ST. TAMMANY PARISH

MICHAEL B. COOPER
PARISH PRESIDENT

NOTICE TO BIDDERS

ST. TAMMANY PARISH

Sealed bids will be received by the Department of Procurement until **2:00 p.m., Wednesday, June 10, 2026,** and then opened and read publicly at that time by the Procurement Staff for the following project:

Bid # 26-31-2– Tammany Trace Bridge # 13

This bid package is available online at www.bidexpress.com or LaPAC https://wwwcfprd.doa.louisiana.gov/osp/lapac/dspBid.cfm?search=department&term=185. It is the Vendor's responsibility to check Bid Express, or LaPAC frequently for any possible addenda that may be issued. The Parish is not responsible for a Vendor's failure to download any addenda documents required to complete a submission.

The project classification is:

Highway, Street and Bridge Construction

Paper Bids must be sealed. In addition, the outside of the envelope, box, or package containing the Bid shall be marked with the following information. Name and Address of the Bidder, the State Contractor's License Number of the Bidder (if the work is estimated at $50k or more), the Bid Name, and the Bid Number. Bids submitted without this information may be deemed non-responsive.

A Mandatory pre-bid meeting will be held on Wednesday, May 27, 2026 at 2:00 PM at the St. Tammany Parish Government 21454 Koop Drive, Building B, 3rd Floor Conference Room, Mandeville, LA 70471. Attendance is required.

Bids will be received at 21454 Koop Dr., Suite 2F, Mandeville, LA 70471 from each bidder or his agent and given a written receipt, by certified mail with return receipt requested, or electronically at www.bidexpress.com.

The Procurement Department can be contacted by telephone at (985) 898-2520 or via e-mail at Procurement@stpgov.org. St. Tammany Parish Government reserves the right to reject any or all quotes and to waive informalities.

BID PROPOSAL

ST. TAMMANY PARISH
GOVERNMENT

BID PACKAGE FOR

Tammany Trace Bridge #13

BID NO.: 26-31-2

February 13, 2026

Section 01

Table of Contents

Section 01	Table of Contents
Section 02	Instructions to Bidders
Section 03	Summary of Work
Section 04	LA Uniform Public Work Bid Form Unit Price Form
Section 05	Affidavits, Louisiana (Pursuant to LSA-R.S. 38:2224, 38:2227 and 38:2212.10)
Section 06	Insurance Requirements
Section 07	Project Sign
Section 08	General Conditions
Section 09	Sample Corporate Resolution
Section 10	Sample Certificate of Insurance
Section 11	Sample Contract
Section 12	Permits
Section 13	Geotechnical Data Report
Section 14	Specifications
Division 1	**General Requirements**
01100	Summary of Work
01350	Special Project Procedures
01400	Quality Requirements
01410	Regulatory Requirements
01500	Temporary Facilities and Controls
01571	Temporary Erosion and Sediment Control
01600	Product Requirements
01711	Mobilization
01712	Field Engineering

01741	Construction Waste Management and Disposal
01742	Clean Up

Division 2 Site Work

020010	Technical Specifications
020020	Special Provisions for Prefabricated Half Through Truss Pedestrian Bridge
Section 15	Construction Drawings

Section 02

Instructions to Bidders

Bidders are urged to promptly review the requirements of this specification and submit questions for resolution as early as possible during the bid period. Questions or concerns must be submitted in writing to the Procurement Department no later than 2:00 CST seven (7) working days prior to the bid opening date. Otherwise, this will be construed as acceptance by the bidders that the intent of the specifications is clear and that competitive bids may be obtained as specified herein. Protests with regard to the specification documents will not be considered after bids are opened.

1. Bid security is required. Be sure that your bid includes such security as is necessary to meet Parish requirements and is properly signed. The bid must be fully completed. All applicable Louisiana license numbers must be affixed.

2. The Owner is the St. Tammany Parish Government (the "Parish").

3. The terms "he/his" and "it/its" may be used interchangeably.

4. The terms "Owner," the "Parish," and "St. Tammany Parish" may be used interchangeably.

5. The successful Bidder understands the limited contract time in the contract is **6 (six) months**, and shall submit any request for an extension of time in accordance with the General and Supplementary Conditions. Said request will reflect the days requested and the reason for same. No extension request is guaranteed or absolute.

6. Bidder specifically understands that acknowledgment of the General Conditions is required. Bidder specifically understands that signature of receipt of the General Conditions is mandated. **The Bidder's signature on the "Louisiana Uniform Public Work Bid Form" will serve as acknowledgment of the Bidder's receipt and understanding of the General Conditions as well as any Supplementary Conditions.**

7. ***If any additional work*** **is performed by the contractor without *written approval* by owner, the cost of the work will be borne by the contractor and will not be reimbursed by the Parish.**

8. **Only** the Louisiana Uniform Public Bid Form, the Unit Price Form (if necessary), the bid security, and written evidence of authority of person signing the bid shall be submitted on or before the bid opening time and date provided for in the Bid Documents. Necessary copies of the Louisiana Uniform Public Work Forms and Unit Price Forms (if necessary) will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.

9. All other documents and information required are to be submitted by the low Bidder within ten (10) days after the opening of the bids, and at the same time of day and location as given for the opening of the bids in the Bid Documents.

10. Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor's License Number of the Bidder (if work requires contractor's license), and the Project name and the Bid number. In the case of an electronic bid proposal, a contractor may submit an authentic digital signature on the electronic bid proposal accompanied by the contractor's license number, Project name and the Bid number.

11. The price quoted for the Work shall be stated in words and figures on the Bid Form, and in figures only on the Unit Price Form. The price in the Bid shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes and is the responsibility of the contractor to obtain tax exemption if applicable. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.

12. The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).

13. Only a Contractor licensed by the State to do the type of Work as indicated on the Notice to Bidders can submit a Bid. The Bidder's signature on the Bid Form certifies that he holds an active license under the provisions of Chapter 24 of Louisiana Revised Statutes Title 37. Failure to be properly licensed constitutes authority for the Owner to reject the Bid.

14. Bidders shall not attach any conditions or provisions to the Bid. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid.

15. A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.

16. Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the execution of the Contract.

17. A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened. A bid withdrawn under the provisions of LSA-R.S. 38:2214(C) cannot be resubmitted.

18. Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.

19. No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. Inquiries received within seven (7) days prior to the day fixed for opening of the Bids may not be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of the Owner to send or failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid as submitted without Modification. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O).

20. The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal, illegible, or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.

21. Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.

22. Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.

23. It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.

24. Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.

25. Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation, including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred

to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not furnished by Contractor; or, iii) use of the product, material or service in other than the specified operating conditions and environment.

26. Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.

27. Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form, instrument, Drawing or document or to visit the site and acquaint itself with existing conditions shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.

28. The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.

29. When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or in conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.

30. Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.

31. In accordance with Louisiana Law, all Corporations (See LA R.S. 12:26.1) and Limited Liability Companies (See LA R.S. 12:1308.2) should be registered and in good standing with the Louisiana Secretary of State in order to hold a contract.

32. Sealed Bids shall be delivered to St. Tammany Parish Government at the office of **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and a receipt given, until the time and date denoted in Notice to Bidders, at which time and place the Bids shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38:2212(H), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Bids may also be mailed by certified mail to **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders. It is the responsibility of the Bidders to ensure that bids are delivered in a timely fashion. **Late bids, regardless of reason, will not be considered, and will be returned to bidder.**

33. Paper bids shall be placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these Instructions, and addressed:

St. Tammany Parish Government
Department of Procurement
21454 Koop Drive, Suite 2-F
Mandeville, LA 70471

34. See Notice to Bidders for availability of Drawings, Specifications and Contract Documents via electronic methods.

35. The successful Bidder shall be required to post in each direction a public information sign, 4' x 4' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.

36. The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility and qualifications of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.

37. At least three days prior to the execution of the Contract, the Contractor shall deliver to the Owner the required Bonds.

38. Failure of the successful Bidder to execute the Contract and deliver the required Bonds within ten (10) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited. Award may then be made to the next lowest responsible bidder.

39. In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and hold harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a Performance and Payment Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.

40. No surety Company will be accepted as a bondsman which has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Service of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.

41. In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):

> Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.
>
> For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of

the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.

In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.

42. Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due, or to become due to Contractor.

43. The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.

44. The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans, specifications, and other Contract Documents. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney's fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.

45. The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of the Contract.

46. The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of the Work/Project by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.

47. Contractor authorizes Parish to deduct from any payment due herein costs and service fees for recordation of this Contract in full or an excerpt hereof, or any revisions or modifications thereof as required by law. Contractor agrees to execute an excerpt or extract of this agreement for recordation purposes. If Contractor fails to execute such an excerpt, then the Parish shall file and record the entire Contract and all attachments at the expense of Contractor and Parish is hereby authorized to deduct all related costs from any proceeds due to the Contractor.

48. Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor,

his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.

49. The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.

50. Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.

51. Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.

52. Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.

53. Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: This project consists of the removal of the existing 252.21-foot timber bridge along the Tammany Trace and its replacement with a new 255-foot prefabricated steel truss bridge. Work includes demolition and disposal of the existing timber structure, construction of new concrete abutments and foundations as required, installation of the prefabricated steel truss superstructure, placement of decking and safety railings, and reconstruction of trail approaches to tie into the existing corridor.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages*.

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

54. The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract shall be designated by a separate document issued by the Office of Risk Management.

55. It is the intent of these instructions that they are in conformance with State Bid Laws. Should there be any discrepancy or ambiguity in these provisions, the applicable State Bid Law shall apply.

56. The letting of any public contract in connection with funds that are granted or advanced by the United States of America shall be subject to the effect, if any, of related laws of said United States and valid rules and regulations of federal agencies in charge, or governing use and payment of such federal funds.

57. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE two (2) working days of the bid opening. Any other protest shall be filed no later than ten (10) calendar days after: the opening of the bid; the basis of the protest is known; or the basis of the protest should have been known (whichever is earlier).

58. It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be concise and logically presented to facilitate review by the Parish. The written protest shall include:

    The protester's name, address, and fax and telephone numbers and the solicitation, bid, or contract number;

    A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;

    Copies of relevant documents;

    All information establishing that the protester is an interested party and that the protest is timely; and

    A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to St. Tammany Parish Government Department of Procurement, P.O. Box 628, Covington, LA 70434

The protest review shall be conducted by the Parish Legal Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals, must be filed with and received by the Department of Procurement BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

59. The last day to submit questions to Procurement shall be no later than 2:00 pm CST, seven (7) working days prior to the opening of bids, and verification on comparable products will be no later than 2:00 pm CST, fourteen (14) working days prior to the opening date of the bid/proposal due date. Further, any questions or inquiries must be submitted via fax to 985-898-5227, or via email to Procurement@stpgov.org. Any questions or inquiries received after the required deadline to submit questions or inquiries will not be answered.

Schedule of Events

	Date	Time (CT)
Bid Due Date	June 10, 2026	2:00 PM
Pre-Bid	May 27, 2026	2:00 PM
Inquiry Deadline	June 1, 2026	2:00 PM
Addendum Deadline	June 5, 2026	2:00 PM

NOTE: The Parish reserves the right to revise this schedule. Any such revision will be formalized by the issuance of an addendum to the Bid Request.

60. St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time, St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.

61. Any action by the Parish to disqualify any Bidder on the grounds that they are not a responsible Bidder shall be conducted in accordance with LSA-R.S. 38:2212(X).

62. Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.

63. If any part of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

Section 03

Summary of Work

I. Work to Include:

This project consists of the removal of the existing 252.21-foot timber bridge along the Tammany Trace and its replacement with a new 255-foot prefabricated steel truss bridge. Work includes demolition and disposal of the existing timber structure, construction of new concrete abutments and foundations as required, installation of the prefabricated steel truss superstructure, placement of decking and safety railings, and reconstruction of trail approaches to tie into the existing corridor.

II. Location of Work:

Tammany Trace Bridge #13

Lat 30-21-00.77N, Long -90-02-20.7W; Tammany Trace Bike Trail; Bayou Castine; Section 47, T08SR12E

III. Documents: Bid Documents dated February 13, 2026, and entitled:

Tammany Trace Bridge #13
Bid No. 26-31-2

IV. OTHER REQUIREMENTS (as applicable)

When not otherwise specified herein, all work and materials shall conform to the requirements of the Louisiana Department of Transportation and Development hereafter called LDOTD (2016 Edition of Louisiana Standard Specifications for Roads and Bridges).

