	4.7

Free swell tests performed at approximate overburden pressure

PRESSURE SWELL TEST RESULTS

Boring No.: B-2
Depth: 4-5 Feet
Liquid Limit: 58
Plastic Limit: 24
Plasticity Index: 34

Pressure (psf)	Swell (%)
9,000	0.0
3,000	1.8
1,000	4.0
250	6.9

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**APPENDIX B –
DRAWINGS**

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NO.	REVISION:	BY:	DATE:

SCALE
AS NOTED

DESIGNED: JAJ
DRAWN: JAJ
CHECKED: RK

FILE: **43913.012**

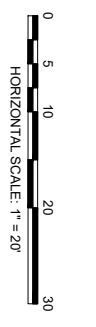
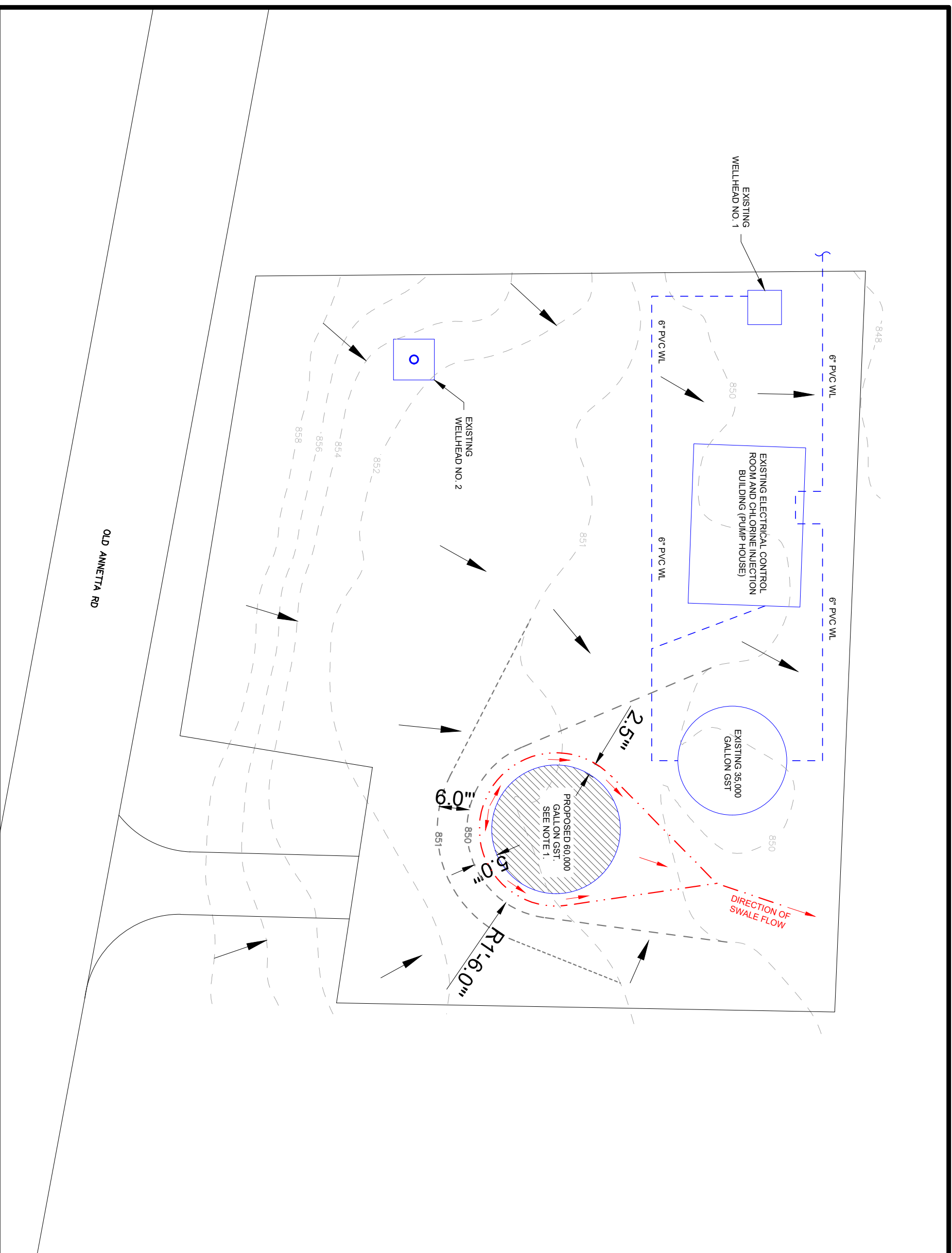