Table 3.1

Liquidated Damages	
Original Contract Amount	**Daily Charge**
Dollars	Dollars
0 - 250,000	500
250,000 – 1 Million	1,000
> 1 Million – 5 Million	1,500
> 5 Million – 10 Million	2,000
> 10 Million	3,000

- Parish reserves the right to increase the Daily charge rate due to additional provisions required in order to complete the project as described in the specifications

Section 04

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: St. Tammany Parish Government
21454 Koop Dr., Suite 2F
Mandeville, La 70471
(Owner to provide name and address of owner)

BID FOR: Tammany Trace Bridge #13
Bid No. 26-31-2
(Owner to provide name of project and other identifying information.)

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Forte & Tablada, Inc and dated: February 13, 2026.
(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____ .

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____Dollars ($ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NA Dollars ($ NA)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NA Dollars ($ NA)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

NA Dollars ($ NA)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

_____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

**** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM
UNIT PRICE FORM

TO:

St. Tammany Parish Government

21454 Koop Drive, Suite 2F

Mandeville, LA. 70471

(OWNER TO PROVIDE NAME AND ADDRESS OF OWNER)

BID FOR:

Tammany Trace Bridge #13

Bid NO. 26-31-2

(OWNER TO PROVIDE PROJECT NAME & OTHER IDENTIFYING INFO)

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	CLEARING AND GRUBBING	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
201-01-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-01-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF ASPHALT PAVEMENT	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-02-02020	122	SQ. YD.		
Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF BASE - SOIL CEMENT, ASPHALT, OR BCS	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-02-03000	122	SQ. YD.		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

Version 2017 Q2

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF BRIDGE (STA.16+40 13.7 ft x 252.21 ft. TIMBER BRIDGE)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-02-04000	1	EACH		
Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF CONCRETE APPROACH SLABS	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-02-06000	26	SQ. YD.		
Description:	☑ BASE BID OR	☐ ALT #	REMOVAL OF SIGN AND U-CHANNEL POST	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
202-02-38300	2	EACH		
Description:	☑ BASE BID OR	☐ ALT #	DRAINAGE EXCAVATION	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
203-02-00100	274	CU. YD.		
Description:	☑ BASE BID OR	☐ ALT #	EXCAVATION AND EMBANKMENT	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
203-05-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	TEMPORARY HAY BALES	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
204-02-00100	2	EACH		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	TEMPORARY SILT FENCING	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
204-06-00100	528	LN. FT.		
Description:	☑ BASE BID OR	☐ ALT #	CLASS II BASE COURSE (6" THICK) (CRUSHED STONE)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
302-02-06020	27.1	SQ. YD.		
Description:	☑ BASE BID OR	☐ ALT #	THIN ASPHALT CONCRETE (DENSE MIX)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
501-01-00100	7.7	TON		
Description:	☑ BASE BID OR	☐ ALT #	ASPHALT CONCRETE	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
502-01-00100	15.3	TON		
Description:	☑ BASE BID OR	☐ ALT #	RIPRAP (30lb, 18" THICK)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
711-01-03020	307.1	SQ. YD.		
Description:	☑ BASE BID OR	☐ ALT #	GEOTEXTILE FABRIC	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
711-04-00100	307.1	SQ. YD.		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	TEMPORARY SIGNS AND BARRICADES	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
713-01-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	MULCH (VEGETATIVE)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
716-01-00100	0.1	TON		
Description:	☑ BASE BID OR	☐ ALT #	SEEDING	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
717-01-00100	2	POUND		
Description:	☑ BASE BID OR	☐ ALT #	FERTILIZER	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
718-01-00100	50	POUND		
Description:	☑ BASE BID OR	☐ ALT #	MOBILIZATION	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
727-01-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	CONSTRUCTION LAYOUT	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
740-01-00100	1	LUMP SUM		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	PRECAST CONCRETE PILES (14")	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
804-01-00200	800	LN. FT.		
Description:	☑ BASE BID OR	☐ ALT #	CONSTRUCTION SITE SURVEY	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
804-17-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	VIBRATION MONITORING	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
804-18-00100	8	DAY		
Description:	☑ BASE BID OR	☐ ALT #	CLASS A1 CONCRETE (BENT CAP)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
805-01-00300	51.02	CU. YD.		
Description:	☑ BASE BID OR	☐ ALT #	CONCRETE FINISH (CLASS 2 RUBBED FINISH)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
805-18-00100	1,052	SQ. FT.		
Description:	☑ BASE BID OR	☐ ALT #	CONCRETE FINISH (CLASS 3 SPECIAL FINISH)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
805-18-00200	1,052	SQ. FT.		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR	☐ ALT #	DEFORMED REINFORCING STEEL	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
806-01-00100	6,986	POUND		
Description:	☑ BASE BID OR	☐ ALT #	STRUCTURAL METALWORK (ANCHOR BOLTS & HARDWARE, JOINT ARMOR)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
807-02-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	STRUCTURAL METALWORK (ERECT PRE-FABRICATED STEEL TRUSS)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
807-04-00100	1	LUMP SUM		
Description:	☑ BASE BID OR	☐ ALT #	CONCRETE APPROACH SLABS (CAST-IN-PLACE)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
813-01-00100	279	SQ. FT.		
Description:	☑ BASE BID OR	☐ ALT #	SEALED EXPANSION JOINT (END DAMS AND PREFORMED NEOPRENE SEAL)	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
815-02-00100	28	LN. FT.		
Description:	☑ BASE BID OR	☐ ALT #	SAW CUTTING ASPHALT CONCRETE PAVEMENT	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
NS-140-00340	60	IN. FT.		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:	☑ BASE BID OR ☐ ALT #		PEDESTRIAN HANDRAIL	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
NS-800-00260	36	LN. FT.		
Description:	☑ BASE BID OR ☐ ALT #		PREFABRICATED HALF THROUGH TRUSS PEDESTRIAN BRIDGE	
REF NO.:	**QUANTITY**	**UNIT OF MEASURE**	**UNIT PRICE**	**UNIT PRICE EXTENSION (Quantity times unit price)**
TS-800-00100	1	LUMP SUM		

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

Section 05

AFFIDAVIT PURSUANT TO LSA-R.S. 38:2224 and 38:2227 FOR BIDDERS FOR PUBLIC WORKS CONTRACTS

STATE OF _____

PARISH/COUNTY OF _____

BEFORE ME, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

_____

Print Name

who, after first being duly sworn, did depose and state:

1. That affiant is appearing on behalf of _____, who is seeking a public contract with St. Tammany Parish Government.

2. That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and

3. That no part of the contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.

4. If affiant is a sole proprietor, that after July 2, 2010, he/she has not been convicted of, or has not entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).

5. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or *nolo contendere* to any

of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).

6. If affiant is a sole proprietor, that neither affiant, nor his/her immediate family is a public servant of St. Tammany Parish Government or the Contract is not under the supervision or jurisdiction of the public servant's agency.

7. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no public servant of St. Tammany Parish Government, or his/her immediate family, either individually or collectively, has more than a 25% ownership interest in the entity seeking the Contract with St. Tammany Parish Government if the Contract will be under the supervision or jurisdiction of the public servant's agency.

_____

Printed Name: _____

Title: _____

Entity name: _____

THUS SWORN TO AND SUBSCRIBED BEFORE ME,

THIS_____, DAY OF _____, 202__.

_____

Notary Public

Print Name: _____

Notary I.D./Bar No.: _____

My commission expires: _____

AFFIDAVIT PURSUANT TO LSA-R.S. 38:2212.10 CONFIRMING REGISTRATION AND PARTICIPATION IN A STATUS VERIFICATION SYSTEM

STATE OF _____

PARISH/COUNTY OF _____

BEFORE ME, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

_____

Print Name

who, after first being duly sworn, did depose and state:

1. That affiant is appearing on behalf of _____, a private employer seeking a bid or a contract with St. Tammany Parish Government for the physical performance of services within the State of Louisiana.

2. That affiant is registered and participates in a status verification system to verify that all employees in the state of Louisiana are legal citizens of the United States or are legal aliens; and

3. That affiant shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

4. That affiant shall require all subcontractors to submit to the affiant a sworn affidavit verifying compliance with this law.

_____

Printed Name: _____

Title: _____

Name of Entity: _____

THUS SWORN TO AND SUBSCRIBED BEFORE ME,
THIS_____, DAY OF _____, 202__.

_____

Notary Public

Print Name: _____

Notary I.D./Bar No.: _____

My commission expires: _____

INSURANCE REQUIREMENTS*

Construction Project: Tammany Trace Bridge #13

Project/Quote/Bid#: 26-31-2

IMPORTANT – PLEASE READ

Prior to submitting your quote or bid, it is recommended that you review these insurance requirements with your insurance broker/agent.

These requirements modify portions of the insurance language found in the General Conditions and/or* Supplementary *General Conditions; however, there is no intention to remove all sections pertaining to insurance requirements and limits set forth in the General Conditions and/or Supplementary General Conditions, only to amend and specify those items particular for this Project.

A. The Provider shall secure and maintain at its expense such insurance that will protect it and St. Tammany Parish Government (the "Parish") from claims for bodily injury, death or property damage as well as from claims under the Workers' Compensation Acts that may arise from the performance of services under this agreement. All certificates of insurance shall be furnished to the Parish and provide thirty (30) days prior notice of cancellation to the Parish, in writing, on all of the required coverage.

B. All policies shall provide for and certificates of insurance shall indicate the following:

1. Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.

2. Additional Insured: St. Tammany Parish Government shall be named as Additional Insured with respect to general liability, automobile liability and excess liability coverages, as well as marine liability and pollution/environmental liability, when those coverages are required or necessary.

3. Payment of Premiums: The insurance companies issuing the policy or policies will have no recourse against St. Tammany Parish Government for payment of any premiums or for assessments under any form of policy.

4. Project Reference: The project(s) and location(s) shall be referenced in the Comment or Description of Operations section of the Certificate of Insurance (Project ##-###, or Bid # if applicable, Type of Work, Location).

C. Coverage must be issued by insurance companies authorized to do business in the State of Louisiana. Companies must have an A.M. Best rating of no less than A-, Category VII. St. Tammany Parish Risk Management Department may waive this requirement only for Workers Compensation coverage at their discretion.

Provider shall secure and present proof of insurance on forms acceptable to St. Tammany Parish Government, Office of Risk Management no later than the time of submission of the Contract to the Parish. However, should any work performed under this Contract by or on behalf of Provider include exposures that are not covered by those insurance coverages, Provider is not relieved of its obligation to maintain appropriate levels and types of insurance necessary to protect itself, its agents and employees, its subcontractors, St. Tammany Parish Government (Owner), and all other interested third parties, from any and all claims for damage or injury in connection with the services performed or provided throughout the duration of this Project, as well as for any subsequent periods required under this Contract.

The insurance coverages checked (✓) below are those required for this Contract.

☑ 1. **Commercial General Liability*** insurance – **Occurrence Form** - with a Combined Single Limit for bodily injury and property damage of at least $1,000,000 per Occurrence / $2,000,000 General Aggregate and $2,000,000 Products-Completed Operations. Contracts over $1,000,000 may require higher limits. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:

a) Premises - operations;
b) Broad form contractual liability;
c) Products and completed operations;
d) Personal/Advertising Injury;
e) Broad form property damage (for Projects involving work on Parish property);
f) Explosion, Collapse and Damage to underground property.
g) Additional Insured forms CG 2010 and CG 2037 in most current edition are required.

☑ 2. **Business Automobile Liability*** insurance with a Combined Single Limit of $1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:

a) Any auto;
or
b) Owned autos; **and**
c) Hired autos; **and**
d) Non-owned autos.

☑ 3. **Workers' Compensation/Employers Liability insurance*** - Workers' Compensation coverage as required by State law. Employers' liability limits shall be a minimum of $1,000,000 each accident, $1,000,000 each disease, $1,000,000 disease policy aggregate. When water activities are expected to be performed in connection with this project, coverage under the USL&H Act, Jones Act and/or Maritime Employers Liability (MEL) must be included. **Coverage for owners, officers and/or partners in any way engaged in the Project shall be included in the policy.** The names of any excluded individual must be shown in the Description of Operations/Comments section of the Certificate**.**

☐ 4. **Pollution Liability and Environmental Liability*** insurance in the minimum amount of $1,000,000 per occurrence / $2,000,000 aggregate including full contractual liability and third party claims for bodily injury and/or property damage, for all such hazardous waste, pollutants and/or environmental exposures that may be affected by this project stemming from pollution/environmental incidents as a result of Contractor's operations.

If coverage is provided on a claims-made basis, the following conditions apply:

1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
    a) continued renewal certificates **OR**
    b) a 24 month Extended Reporting Period

*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

☐ 5. **Contractor's Errors and Omissions*** insurance in the sum of at least $1,000,000 per claim / $2,000,000 aggregate is required when work performed by Contractor or on behalf of Contractor to include coverage for, but not limited to: negligence, mistakes, faulty workmanship, improper installation, not following design specifications, etc. An occurrence basis policy is preferred.

If coverage is provided on a claims-made basis, the following conditions apply:

1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
    a) continued renewal certificates **OR**
    b) a 24 month Extended Reporting Period

*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

☐ 6. **Marine Liability/Protection and Indemnity*** insurance is required for any and all vessel and/or marine operations in the minimum limits of $1,000,000 per occurrence / $2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability

***Excess/Umbrella Liability** insurance may be provided to meet the limit requirements for any Liability coverage. For example: if the General Liability requirement is $3,000,000 per occurrence, but the policy is only $1,000,000 per occurrence, then the excess policy should be at least $2,000,000 per occurrence thereby providing a combined per occurrence limit of $3,000,000.)

☑ 7. **Owners Protective Liability (OPL)** shall be furnished by the Contractor and shall provide coverage in the minimum amount of $1,000,000 CSL each occurrence / $1,000,000 aggregate. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the policy**.

☑ 8. **Builder's Risk Insurance** written as an "all-risk" policy providing coverage in an amount at or greater than one hundred percent (100%) of the completed value of the contracted project. Any contract modifications increasing the contract cost will require an increase in the limit of the Builder's Risk policy. Deductibles should not exceed $5,000 and Contractor shall be responsible for all policy deductibles. This insurance shall cover materials at the site, stored off the site, and in transit. The Builder's Risk Insurance shall include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be named as a Loss Payee on the policy**.

☐ 9. **Installation Floater Insurance**, on an "all-risk" form, shall be furnished by Contractor and carried for the full value of the materials, machinery, equipment and labor for each location. The Contractor shall be responsible for all policy deductibles. The Installation Floater Insurance shall provide coverage for property owned by others and include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be named as a Loss Payee on the policy**.

D. All policies of insurance shall meet the requirements of the Parish prior to the commencing of any work. The Parish has the right, but not the duty, to approve all insurance coverages prior to commencement of work. If any of the required policies are or become unsatisfactory to the Parish as to form or substance; or if a company issuing any policy is or becomes unsatisfactory to the Parish, the Provider shall promptly obtain a new policy, timely submit same to the Parish for approval, and submit a certificate thereof as provided above. The Parish agrees not to unreasonably withhold approval of any insurance carrier selected by Provider. In the event that Parish cannot agree or otherwise authorize a carrier, Provider shall have the option of selecting and submitting a new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Provider and thereafter deduct from Provider's fee the cost of such insurance.

E Upon failure of Provider to furnish, deliver and/or maintain such insurance as above provided, this contract, at the election of the Parish, may be declared suspended, discontinued or terminated. Failure of the Provider to maintain insurance shall not relieve the Provider from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Provider concerning indemnification.

F. Provider shall maintain a current copy of all annual insurance policies and agrees to provide a certificate of insurance to the Parish on an annual basis or as may be reasonably requested for the term of the contract or any required Extended Reporting Period. Provider further shall ensure that all insurance policies are maintained in full force and effect throughout the duration of the Project and shall provide the Parish with annual renewal certificates of insurance evidencing continued coverage, without any prompting by the Parish.

G. It shall be the responsibility of Provider to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Provider. Provider shall further ensure the Parish is named as an additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project.

H. Certificates of Insurance shall be issued as follows:

St. Tammany Parish Government
Attn: Risk Management
P O Box 628
Covington, LA 70434

To avoid contract processing delays, be certain the project name/number is included on all correspondence including Certificates of Insurance.

***NOTICE*: St. Tammany Parish Government reserves the rights to remove, replace, make additions to and/or modify any and all of the insurance requirements at any time.**

Any inquiry regarding these insurance requirements should be addressed to:

St. Tammany Parish Government
Office of Risk Management
P O Box 628
Covington, LA 70434
Telephone: 985-898-5226
Email: riskman@stpgov.org

Section 07

Project Signs

1. General

a. Work to include providing and installing project sign(s) at the beginning of the project. Some projects may require multiple signs. Should more than one sign be required, it will be reflected in the bidding documents.

2. Materials

a. The printed project sign(s) shall be 3/8" primed Medium Density Overlay (MDO) **OR** 3-millimeter corrugated plastic secured to exterior plywood (4' x 4').

b. Contractor shall not use previously provided templates and/or fonts.

3. Execution

a. The sign(s) shall be printed on a project-by-project basis in black and white, using the template and font provided to the Contractor by the St. Tammany Parish Government Project Manager.

b. All signage proofed and approved by State Tammany Parish Government before project sign(s) are to be produced by the Contractor.

c. Exact placement of the project sign(s) must be coordinated with, and approved by, the St. Tammany Parish Government Project Manager prior to sign installation.

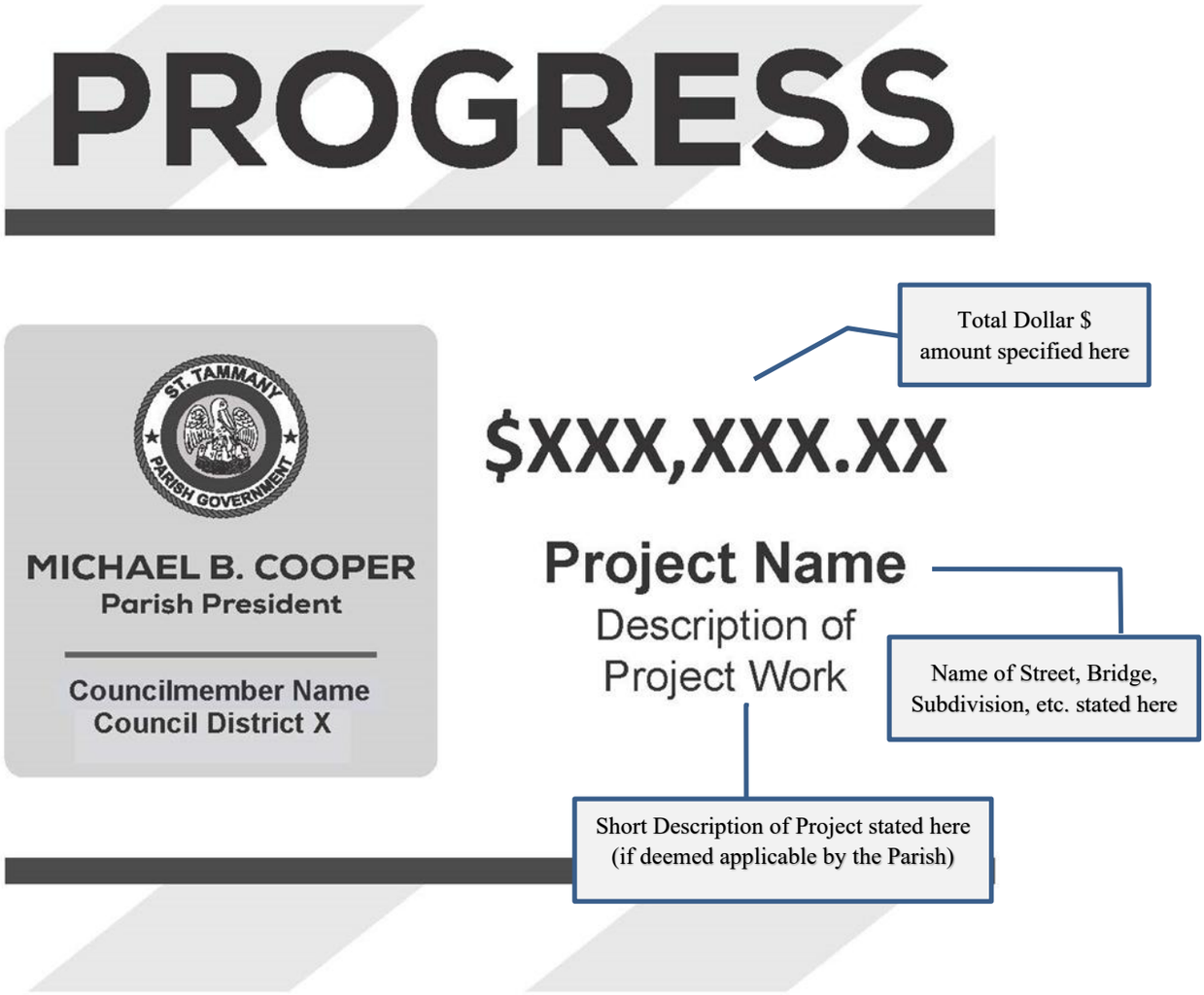
d. The sign(s) is to be installed such that the bottom of the sign is a minimum of 5' above the existing ground elevation.

e. Sign(s) is to be maintained throughout the period of construction. If sign(s) is damaged or destroyed, repair and/or replacement of sign(s) will be at Contractor's expense.

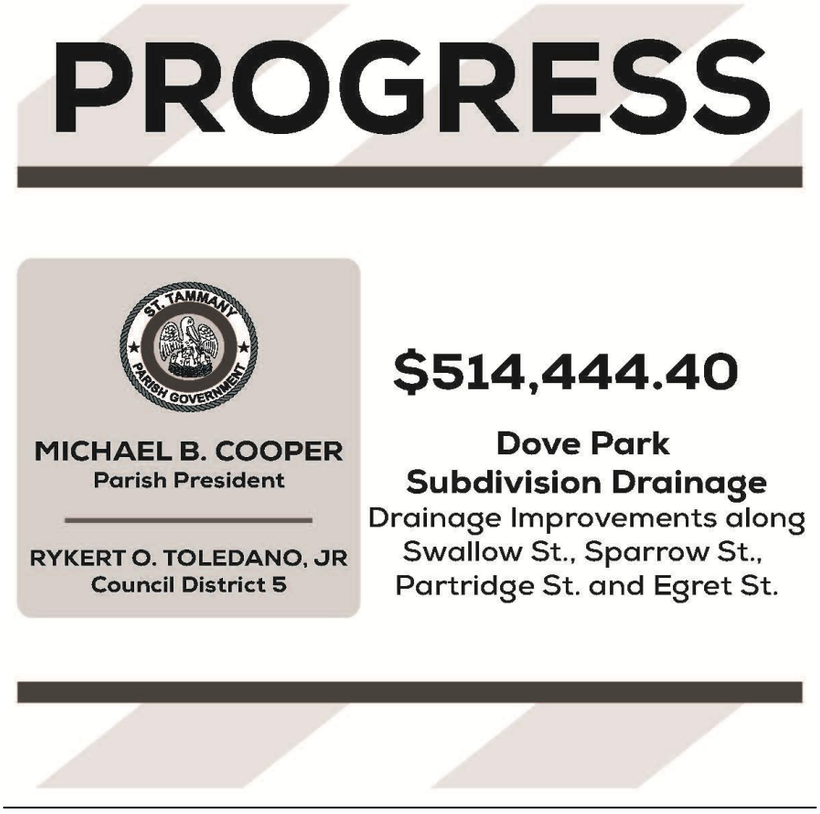
f. Contractor is responsible for the removal of all project signs upon issuance of final acceptance by the St. Tammany Parish Government Project Manager at no direct pay.

g. Cost to be included in "Temporary Signs and Barricades

Blank Template of Parish Project Sign:



Example of a Completed Parish Project Sign:



Section 08

General Conditions for St. Tammany Parish Government

This index is for illustrative purposes only and is not intended to be complete nor exhaustive.

All bidders/contractors are presumed to have read and understood the entire document. Some information contained in these conditions may not be applicable to all projects.