NAME: JOURDAN A. JOHNSON
DATE: 11/9/2022
TBE FIRM # - 312



SHEET
1 OF 2

PROJ. No.
43913



LEGEND

	PROPOSED GROUND STORAGE TANK
	DIRECTION OF OVERLAND FLOW
	DIRECTION OF SHALLOW SWALE FLOW
	PROPOSED SHALLOW SWALE
	EXISTING WATERLINE
	PROPOSED CONTOUR
	EXISTING CONTOUR


- NOTES:**
1. PROVIDE 80,000 GALLON GST. TANK SHALL BE PLACED EQUAL IN ELEVATION TO THE EXISTING 35,000 GALLON GST. CONTRACTOR SHALL REMOVE AND REPLACE A MINIMUM 6\"/>

NO.	REVISION:	BY:	DATE:


SCALE
AS NOTED

DESIGNED: JAJ
DRAWN: JAJ
CHECKED: RK

FILE: 43933.012



4000 FOSSIL CREEK BLVD
FORT WORTH, TEXAS 76137-2797
TEL: (817) 847-4225 FAX: (817) 252-9794



NAME: JOURDAN A. JOHNSON
DATE: 11/9/2022
TBE FIRM # - 512

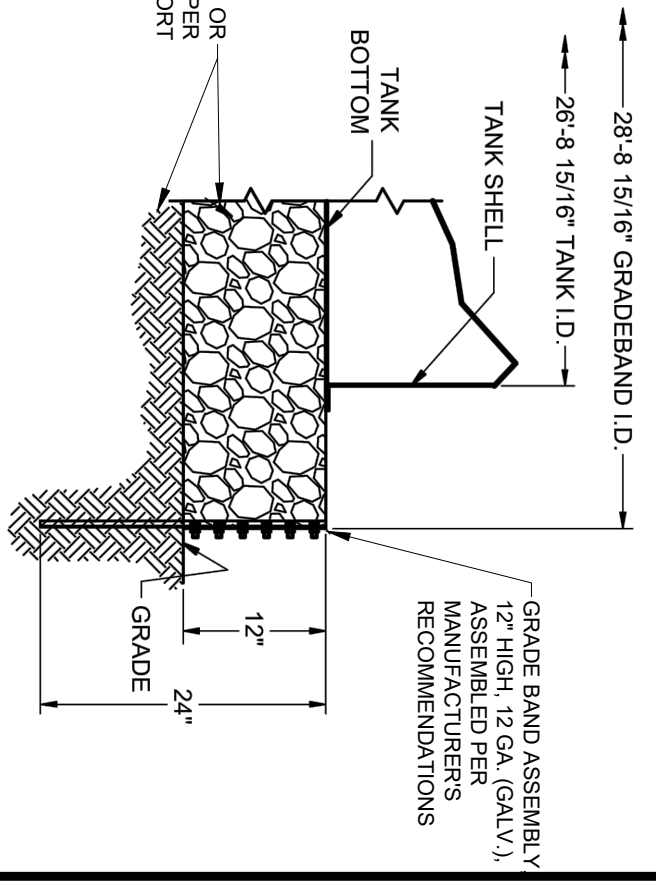
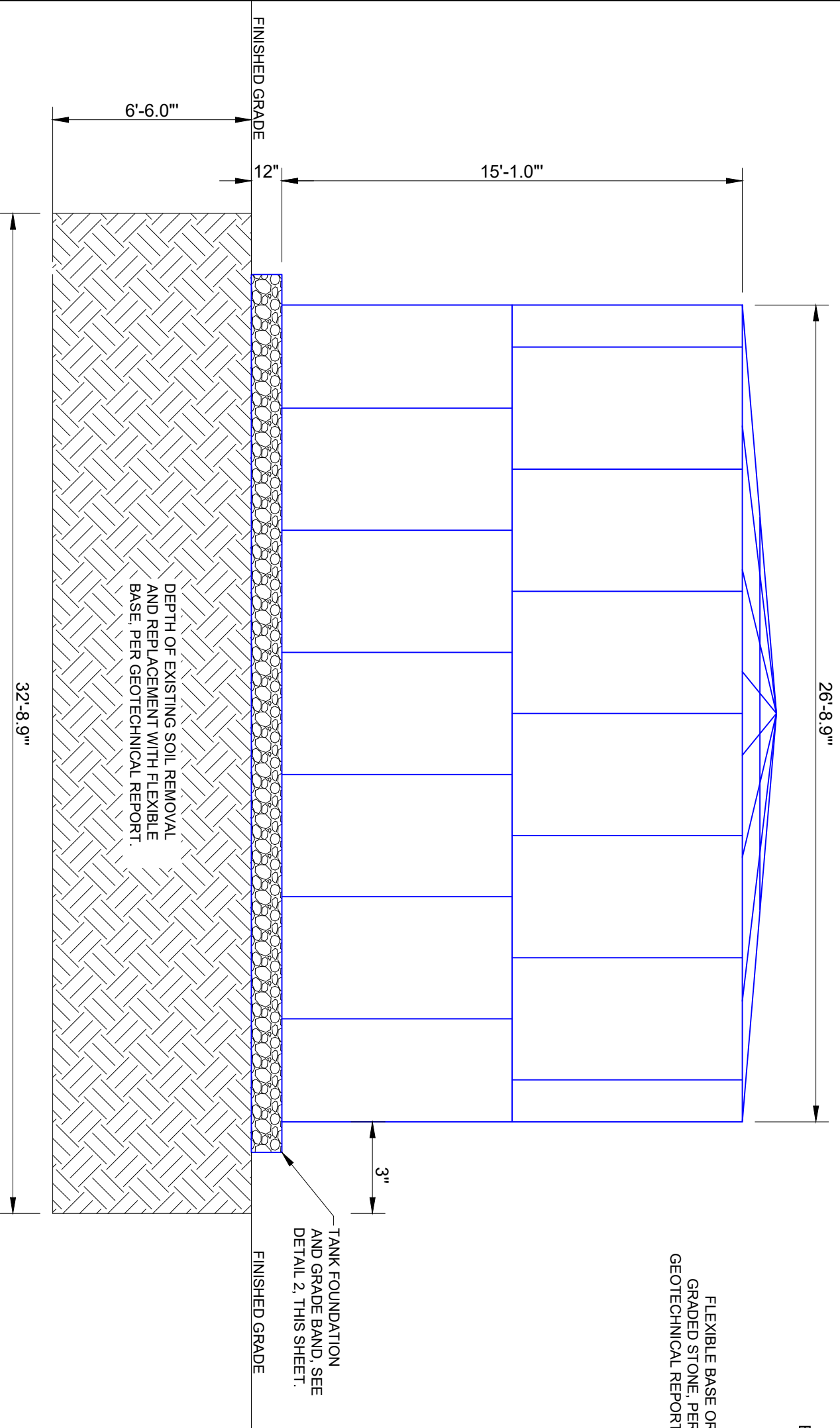