GENERAL CONDITIONS INDEX

A.A.S.H.T.O	01.01
A.C.I.	01.02
ADDENDA	01.03, 01.05, 01.12, 02.13, 02.13, 06.02, 06.03
ADVERTISEMENT	01.04, 01.12, 02.21, 02.22, 02.23
AGREEMENT	01.05, 01.11, 01.12, 01.14, 01.15, 01.19, 03.02, 03.03, 03.04, 06.01, 06.02, 10.01, 11.03, 12.01, 14.02, 29.06, 32.01, 32.02, 33.06, 33.07
APPLICATION FOR PAYMENT	01.06, 29.07
A.S.T.M.	01.07
AWARD	03.00, 03.01, 03.04, 03.05
BID	01.08, 01.12, 01.26, 02.02, 02.04, 02.08, 02.09, 02.10, 02.13, 02.14, 02.17, 02.19, 02.21, 03.01, 03.04, 04.02, 14.03, 22.01, 23.01, 28.08
BIDDER	01.04, 01.08, 01.09, 01.26, 01.28, 02.02, 02.04, 02.06, 02.08, 02.09, 02.10, 02.12, 03.13, 02.14, 02.16, 02.17, 02.19, 02.20, 02.21, 02.24, 03.01, 03.04, 03.05, 23.01
BONDS	01.10, 01.12 02.02, 02.09, 03.00, 03.03, 03.04, 03.05, 03.07, 03.08, 03.10, 03.12, 03.13, 27.06
CHANGE ORDER	01.11, 01.19, 04.01, 09.04, 11.07, 16.02, 16.06, 16.07, 21.06, 21.08, 21.10, 21.11, 29.06, 33.07
CLAIMS	02.15, 04.05, 09.05, 14.01, 16.04, 16.05, 21.16, 24.01
CLOSING ROADS	16.06, 16.07, 16.15
COMMENCE WORK	04.04, 07.04, 09.02, 11.02, 14.02, 16.13, 24.02
COMPLETION OF WORK OR PROJECT	01.14, 02.15, 08.03, 09.01, 09.04, 11.00, 11.03, 12.01, 13.01, 13.11, 20.01, 25.01, 28.02, 29.04
CONDITIONS AT JOB SITE	16.17
CONTRACT DOCUMENTS	01.03, 01.03, 01.10, 01.12, 01.13, 01.16, 01.17, 01.18, 01.19, 01.29, 01.22, 01,25, 01.30, 01.33, 02.02, 02.05, 02.13, 02.17, 02.18, 02.23, 03.01, 03.02, 04.01, 04.02, 04.03, 04.04, 04.05, 06.00, 06.01, 06.02, 06.03, 07.02, 07.03, 07.05, 08.01, 10.06, 11.03, 13.01, 13.02, 21.01, 21.09, 21.10, 21.11, 28.01, 28.04, 33.01
CONTRACT PRICE	01.11, 01.13, 03.05, 04.01, 12.01, 14.02, 21.06, 21.10, 21.11, 27.05, 28.01, 28.02, 28.03, 28.08

CONTRACT TIME	01.11, 01.14, 01.22, 10.06, 11.01, 21.06, 29.04
CONTRACTOR - (Defined)	01.15
DAMAGE	02.15, 03.05, 03.12, 04.05, 09.05, 11.09, 13.11, 14.01, 14.02, 16.01, 16.02, 16.03, 16.04, 16.05, 19.01, 19.03, 20.01, 20.08, 23.03, 24.01, 24.07, 24.12, 26.03, 28.05, 28.01, 28.10, 33.07
DEFECTIVE WORK	01.16, 10.03, 21.00, 21.01, 21.07, 21.08, 21.09, 21.10, 28.03
DELAYS	07.02, 11.05, 11.09, 12.01, 16.07, 18.02, 19.01, 28.04
DRAWINGS	01.12, 01.17, 02.13, 02.17, 02.23, 06.01, 06.02, 06.03, 13.15, 22.02, 01.27, 01.33, 03.12, 04.01, 06.02, 09.01, 10.01, 10.02, 11.07, 13.00, 13.01, 13.03, 13.05, 13.11, 13.12, 13.15, 14.02, 14.07, 14.08, 14.09, 16.09, 16.13, 21.01, 21.06, 21.07, 21,14, 24.07, 27.05, 27.07, 28.01, 28.05, 28.10, 29.03, 13.00, 13.11
ENGINEER STATUS (NOT APPLICABLE)	15.00
EXTRA WORK	03.09, 14.00, 14.03, 14.04, 14.05, 14.08, 14.09, 14.10, 14.11, 14.12, 16.01, 22.02
FAILURE OF CONTRACTOR	03.10, 04.05, 06.02, 09.05, 10.01, 10.03, 13.10, 16.03, 20.01, 24.09, 27.02, 28.10
FAILURE OF OWNER	02.13
FAILURE OF SUCCESSFUL BIDDER	02.13, 02.17, 03.04
FIELD ORDER	01.18
FORCE ACCOUNT	14.04, 14.05, 14.11, 14.12
FUNDING	33.09
INDEMNIFY / HOLD HARMLESS	02.15, 03.05, 04.05, 13.11, 16.04, 16.05, 20.02, 24.06, 24.09
INDEMNIFYING INFRINGEMENT CLAUSE	02.15
INJURIES	16.00, 16.01, 16.02, 19.01, 19.03, 20.01, 24.02, 24.07
INSPECTION FEES	13.12
INSPECTIONS, GENERALLY	01.16, 13.05, 16.13, 21.00, 21.03, 21.04, 21.05, 21.06, 21.14, 21.15, 28.04, 29.02, 29.03
INSURANCE	01.05, 14.05, 16.13, 24.00 - 12, 27.07, 28.05
INTENTION OF CONTRACT DOCUMENTS	06.00, 06.01
INTENTION OF GENERAL CONDITIONS	31.00

LABOR	01.33, 03.12, 09.01, 13.00, 13.01, 13.02, 13.08, 13.10, 13.11, 13.12, 14.05, 16.06, 16.07, 21.06, 21.07, 21.15, 27.01, 28.10, 29.03
LAWS	01.10, 01.20, 02.06, 02.13, 02.14, 02.16, 02.20, 03.01, 03.10, 13.12, 16.06, 16.07, 20.02, 21.02, 21.09, 27.01, 29.06, 33.00, 33.01, 33.08
LIQUIDATED DAMAGES	11.03, 12.00, 12.01, 29.04
MATERIALS	01.33, 03.12, 04.01, 06.02, 07.01, 09.01, 10.01, 10.02, 13.00, 13.01, 13.03, 13.04, 13.05, 13.12, 13.13, 13.15, 14.01, 14.11, 20.01, 12.01, 21.07, 21.14, 21.15, 23.03, 27.01, 27.05, 27.07, 28.01, 28.05, 28.07, 28.08, 28.10
MODIFICATIONS	01.12, 01.19, 02.12, 02.13, 06.01, 06.02, 24.07, 32.02
NOTICE OF AWARD	01.20, 03.01, 03.04, 04.01
NOTICE OF DEFAULT	12.01, 33.08
NOTICE TO BIDDER	2.21
NOTICE TO CONTRACTOR	01.12, 01.21, 21.11, 30.01
NOTICE TO OWNER	13.07, 24.06, 27.07
NOTICE TO PROCEED	01.22, 09.02, 11.01, 11.03
OBSTRUCTIONS	16.09, 16.11, 16.15, 23.00, 23.01, 23.02
OCCUPANCY	25.00
ORAL INTERPRETATIONS	02.13
OWNER - (Defined)	01.23
PAYMENT	01.30,.03,10, 03.12, 03.13, 04.12, 09.03, 11.04, 11.09, 14.04, 14.12, 16.02, 16.16, 19.02, 21.07, 21.08, 21.09, 21.10, 21.11, 21.16, 24.02, 24.03, 24.12, 27.01, 27.07, 28.00, 28.01, 28.02, 28.03, 28.04, 28.05, 28.06, 28.08, 28.09, 28.10, 29.00, 29.03, 29.05, 29.07
PERMITS	13.00, 13.12, 16.13, 28.08
PRICE	02.05, 14.02, 14.03, 14.04, 14.05, 22.01
PROGRESS PAYMENT	01.06, 28.06
PROGRESS SCHEDULE	09.03, 09.05, 21.11
PROGRESS OF WORK	09.00, 11.09, 13.07, 16.01, 16.12, 21.11, 21.12, 22.02, 27.02
PROJECT	01.24, 01.29, 01.30, 02.04, 03.07, 06.01, 07.03, 10.02, 11.04, 11.06, 13.08, 13.13, 14.08, 14.11, 16.15, 24.07, 24.11, 28.07, 29.03, 29.07

PROJECT REPRESENTATIVE	01.23, 21.16
PROPERTY	16.00, 16.01, 16.02, 16.03, 16.12, 16,13, 16.17, 18.01, 19.00, 19.01, 19.02, 19.03, 23.03, 24.0124.07, 26.03, 28.10, 29,08, 33.05
PROPOSAL	01.26, 02.00, 02.01, 02.03, 02.05,.02.06, 02.07, 02.08, 02.09, 02.10, 02.11, 02.12, 02.14, 02.18, 02.21, 02.22, 11.03, 12.01, 14.01, 14.02, 14.03, 19.02, 23.02, 28.08
PROTESTS	33.10
PUNCH LIST	29.03, 29.04
QUANTITIES OF ESTIMATES	14.00, 14.01, 14.02, 14.04
RAILROADS	16.13, 19.01
RECORD DRAWINGS	08.00, 18.01, 18.02, 18.03
RECORDATION OF DOCUMENTS	03.13, 28.03, 29.05, 29.06
REJECTION OF BIDS	02.03, 02.07, 02.08, 02.10, 02.14, 03.01
RENTAL OF EQUIPMENT	14.07, 14.09
RIGHTS OF WAY	18.00
SAFETY	16.01, 16.07, 16.14, 16.17
SANITARY PROVISIONS	13.01, 17.00
SCHEDULE OF WORK	09.03, 09.04, 9.05, 11.06, 13.09
SEVERABILITY	32.01, 32.02
SHOP DRAWINGS	01.27, 06.03, 07.00, 07.01, 07.02, 07.03, 07.04, 07.05
SITE	02.17, 7.04, 13.05, 13.07, 13.11, 14.06, 16.09, 21.08, 21.09, 21.12, 22.02, 23.01, 24.07
SOLICITATION OF EMPLOYMENT	13.14
SPECIFICATIONS	01.01, 01.02, 01.05, 01.07, 01.12, 01.28, 02.13, 02.17, 02.23, 03.06, 03.09, 03.10, 03.13, 06.01, 06.02, 06.03, 07.04, 07.05, 11.03, 13.05, 13.15, 20.01, 21.12, 22.02, 28.01, 28.04, 32.01
SUBCONTRACTOR	01.27, 01.29, 04.01, 04.02, 04.03, 04.04, 04.05, 16.02, 16.04, 16.05, 20.01, 20.02, 21.07, 24.01, 24.07, 27.01, 28.07
SUBCONTRACTS	04.00, 13.09
SUBSURFACE CONDITIONS	02.17, 22.00, 22.01, 22.02
SUBSTANTIAL COMPLETION	01.30, 11.04, 21.09, 28.04, 29.01, 29.02, 29.03, 29.04, 29.06
SUPERINTENDENT	01.21, 01.31, 13.07, 14.05

SUPERVISION	13.01, 13.06
SURETY	01.05, 01.10, 02.09, 03.05, 03.06, 03.07, 03.08, 03.09, 03.11, 03.12, 04.05, 05.01, 14.03, 27.03, 27.05
SURVEY	13.02, 26.00, 26.01
TAXES	02.05, 13.00, 13.12, 13.13, 14.05, 28.07, 28.08, 28.10
TERMINATION OF CONTRACT	13.10, 24.09, 27.00, 27.01, 27.02, 27.03, 27.04, 27.05, 27.06, 27.07
TESTS, GENERALLY	21.00, 21.02, 21.03, 21.04, 21.05, 21.06
TIME	01.32
TRAFFIC	16.06, 16.07, 16.10, 16.15, 16.16
TRAFFIC HAZARDS	16.16
TREES AND SHRUBS	19.02
VERBAL INSTRUCTIONS	21.16
WAIVERS	24.06, 29.03, 33.08
WARNING DEVICES	16.13, 16.14, 16.15
WARRANTY	21.01, 21.08, 21.09, 33.04, 33.06
WORK	01.31, 20.01
WORK BY OTHERS	10.03, 10.04, 10.05
WORK BY OWNER	10.02, 10.04, 10.05
WORK FOR OTHER, RESTRICTIONS	16.12
WORK ORDER	28.01

01.00 DEFINITIONS OF TERMS

Whenever used in these General Conditions or in other Contract Documents, the following terms shall have the meanings indicated, and these shall be applicable to both the singular and plural thereof.

01.01 A.A.S.H.T.O American Association of State Highway and Transportation Officials. When A.A.S.H.T.O. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this association and the specification stated is considered to be a part of the Specifications as if written herein in full.

01.02 A.C.I American Concrete Institute. When A.C.I. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this institute and the specification stated is considered to be a part of the Specifications as if written herein in full.

01.03 Addenda Written or graphic instruments issued prior to the opening of bids which clarify, correct, modify or change the bidding or Contract Documents.

01.04 Advertisement The written instrument issued by the Owner at the request of the Owner used to notify the prospective bidder of the nature of the Work. It becomes part of the Contract Documents.

01.05 Agreement The written agreement or contract between the Owner and the Contractor covering the Work to be performed and the price that the Owner will pay. Other documents, including the Proposal, Addenda, Specifications, plans, surety, insurance, etc., are made a part thereof.

01.06 Application for Payment The form furnished by the Owner which is to be used by the Contractor in requesting incremental (progress) payments and which is to include information required by Section 28.01 and an affidavit of the Contractor. The affidavit shall stipulate that progress payments theretofore received from the Owner on account of the Work have been applied by Contractor to discharge in full of all Contractor's obligations reflected in prior applications for payment.

01.07 A.S.T.M. American Society of Testing Materials. When A.S.T.M. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this society and the specification stated is considered to be a part of the Specifications as if written herein in full.

01.08 Bid The offer or Proposal of the Bidder submitted on the prescribed form setting forth all the prices for the Work to be performed.

01.09 Bidder Any person, partnership, firm or corporation submitting a Bid for the Work.

01.10 Bonds Bid, performance and payment bonds and other instruments of security, furnished by the Contractor and its surety in accordance with the Contract Documents and Louisiana law.

01.11 Change Order A written order to the Contractor signed by the Owner authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time after execution of the Agreement.

01.12 Contract Documents The Agreement, Addenda, Contractor's Bid and any documentation accompanying or post-bid documentation when attached as an exhibit, the Bonds, these General Conditions, the Advertisement for Bid, Notice to Contractor, all supplementary conditions, the Specifications, the Drawings, together with all Modifications issued after the execution of the Agreement.

01.13 Contract Price The total monies payable to the Contractor under the Contract Documents.

01.14 Contract Time The number of consecutive calendar days stated in the Agreement for the completion of the Work.

01.15 Contractor The person, firm, corporation or Contractor with whom the Owner has executed the Agreement.

01.16 Defective Work When work which is unsatisfactory, faulty or deficient for any reason whatsoever, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to the Owner's recommendation or acceptance.

01.17 Drawings The Drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the Owner and are referred to in the Contract Documents.

01.18 Field Order A written order issued by the Owner or his agent which clarifies or interprets the Contract Documents.

01.19 Modification (a) A written amendment of the Contract Documents signed by both parties, (b) A Change Order, (c) A written clarification or interpretation issued by the Owner or his agent. Modification may only be issued after execution of the Agreement.

01.20 Notice of Award The written notice by Owner to the lowest responsible Bidder stating that upon compliance of the conditions enumerated in the Notice of Award, or enumerated in the Bid documents, the Owner will deliver the Contract Documents for signature. The time for the delivery of the Contract Documents can be extended in conformance with Louisiana Law.

01.21 Notice to Contractor Instructions, written or oral given by Owner to Contractor and deemed served if given to the Contractor's superintendent, foreman or mailed to Contractor at his last known place of business.

01.22 Notice to Proceed A written notice given by the Owner fixing the date on which the Contract Time will commence, and on which date the Contractor shall start to perform his obligation under the Contract Documents. Upon mutual consent by both parties, the Notice to Proceed may be extended.

01.23 Owner St. Tammany Parish Government, acting herein through its duly constituted and authorized representative, including but not limited to the Office of the Parish President or its designee, its Chief Administrative Officer, and/or Legal Counsel. St. Tammany Parish Government (hereinafter, the “Parish”) and Owner may be used interchangeably.

01.24 Project The entire construction to be performed as provided in the Contract Documents.

01.25 Project Representative The authorized representative of the Owner who is assigned to the Project or any parts thereof.

01.26 Proposal The Bid submitted by the Bidder to the Owner on the Proposal form setting forth the Work to be done and the price for which the Bidder agrees to perform the Work.

01.27 Shop Drawings All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, Subcontractor, Manufacturer, Supplier or Distributor and which illustrate the equipment, material or some portion of the Work.

01.28 Specifications The Instructions to Bidders, these General Conditions, the Special Conditions and the Technical Provisions. All of the documents listed in the "Table of Contents."

01.29 Subcontractor An individual, firm or corporation having a direct Contract with the Contractor or with any other Subcontractor for the performance of a part of the Project Work.

01.30 Substantial Completion The date as certified by the Owner or its agent when the construction of the Project or a specified part thereof is sufficiently complete in accordance with the Contract Documents so that the Project or specified part can be utilized for the

purposes for which it was intended; or if there is no such certification, the date when final payment is due in accordance with Section 28.

01.31 Superintendent Contractor's site representative. The person on the site who is in full and complete charge of the Work.

01.32 Time Unless specifically stated otherwise, all time delays shall be calculated in calendar days.

01.33 Work Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by the Contractor under the Contract Documents, usually including the furnishing of all labor, materials, equipment and other incidentals.

01.34 The terms “he/himself” may be used interchangeably with “it/itself.”

02.00 PROPOSAL

02.01 All papers bound with or attached to the Proposal Form are a necessary part thereof and must not be detached.

02.02 For submitting Bids, the only forms allowed shall be the “Louisiana Uniform Public Work Bid Form”, “Louisiana Uniform Public Works Bid Form Unit Price Form” (if necessary), the Bid Bond, and written evidence of authority of person signing the bid. Necessary copies of the Louisiana Uniform Public Work Forms will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.

02.03 Proposal forms must be printed in ink or typed, unless submitted electronically. Illegibility or ambiguity therein may constitute justification for rejection of the Bid.

02.04 Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor’s License Number of the Bidder (if work requires contractor’s license), and the Project name and number for which the Bid is submitted, along with the Bid number.

02.05 The price quoted for the Work shall be stated in words and figures on the Bid Form, and in numbers only on the Unit Price Form. The price in the Proposal shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.

02.06 The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).

02.07 Only the Contractors licensed by the State to do the type of Work involved can submit a Proposal for the Work. The envelope containing the Proposal shall have the Contractor's license number on it. Failure to be properly licensed constitutes authority by the Owner for rejection of Bid.

02.08 Bidders shall not attach any conditions or provisions to the Proposal. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid or Proposal.

02.09 A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish

of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide, or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.

02.10 Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids as permitted by Public Bid Law. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the Execution of the Contract.

02.11 A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened.

02.12 Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.

02.13 No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. No inquiry received within seven (7) days prior to the day fixed for opening of the Bids shall be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O)(2)(a) and (b).

02.14 The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.

02.15 The Contractor shall indemnify and hold harmless the Owner from any and all suits, costs, penalties or claims for infringement by reason of use or installation of any patented design, device, material or process, or any trademark and copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify and hold harmless the Owner for any costs, expenses and damages which it may be obliged to pay by reason of any such infringement at any time during the prosecution or after completion of the Work.

02.16 Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.

02.17 Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this

Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form instrument, Drawing or document or to visit the site and acquaint itself with existing conditions, shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.

02.18 The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.

02.19 When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or into conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.

02.20 Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.

02.21 Sealed Proposals (Bid) shall be received by St. Tammany Parish Government at the office of St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, until the time and date denoted in Notice to Bidders, at which time and place the Proposals (Bids), shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38-2212(A)(3)(c)(i), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Proposals (Bids) may also be mailed by certified mail to St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders.

02.22 Proposals (Bids) shall be executed on Forms furnished and placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these General Conditions, and addressed:

St. Tammany Parish Government
Department of Procurement
21454 Koop Drive, Suite 2-F
Mandeville, LA 70471

02.23 See Notice to Bidders for availability of Drawings, Specifications and Contract Documents via electronic methods.

02.24 The successful bidder shall be required to post in each direction a public information sign, 4' x 4' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.

03.00 AWARD, EXECUTION OF DOCUMENTS, BONDS, ETC.

03.01 The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility, qualifications and financial ability and stability of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. The Owner reserves the right to reject the Bid of any Bidder in accordance with the Public Bid Law, LSA-R.S. 38:2214. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after

the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.

03.02 At least three counterparts of the Agreement and of such other Contract Documents as practicable shall be signed by the Owner and the Contractor. The Owner shall identify those portions of the Contract Documents not so signed and such identification shall be binding on both parties. The Owner and the Contractor shall each receive an executed counterpart of the Contract Documents.

03.03 Prior to the execution of the Agreement, the Contractor shall deliver to the Owner the required Bonds.

03.04 Failure of the successful Bidder to execute the Agreement and deliver the required Bonds within twenty (20) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited.

03.05 In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and save harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a surety Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.

03.06 No surety Company will be accepted as a bondsman who has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Services of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.

03.07 In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):

> Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.
>
> For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.
>
> In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.

03.08 Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails

or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due or to become due Contractor.

03.09 The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.

03.10 The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans and Specifications. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.

03.11 The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of Section 03.00.

03.12 The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of this Contract by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.

03.13 Contractor shall pay for the cost of recording the Contract and Bond and the cost of canceling same. Contractor shall also secure and pay for all Clear Lien and Privilege Certificates (together with any updates) which will be required before any final payment is made, and that may be required before any payment, at the request of the Owner, its representative, agent, architect, engineer and the like. All recordation and Clear Lien and Privilege Certificate requirements shall be in accordance with those requirements noted herein before in contract Specifications.

04.00 SUBCONTRACTS

04.01 Contractor shall be fully responsible for all acts and omissions of its Subcontractors and of persons and organizations for whose acts any of them may be liable to the same extent that it is responsible for the acts and omissions of persons directly employed by it. Nothing in the Contract Documents shall create any contractual relationship between Owner and any Subcontractor or other person or organization having a direct Contract with Contractor, nor shall it create any obligation on the part of the Owner to pay or to see to the payment of any monies due any Subcontractor.

04.02 Nothing in the Contract Documents shall be construed to control the Contractor in dividing the Work among approved Subcontractors or delineating the Work to be performed by any trade.

04.03 The Contractor agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents prior to commencing Work. Every Subcontractor, by undertaking to perform any of the Work, shall thereby automatically be deemed bound by such terms and conditions.

04.04 The Contractor shall indemnify and hold harmless the Owner and their agents and employees from and against all claims, damages, losses and expenses including Attorney's fees arising out of or resulting from the Contractor's failure to bind every Subcontractor and Contractor's surety to all of the applicable terms and conditions of the Contract Documents.

05.00 ASSIGNMENT

05.01 Neither party to this Contract shall assign or sublet its interest in this Contract without prior written consent of the other, nor shall the Contractor assign any monies due or to become due to it under this Contract without previous written consent of the Owner, nor without the consent of the surety unless the surety has waived its right to notice of assignment.

06.00 CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS.

06.01 It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between Owner and Contractor. Alterations, modifications and amendments shall only be in writing between these parties.

06.02 The Contract Documents are intended to be complimentary and to be read *in pari materii*, and what is called for by one is as binding as if called for by all. If Contractor finds a conflict, error or discrepancy in the Contract Documents, it shall call it to the Owner's attention, in writing, at once and before proceeding with the Work affected thereby; however, it shall be liable to Owner for its failure to discover any conflict, error or discrepancy in the Specifications or Drawings. In resolving such conflicts, errors and discrepancies, the documents shall be given precedence in the following order: Agreement, Modifications, Addenda, Special Conditions, General Conditions, Construction Specifications and Drawings. The general notes on the plans shall be considered special provisions. Figure dimensions on Drawings shall govern over scale dimensions and detail Drawings shall govern over general Drawings. Where sewer connections are shown to fall on a lot line between two lots, the Contractor shall determine this location by measurement not by scale. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described herein which so applied to this Project are covered by a well-known technical meaning or specification shall be deemed to be governed by such recognized standards unless specifically excluded.