TOWN OF ANNA

TANK FOUNDATION DETAILS	SHEET 2 OF 2
LAKES OF ALEDO GST FOUNDATION & GRADING IMPROVEMENTS	PROJ. No. 43933

1
A 1" = 50'

TANK EXCAVATION AND SOIL BACKFILL DETAIL



- NOTES:
1. A REINFORCED CONCRETE SPREAD FOOTING OR CONTINUOUS RING FOUNDATION MAY BE USED TO SUPPORT THE PROPOSED TANK. PER THE GEOTECHNICAL REPORT. ADDITIONALLY, CONTRACTOR MAY USE A GROUND SUPPORTED TANK FOUNDATION, IN LIEU OF A CONCRETE SPREAD FOOTING OR RING FOUNDATION, FURTHER DETAILED IN NOTE 3 BELOW.
 2. IF A REINFORCED CONCRETE SPREAD FOOTING OR CONTINUOUS RING FOUNDATION IS USED, CONTRACTOR SHALL SUBMIT FOUNDATION DESIGN FOR APPROVAL BY THE ENGINEER. CONTRACTORS FOUNDATION DESIGN SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS.
 3. GROUND SUPPORTED TANK FOUNDATION:
 - 3.1. REMOVAL AND REPLACEMENT OF THE EXISTING SOIL WITH FLEXIBLE BASE OR GRADED STONE, PER THE GEOTECHNICAL REPORT, MAY BE UTILIZED.
 - 3.2. CONTRACTOR SHALL REMOVE A MINIMUM OF 6.5-FT OF SOIL DEPTH AND COMPACT TO A MINIMUM 95% OF STANDARD PROCTOR DENSITY (ASTM D698). FILL FROM THE BASE OF THE EXCAVATION UP TO THE TANK BOTTOM IN 6-INCH LIFTS, TO 95% STANDARD PROCTOR DENSITY. A LAYER OF COURSE SAND MAY BE PLACED DIRECTLY BELOW THE BOTTOM OF THE TANK TO PROVIDE UNIFORM SUPPORT.
 - 3.3. THE FLEXIBLE BASE OR GRADED ROCK PAD SHALL EXTEND A MINIMUM OF 3-FEET BEYOND THE TANK FOOTING EDGE.
 4. EXCAVATION: PROVIDE EXCAVATION SIDE SLOPES THROUGH THE OVERBURDEN SOILS TO ENSURE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, PIPELINES, OR OTHER FACILITIES.