06.03 Unless otherwise provided in the Contract Documents, the Owner will furnish to the Contractor (free of charge not to exceed ten (10) copies) Drawings and Specifications for the execution of Work. The Drawings and Specifications are the property of the Owner and are to be returned to it when the purpose for which they are intended have been served. The Contractor shall keep one copy of all Drawings and Specifications, including revisions, Addenda, details, Shop Drawings, etc. on the Work in good order and available to the Owner or the regulatory agency of the governmental body having jurisdiction in the area of the Work.

07.00 SHOP DRAWINGS, BROCHURES AND SAMPLES

07.01 After checking and verifying all field measurements, Contractor shall submit to Owner for approval, five copies (or at Owner's option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of Contractor and identified as Owner may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable Owner to review the information as required.

07.02 Contractor shall also submit to Owner, for review with such promptness as to cause no delay in Work, all samples as required by the Contract Documents. All samples will have been checked by and stamped with the approval of Contractor identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended. At the time of each submission, Contractor shall in writing call Owner's attention to any deviations that the Shop Drawings or samples may have from the requirements of the Contract Documents.

07.03 Owner will review with reasonable promptness Shop Drawings and samples, but its review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make any corrections required by Owner and shall return the required number of

corrected copies of Shop Drawings and resubmit new samples for review. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by Owner on previous submissions. Contractor's stamp of approval on any Shop Drawing or sample shall constitute a representation to Owner that Contractor has determined and verified all quantities, dimensions, field construction criteria, materials catalog numbers and similar data and thereafter assumes full responsibility for doing so, and that it has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and the Contract Documents.

07.04 Where a Shop Drawing or sample submission is required by the Specifications, no related Work shall be commenced until the submission has been reviewed by Owner. A copy of each reviewed shop Drawing and each inspected sample shall be kept in good order by Contractor at the site and shall be available to Owner.

07.05 Owner's review of Shop Drawings or samples shall not relieve Contractor from its responsibility for any deviations from the requirements of the Contract Documents unless Contractor has in writing called Owner's attention to such deviation at the time of submission and Owner has given written approval to the specific deviation, nor shall any review by Owner relieve Contractor from responsibility for errors or omissions in the Shop Drawings. The mere submittal of shop drawings which contain deviations from the requirements of plans, specifications and/or previous submittals in itself does not satisfy this requirement.

08.00 RECORD DRAWINGS

08.01 The Contractor shall keep an accurate record in a manner approved by the Owner of all changes in the Contract Documents during construction. In Work concerning underground utilities, the Contractor shall keep an accurate record in a manner approved by the Owner of all valves, fittings, etc. Before the Work is accepted by the Owner, and said acceptance is recorded, the Contractor shall furnish the Owner a copy of this record.

08.02 Contractor shall keep an accurate drawing measured in the field to the nearest 0.1' of the location of all sewer house connections. The location shown shall be the end of the connection at the property line measured along the main line of pipe from a manhole.

08.03 Contractor shall keep an accurate drawing of the storm water drainage collection system. Inverts to the nearest 0.01' and top of castings shall be shown as well as location of all structures to the nearest 0.1'. Upon completion of the Work, the plan will be given to the Owner.

09.00 PROGRESS OF WORK

09.01 Contractor shall conduct the Work in such a professional manner and with sufficient materials, equipment and labor as is considered necessary to ensure its completion within the time limit specified.

09.02 The Owner shall issue a Notice to Proceed to the Contractor within twenty (20) calendar days from the date of execution of the Contract. Upon mutual consent by both parties, the Notice to Proceed may be extended. The Contractor is to commence Work under the Contract within ten (10) calendar days from the date the Notice to Proceed is issued by the Owner.

09.03 The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Owner's approval an estimated progress schedule for the work to be performed, as well as a construction signing layout for all roads within the project area. The Contractor shall not start work or request partial payment until the work schedule has been submitted to the Owner for approval.

09.04 Revisions to the original schedule will be made based on extension of days granted for inclement weather or change orders issued under the contract. No other revision shall be made which affects the original completion or updated completion date, whichever is applicable.

09.05 Failure of the Contractor to submit an estimated progress schedule or to complete timely and on schedule the Work shown on the progress schedule negates any and all causes or claims by the Contractor for accelerated completion damages. These accelerated damage claims shall be deemed forfeited.

09.06 Meetings will be held as often as necessary to expedite the progress of the job. Meetings will be held during normal working hours at the jobsite and shall be mandatory for the Contractor and all Sub-Contractors working on the project. Meetings may be requested by the Owner at any time and at the discretion of the Owner.

10.00 OWNER'S RIGHT TO PROCEED WITH PORTIONS OF THE WORK

10.01 Upon failure of the Contractor to comply with any notice given in accordance with the provisions hereof, the Owner shall have the alternative right, instead of assuming charge of the entire Work, to place additional forces, tools, equipment and materials on parts of the Work. The cost incurred by the Owner in carrying on such parts of the Work shall be payable by the Contractor. Such Work shall be deemed to be carried on by the Owner on account of the Contractor. The Owner may retain all amounts of the cost of such Work from any sum due Contractor or those funds that may become due to Contractor under this Agreement.

10.02 Owner may perform additional Work related to the Project by itself or it may let any other direct contract which may contain similar General Conditions. Contractor shall afford the other contractors who are parties to such different contracts (or Owner, if it is performing the additional Work itself) reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate its Work with the subsequent work.

10.03 If any part of Contractor's Work depends upon proper execution or results upon the Work of any such other contractor (or Owner), Contractor shall inspect and promptly report to Owner in writing any defects or deficiencies in such Work that render it unsuitable for such proper execution and results. Failure to so report shall constitute an acceptance of the other Work as fit and proper for the relationship of its Work except as to defects and deficiencies which may appear in the other Work after the execution of its Work.

10.04 Whatever Work is being done by the Owner, other Contractors or by this Contractor, the parties shall respect the various interests of the other parties at all times. The Owner may, at its sole discretion, establish additional rules and regulations concerning such orderly respect of the rights of various interests.

10.05 Contractor shall do all cutting, fitting and patching of its Work that may be required to integrate its several parts properly and fit to receive or be received by such other Work. Contractor shall not endanger any Work of others by cutting, excavating or otherwise altering Work and will only alter Work with the written consent of Owner and of the other contractors whose Work will be affected.

10.06 If the performance of additional Work by other contractors or Owner is not noted in the Contract Documents, written notice thereof shall be given to Contractor prior to starting any such additional Work. If Contractor believes that the performance of such additional Work by Owner or others may cause additional expense or entitles an extension of the Contract Time, the Contractor may make a claim therefor. The claim must be in writing to the Owner within thirty (30) calendar days of receipt of notice from the Owner of the planned additional Work by others.

11.00 TIME OF COMPLETION

11.01 The Notice to Proceed will stipulate the date on which the Contractor shall begin work. That date shall be the beginning of the Contract Time charges.

11.02 Contractor shall notify the Owner through its duly authorized representative, in advance, of where Contractor’s work shall commence each day. A daily log shall be maintained by Contractor to establish dates, times, persons contacted, and location of work. Specific notice shall be made to the Owner if the Contractor plans to work on Saturday, Sunday, or

a Parish approved holiday. If notice is not received, no consideration will be given for inclement weather and same shall be considered a valid work day.

11.03 The Work covered by the Plans, Specifications and Contract Documents must be completed sufficiently for acceptance within the number of calendar days specified in the Proposal and/or the Contract, commencing from the date specified in the Notice to Proceed. It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the time of completion is an essential condition of this Contract, and it is further mutually understood and agreed that if the Contractor shall neglect, fail or refuse to complete the Work within the time specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as partial consideration for the awarding of this Contract, to pay the Owner based on **Table 3.1** as specified in the Contract, not as a penalty, but as liquidated damages for such breach of contract for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the Work. It is specifically understood that the Owner shall also be entitled to receive a reasonable attorney fee and all costs in the event that Contractor fails to adhere to this agreement and this contract is referred to counsel for any reason whatsoever. Reasonable attorney fees shall be the prevailing hourly rate of the private sector, and in no event shall the hourly rate be less than $175.00 per hour. All attorney fees shall be paid to the operating budget of the Office of the Parish President.

11.04 Prior to final payment, the Contractor may, in writing to the Owner, certify that the entire Project is substantially complete and request that the Owner or its agent issue a certificate of Substantial Completion. See Section 29.00.

11.05 The Owner may grant an extension(s) of time to the Contractor for unusual circumstances which are beyond the control of the Contractor and could not reasonably be foreseen by the Contractor prior to Bidding. Any such request must be made in writing to the Owner within seven (7) calendar days following the event occasioning the delay. The Owner shall have the exclusive and unilateral authority to determine, grant, and/or deny the validity of any such claim.

11.06 Extensions of time for inclement weather shall be processed as follows:

Commencing on the start date of each job, the Parish Inspector assigned to same shall keep a weekly log, indicating on each day whether inclement weather has prohibited the Contractor from working on any project within the specific job, based upon the following:

1. Should the Contractor prepare to begin work on any day in which inclement weather, or the conditions resulting from the weather, prevent work from beginning at the usual starting time, and the crew is dismissed as a result, the Contractor will not be charged for a working day whether or not conditions change during the day and the rest of the day becomes suitable for work.

2. If weather conditions on the previous day prevent Contractor from performing work scheduled, provided that no other work can be performed on any project within the package. The Parish Inspector shall determine if it is financially reasonable to require the Contractor to deviate from the schedule and relocate to another location.

3. If the Contractor is unable to work at least 60% of the normal work day due to inclement weather, provided that a normal working force is engaged on the job.

Any dispute of weather conditions as related to a specific job shall be settled by records of the National Weather Service.

11.07 Extensions of time for change orders

When a change order is issued, the Owner and Contractor will agree on a reasonable time extension, if any, to implement such change. Consideration shall be given for, but not limited to, the following:

1. If material has to be ordered;
2. Remobilization and or relocation of equipment to perform task; and
3. Reasonable time frame to complete additional work.

Time extensions for change orders shall be reflected on the official document signed by the Owner and Contractor.

11.08 At the end of each month, the Owner or its agent will furnish to the Contractor a monthly statement which reflects the number of approved days added to the contract. The Contractor will be allowed fourteen (14) calendar days in which to file a written protest setting forth in what respect the monthly statement is incorrect; otherwise, the statement shall be considered accepted by the Contractor as correct.

11.09 Apart from extension of time for unavoidable delays, no payment or allowance of any kind shall be made to the Contractor as compensation for damages because of hindrance or delay for any cause in the progress of the Work, whether such delay be avoidable or unavoidable.

12.00 LIQUIDATED DAMAGES

12.01 In case the Work is not completed in every respect within the time that may be extended, it is understood and agreed that per diem deductions per **Table 3.1** for liquidated damages, as stipulated in the Proposal and/or Contract, shall be made from the total Contract Price for each and every calendar day after and exclusive of the day on which completion was required, and up to the completion of the Work and acceptance thereof by the Owner. It is understood and agreed that time is of the essence to this Contract, and the above sum being specifically herein agreed upon in advance as the measure of damages to the Owner on account of such delay in the completion of the Work. It is further agreed that the expiration of the term herein assigned or as may be extended for performing the Work shall, *ipso facto*, constitute a putting in default, the Contractor hereby waiving any and all notice of default. The Contractor agrees and consents that the Contract Price, reduced by the aggregate of the entire damages so deducted, shall be accepted in full satisfaction of all Work executed under this Contract. It is further understood and agreed that Contractor shall be liable for a reasonable attorney fee and all costs associated with any breach of this agreement, including but not limited to this subsection. In the event that any dispute or breach herein causes referrals to counsel, then Contractor agrees to pay a reasonable attorney fee at the prevailing hourly rate of the private sector. In no event shall the hourly rate be less than $175.00 per hour.

13.00 LABOR, MATERIALS, EQUIPMENT, SUPERVISION, PERMITS AND TAXES

13.01 The Contractor shall provide and pay for all labor, materials, equipment, supervision, subcontracting, transportation, tools, fuel, power, water, sanitary facilities and all incidentals necessary for the completion of the Work in substantial conformance with the Contract Documents.

13.02 The Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. It shall at all times maintain good discipline and order at the site.

13.03 Unless otherwise specifically provided for in the Specifications, all workmanship, equipment, materials, and articles incorporated in the Work covered by this Contract are to be new and of the best grade of their respective kinds for the purpose intended. Samples of materials furnished under this Contract shall be submitted for approval to the Owner when and as directed.

13.04 Whenever a material or article required is specified or shown on the plans by using the name of a proprietary product or of a particular manufacturer or Contractor, any material or article which shall perform adequately the duties imposed by the general design will be considered equal, and satisfactory, providing the material or article so proposed is of equal substance and function and that all technical data concerning the proposed substitution be approved by the Owner prior to the Bidding. The Owner shall have the exclusive and unilateral discretion to determine quality and suitability in accordance with LSA-R.S. 38:2212(T)(2).

13.05 Materials shall be properly and securely stored so as to ensure the preservation of quality and fitness for the Work, and in a manner that leaves the material accessible to inspection. Materials or equipment may not be stored on the site in a manner such that it will interfere with the continued operation of streets and driveways or other contractors working on the site.

13.06 The Contractor, by entering into the Contract for this Work, sets itself forth as an expert in the field of construction and it shall supervise and direct the Work efficiently and with its best skill and attention. It shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

13.07 Contractor shall keep on the Work, at all times during its progress, a competent resident Superintendent, who shall not be replaced without written Notice to Owner except under extraordinary circumstances. The Superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the Superintendent shall be as binding as if given to the Contractor. Owner specifically reserves the right to approve and/or disapprove the retention of a new superintendent, all to not be unreasonably withheld.

13.08 Any foreman or workman employed on this Project who disregards orders or instructions, does not perform his Work in a proper and skillful manner, or is otherwise objectionable, shall, at the written request of the Owner, be removed from the Work and shall be replaced by a suitable foreman or workman.

13.09 The Contractor and/or its assigned representative shall personally ensure that all subcontracts and divisions of the Work are executed in a proper and workmanlike manner, on scheduled time, and with due and proper cooperation.

13.10 Failure of the Contractor to keep the necessary qualified personnel on the Work shall be considered cause for termination of the Contract by the Owner.

13.11 Only equipment in good working order and suitable for the type of Work involved shall be brought onto the job and used by the Contractor. The Contractor is solely responsible for the proper maintenance and use of its equipment and shall hold the Owner harmless from any damages or suits for damages arising out of the improper selection or use of equipment. No piece of equipment necessary for the completion of the Work shall be removed from the job site without approval of the Owner.

13.12 All Federal, State and local taxes due or payable during the time of Contract on materials, equipment, labor or transportation, in connection with this Work, must be included in the amount bid by the Contractor and shall be paid to proper authorities before acceptance. The Contractor shall furnish all necessary permits and certificates and comply with all laws and ordinances applicable to the locality of the Work. The cost of all inspection fees levied by any governmental entity whatsoever shall be paid for by the Contractor.

13.13 In accordance with St. Tammany Police Jury Resolution 86-2672, as amended, the Contractor must provide in a form suitable to the Owner an affidavit stating that all applicable sales taxes for materials used on this project have been paid.

13.14 During the period that this Contract is in force, neither party to the Contract shall solicit for employment or employ an employee of the other.

13.15 All materials or equipment shown on the Drawings or included in these specifications shall be furnished unless written approval of a substitute is obtained from the Designer, or Owner if no separate designer.

13.16 If a potential supplier wishes to submit for prior approval a particular product other than a product specified in the contract documents, he shall do so no later than fourteen working days prior to the opening of bids. Within ten days, exclusive of holidays and weekends, after such submission, the prime design professional shall furnish to both the public entity and the potential supplier written approval or denial of the product submitted. The burden of proof of the equality of the proposed substitute is upon the proposer and only that information formally submitted shall be used by the Designer in making its decision.

13.17 The decision of the Designer/Owner shall be given in good faith and shall be final.

14.00 QUANTITIES OF ESTIMATE, CHANGES IN QUANTITIES, EXTRA WORK

14.01 Whenever the estimated quantities of Work to be done and materials to be furnished under this Contract are shown in any of the documents, including the Proposal, such are given for use in comparing Bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish same not to exceed twenty-five percent (25%) by the Owner to complete the Work contemplated by this Contract. Such increase or diminution shall in no way vitiate this Contract, nor shall such increase or diminution give cause for claims or liability for damages.

14.02 The Owner shall have the right to make alterations in the line, grade, plans, form or dimensions of the Work herein contemplated, provided such alterations do not change the total cost of the Project, based on the originally estimated quantities, and the unit prices bid by more than twenty-five percent (25%) and provided further that such alterations do not change the total cost of any major item, based on the originally estimated quantities and the unit price bid by more than twenty-five (25%). (A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total Contract Price, computed on the basis of the Proposal quantity and the Contract unity price). Should it become necessary, for the best interest of the Owner, to make changes in excess of that herein specified, the same shall be covered by supplemental agreement either before or after the commencement of the Work and without notice to the sureties. If such alterations diminish the quantity of Work to be done, such shall not constitute a claim for damages for anticipated profits for the Work dispensed with, but when the reduction in amount is a material part of the Work contemplated, the Contractor shall be entitled to only reasonable compensation as determined by the Owner for overhead and equipment charges which it may have incurred in expectation of the quantity of Work originally estimated, unless specifically otherwise provided herein; if the alterations increase the amount of Work, the increase shall be paid according to the quantity of Work actually done and at the price established for such Work under this Contract except where, in the opinion of the Owner, the Contractor is clearly entitled to extra compensation.

14.03 Without invalidating the Contract, the Owner may order Extra Work or make changes by altering, adding to, or deducting from the Work, the Contract sum being adjusted accordingly. The consent of the surety must first be obtained when necessary or desirable, all at the exclusive discretion of the Owner. All the Work of the kind bid upon shall be paid for at the price stipulated in the Proposal, and no claims for any Extra Work or material shall be allowed unless the Work is ordered in writing by the Owner.

14.04 Extra Work for which there is no price or quantity included in the Contract shall be paid for at a unit price or lump sum to be agreed upon in advance in writing by the Owner and Contractor. Where such price and sum cannot be agreed upon by both parties, or where this method of payment is impracticable, the Owner may, at its exclusive and unilateral discretion, order the Contractor to do such Work on a Force Account Basis.

14.05 In computing the price of Extra Work on a Force Account Basis, the Contractor shall be paid for all foremen and labor actually engaged on the specific Work at the current local rate of wage for each and every hour that said foremen and labor are engaged in such Work, plus ten percent (10%) of the total for superintendence, use of tools, overhead, direct & indirect costs/expenses, pro-rata applicable payroll taxes, pro-rata applicable workman compensation benefits, pro-rata insurance premiums and pro-rata reasonable profit. The Contractor shall furnish satisfactory evidence of the rate or rates of such insurance and tax. The Contractor will not be able to collect any contribution to any retirement plans or programs.

14.06 For all material used, the Contractor shall receive the actual cost of such material delivered at the site of the Work, as shown by original receipted bill, to which shall be added five percent (5%). There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.

14.07 For any equipment used that is owned by the Contractor, the Contractor shall be allowed a rental based upon the latest prevailing rental price, but not to exceed a rental price as determined by the Associated Equipment Distributors (A.E.D. Green Book).

14.08 The Contractor shall also be paid the actual costs of transportation for any equipment which it owns and which it has to transport to the Project for the Extra Work. There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.

14.09 If the Contractor is required to rent equipment for Extra Work, but not required for Contract items, it will be paid the actual cost of rental and transportation of such equipment to which no percent shall be added. The basis upon which rental cost are to be charged shall be agreed upon in writing before the Work is started. Actual rental and transportation costs shall be obtained from receipted invoices and freight bills.

14.10 No compensation for expenses, fees or costs incurred in executing Extra Work, other than herein specifically mentioned herein above, will be allowed.

14.11 A record of Extra Work on Force Account basis shall be submitted to the Owner on the day following the execution of the Work, and no less than three copies of such record shall be made on suitable forms and signed by both the Owner or his representative on the Project and the Contractor. All bids for materials used on extra Work shall be submitted to the Owner by the Contractor upon certified statements to which will be attached original bills covering the costs of such materials.

14.12 Payment for Extra Work of any kind will not be allowed unless the same has been ordered in writing by the Owner.

15.00 STATUS OF THE ENGINEER (NOT APPLICABLE)

16.00 INJURIES TO PERSONS AND PROPERTY

16.01 The Contractor shall be held solely and exclusively responsible for all injuries to persons and for all damages to the property of the Owner or others caused by or resulting from the negligence of itself, its employees or its agents, during the progress of or in connection with the Work, whether within the limits of the Work or elsewhere under the Contract proper or as Extra Work. This requirement will apply continuously and not be limited to normal working hours or days. The Owner's construction review is for the purpose of checking the Work product produced and does not include review of the methods employed by the Contractor or to the Contractor's compliance with safety measures of any nature whatsoever. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than $175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.

16.02 The Contractor must protect and support all utility infrastructures or other properties which are liable to be damaged during the execution of its Work. It shall take all reasonable and proper precautions to protect persons, animals and vehicles or the public from the injury, and wherever necessary, shall erect and maintain a fence or railing around any excavation, and place a sufficient number of lights about the Work and keep same burning from twilight until sunrise, and shall employ one or more watchmen as an additional security whenever needed. The Contractor understands and agrees that the Owner may request that security be placed on the premises to ensure and secure same. The Owner shall exclusive authority to request placement of such security. Contractor agrees to retain and place security as requested, all at the sole expense of Contractor. Additional security shall not be considered a change order or reason for additional payment by the Owner. The Contractor must, as far as practicable and consistent with good construction, permit access to private and public property and leave fire hydrants, catch basins, streets, etc., free from encumbrances. The Contractor must restore at its own expense all injured or damaged property caused by any negligent act of omission or commission on its part or on the part of its employees or subcontractors, including, but not limited to, sidewalks, curbing, sodding, pipes conduits, sewers, buildings, fences, bridges, retaining walls, tanks, power lines, levees or any other building or property whatsoever to a like condition as existed prior to such damage or injury.

16.03 In case of failure on the part of the Contractor to restore such property or make good such damage, the Owner may upon forty-eight (48) hours' notice proceed to repair or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due under its Contract.

16.04 Contractor agrees to protect, defend, indemnify, save, and hold harmless St. Tammany Parish Government, its elected and appointed officials, departments, agencies, boards and commissions, their officers, agents servants, employees, including volunteers, from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property to the extent caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors, or any and all costs, expense and/or attorney fees incurred by St. Tammany Parish Government as a result of any claim, demands, and/or causes of action that results from the negligent performance or non-performance by Contractor, its agents, servants, employees, and subcontractors of this contract. Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors.

16.05 As to any and all claims against Owner, its agents, assigns, representatives or employees by any employee of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts as may be liable, the indemnification obligation under Paragraph 16.04 shall not be limited in any way or by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.

16.06 No road shall be closed by the Contractor to the public except by written permission of the Owner. If so closed, the Contractor shall maintain traffic over, through and around the Work included in his Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether or not Work has ceased temporarily. The Contractor shall notify the Owner at the earliest possible date after the Contract has been executed and, in any case, before commencement of any construction that might in any way inconvenience or endanger traffic, in order that necessary and suitable arrangements may be determined. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.

16.07 The convenience of the general public and residents along the Works shall be provided for in a reasonable, adequate and satisfactory manner. Where existing roads are not available as detours, and unless otherwise provided, all traffic shall be permitted to pass through the Work. In all such cases, the public shall have precedence over Contractor's vehicles insofar as the traveling public's vehicles shall not be unduly delayed for the convenience of the Contractor. In order that all unnecessary delay to the traveling public may be avoided, the Contractor shall provide and station competent flagmen whose sole duties shall consist of directing and controlling the movement of public traffic either through or around the Work. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.

16.08 The Contractor shall arrange its Work so that no undue or prolonged blocking of business establishments will occur.

16.09 Material and equipment stored on the right of way or work site shall be so placed and the Work at times shall be so conducted as to ensure minimum danger and obstruction to the traveling public.

16.10 During grading operations when traffic is being permitted to pass through construction, the Contractor shall provide a smooth, even surface that will provide a satisfactory passageway

for use of traffic. The road bed shall be sprinkled with water if necessary to prevent a dust nuisance, provided the dust nuisance is a result of the Work.

16.11 Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules or regulations or within fifteen (15) feet of a fire hydrant, in the absence of such ordinance, rules or regulations.

16.12 The Contractor shall not, without the written permission of the Owner, do Work for a resident or property owner abutting the Work at the time that this Work is in progress.

16.13 No Work of any character shall be commenced on railroad right-of-way until the Railroad Company has issued a permit to the Owner and has been duly notified by the Contractor in writing (with a copy forwarded to the Owner) of the date it proposes to begin Work, and until an authorized representative of the Railroad Company is present, unless the Railroad Company waives such requirements. All Work performed by the Contractor within the right-of-way limits of the railroad shall be subject to the inspection and approval of the chief engineer of the Railroad Company or its authorized representative. Any precautions considered necessary by said chief engineer to safeguard the property, equipment, employees and passengers of the Railroad Company shall be taken by the Contractor without extra compensation. The Contractor shall, without extra compensation, take such precautions and erect and maintain such tell-tale or warning devices as the Railroad Company considers necessary to safeguard the operation of its trains. The temporary vertical and horizontal clearance specified by the chief engineer of the Railroad Company in approving these shall be maintained at all times. No steel, brick, pipe or any loose material shall be left on the ground in the immediate vicinity of the railway track. Before any Work is done within Railroad right of way, the Contractor shall provide and pay all costs of any special insurance requirements of the Railroad.

16.14 The Contractor, shall, without extra compensation, provide, erect, paint and maintain all necessary barricades. Also, without extra compensation, the Contractor shall provide suitable and sufficient lights, torches, reflectors or other warning or danger signals and signs, provide a sufficient number of watchmen and flagmen and take all the necessary precautions for the protection of the Work and safety of the Public.

16.15 The Contractor shall erect warning signs beyond the limits of the Project, in advance of any place on the Project where operations interfere with the use of the road by traffic, including all intermediate points where the new Work crosses or coincides with the existing road. All barricades and obstructions shall be kept well painted and suitable warning signs shall be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.

16.16 Whenever traffic is maintained through or over any part of the Project, the Contractor shall clearly mark all traffic hazards. No direct payment will be made for barricades, signs and illumination therefore or for watchmen or flagmen.

16.17 The Contractor will be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours. The duty of the Owner to conduct construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures, in, or near the construction site.

17.00 SANITARY PROVISIONS

17.01 The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of its employees as may be necessary to comply with the rules and regulations of the State Health Agency or of the other authorities having jurisdiction and shall permit no public nuisance.

18.00 RIGHTS OF WAY

18.01 The Owner will furnish the Contractor with all necessary rights-of-way for the prosecution of the Work. The rights of way herein referred to shall be taken to mean only permission to use or pass through the locations or space in any street, highway, public or private property in which the Contractor is to prosecute the Work.

18.02 It is possible that all lands and rights of way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin its Work upon such land and rights of way as the Owner may have previously acquired. Any delay in furnishing these lands by the Owner can be deemed proper cause for adjustment in the Contract amount and/or in the time of completion.

19.00 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

19.01 The Contractor shall not enter upon private property for any purpose without first obtaining permission from the Owner, as well as the private property owner and/or and private property Lessees. The Contractor shall use every precaution necessary for the preservation of all public and private property, monuments, highway signs, telephone lines, other utilities, etc., along and adjacent to the Work; the Contractor shall use every precaution necessary to prevent damage to pipes, conduits, and other underground structures; and shall protect carefully from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. The street and highway signs and markers that are to be affected by the Work shall be carefully removed when the Work begins and stored in a manner to keep them clean and dry. The Contractor must obtain all necessary information in regard to existing utilities and shall give notice in writing to the owners or the proper authorities in charge of streets, gas, water, pipes, electric, sewers and other underground structures, including conduits, railways, poles and pole lines, manholes, catch basins, fixtures, appurtenances, and all other property that may be affected by the Contractor's operations, at least forty-eight (48) hours before its operations will affect such property. The Contractor shall not hinder or interfere with any person in the protection of such Work or with the operation of utilities at any time. When property, the operation of railways, or other public utilities are endangered, the Contractor shall at its own expense, maintain flagmen or watchmen and any other necessary precautions to avoid interruption of service or damage to life or property, and it shall promptly repair, restore, or make good any injury or damage caused by its negligent operations in an acceptable manner. The Contractor must also obtain all necessary information in regard to the installation of new cables, conduits, and transformers, and make proper provisions and give proper notifications, in order that same can be installed at the proper time without delay to the Contractor or unnecessary inconvenience to the Owner.

19.02 The Contractor shall not remove, cut or destroy trees, shrubs, plants, or grass that are to remain in the streets or those which are privately owned, without the proper authority. Unless otherwise provided in the Special Provisions or the Proposal, the Contractor shall replace and replant all plants, shrubs, grass and restore the grounds back to its original good condition to the satisfaction of the Owner and/or the property owner. The Contractor shall assume the responsibility of replanting and guarantees that plants, shrubs, grass will be watered, fertilized and cultivated until they are in a growing condition. No direct payment will be made for removing and replanting of trees, shrubs, plants or grass unless such items are set forth in the Proposal.

19.03 When or where direct damage or injury is done to public or private property by or on account of any negligent act, omission, neglect or otherwise of the Contractor, it shall make good such damage or injury in an acceptable manner.

20.00 CONTRACTORS RESPONSIBILITY FOR WORK

20.01 Until final acceptance of the Work by the Owner as evidence by approval of the final estimate, the Work shall be in the custody and under the charge and care of the Contractor and it shall take every necessary precaution against injury or damage to any part thereof by the action of the elements or from the non-execution of the Work; unless otherwise provided for elsewhere in the Specifications or Contract. The Contractor shall rebuild, repair, restore and make good, without extra compensation, all injuries or damages to any portion of the Work occasioned by any of the above causes before its completion and

acceptance, and shall bear the expenses thereof. In case of suspension of the Work from any cause whatever, the Contractor shall be responsible for all materials and shall properly and securely store same, and if necessary, shall provide suitable shelter from damage and shall erect temporary structures where necessary. If in the exclusive discretion of the Owner, any Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of its Subcontractors to so protect the Work, such materials shall be removed and replaced at the sole expense of the Contractor. Such amount shall be deducted from any sum due or to be due Contractor.

20.02 The Contractor shall give all notice and comply with all Federal, State, and local laws, ordinances, and regulations in any manner affecting the conduct of the Work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the Work, and shall indemnify and hold harmless the Owner against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by itself, its employees or Subcontractors.

21.00 TESTS AND INSPECTIONS CORRECTION & REMOVAL OF DEFECTIVE WORK

21.01 Contractor warrants and guarantees to Owner that all materials and equipment will be new unless otherwise specified and that all Work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents. All unsatisfactory Work, all faulty or Defective Work and all Work not conforming to the requirements of the Contract Documents at the time of acceptance shall be considered Defective. Prompt and reasonable notice of all defects shall be given to the Contractor.

21.02 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested or approved by some public body, Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish Owner the required certificates of inspection, testing or approval. All other inspections, tests and approval required by the Contract Documents shall be performed by organizations acceptable to Owner and Contractor and the costs thereof shall be borne by the Contractor unless otherwise specified.

21.03 Contractor shall give Owner timely notice of readiness of the Work for all inspections, tests or approvals. If any such Work required to be inspected, tested or approved is covered without written approval of Owner, it must, if requested by Owner, be uncovered for observation, and such uncovering shall be at Contractor's expense unless Contractor has given Owner timely notice of its intention to cover such Work and Owner has not acted with reasonable promptness in response to such notice.

21.04 Neither observations by Owner nor inspections, tests or approvals shall relieve Contractor from its obligations to perform the Work in accordance with the requirements of the Contract Document.

21.05 Owner and its representatives will at reasonable times have access to the Work. Contractor shall provide proper and safe facilities for such access and observation of the Work and also for any inspection or testing thereof by others.

21.06 If any Work is covered contrary to the written request of Owner, it must, be uncovered for Owner’s observation and replaced at Contractor's expense. If any Work has been covered which Owner has not specifically requested to observe prior to its being covered, or if Owner considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at Owner's request, shall uncover, expose or otherwise make available for observations, inspections or testing as Owner may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be Defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

21.07 If the Work is Defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor fails to make prompt payments to Subcontractors or for labor, materials or equipment, Owner may order Contractor to stop the Work, or any portion thereof, until the cause of such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor or any other party.

21.08 Prior to approval of final payment, Contractor shall promptly, without cost to Owner and as specified by Owner, either correct any Defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not correct such Defective Work or remove and replace such rejected Work within a reasonable time, all as specified in a written notice from Owner, Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement including compensation for additional professional services shall be paid by Contractor, and an appropriate deductive Change Order shall be issued. Contractor shall also bear the expense of making good all Work of others destroyed or damaged by its correction, removal or replacement of its Defective Work.

21.09 If, after the approval of final payment and prior to the expiration of one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such Defective Work or if it has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, Owner may have the Defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by Contractor. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than $175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.

21.10 If, instead of requiring correction or removal and replacement of Defective Work, Owner (and prior to approval of final payment) prefers to accept it, the Owner may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price, or, if the acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to Owner.

21.11 If Contractor should fail to progress the Work in accordance with the Contract Documents, including any requirements of the Progress Schedule, Owner, after seven (7) days written Notice to Contractor, may, without prejudice to any other remedy Owner may have, make good such deficiencies and the cost thereof including compensation for additional professional services shall be charged against Contractor. In such cases, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract Price. If the payments then or thereafter due Contractor are not sufficient to cover such amount, Contractor shall pay the difference to Owner.

21.12 The Owner may appoint representatives to make periodic visits to the site and observe the progress and quality of the executed Work. These representatives shall be governed by the same restrictions placed on the Owner by these Specifications. The governing body of the Federal, State or local government exercising authority in the area of the Work may appoint representatives to observe the progress and quality of the Work. Contractor shall cooperate with and assist these representatives in the performance of their duties.

21.13 The Contractor shall be responsible for the faithful execution of its Contract and the presence or absence of the Owner's or Government's Representative is in no way or manner to be presumed or assumed to relieve in any degree the responsibility or obligation of the Contractor.

21.14 The Contractor shall notify the Owner and the Governmental Agency having jurisdiction as to the exact time at which it is proposed to begin Work so the Owner may provide for inspection of all materials, foundations, excavations, equipment, etc., and all or any part of the Work and to the preparation or manufacture of materials to be used whether within the limits of the Work or at any other place.

21.15 The Owner or its representatives shall have free access to all parts of the Work and to all places where any part of the materials to be used are procured, manufactured or prepared. The Contractor shall furnish the Owner all information relating to the Work and the material therefor, which may be deemed necessary or pertinent, and with such samples of materials as may be required. The Contractor, at its own expense, shall supply such labor and assistance as may be necessary in the handling of materials for proper inspection or for inspection of any Work done by it.

21.16 No verbal instructions given to the Contractor by the Owner, Project Representative or any of their agents shall change or modify the written Contract. Contractors shall make no claims for additional payments or time based upon verbal instructions.

22.00 SUBSURFACE CONDITIONS

22.01 It is understood and agreed that the Contractor is familiar with the subsurface conditions that will be encountered and its price bid for the Work includes all of the costs involved for Work in these conditions and it is furthermore agreed that it has taken into consideration, prior to its Bid and acceptance by Owner, all of the subsurface conditions normal or unusual that might be encountered in the location of the Work.

22.02 Should the Contractor encounter during the progress of the Work subsurface conditions at the site materially differing from those shown on the Drawings or indicated in the Specifications, the attention of the Owner shall be directed to such conditions before the conditions are disturbed. If the Owner finds that the conditions materially differ from those shown on the Drawings or indicated in the Specifications, it shall at once make such changes in the Drawings or Specifications as it may find necessary, and any increase or decrease in cost or extension of time resulting from such changes shall be adjusted in the same manner as provided for changes for Extra Work. The Contractor shall submit breakdowns of all costs in a manner as instructed and approved by the Owner.

23.00 REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS

23.01 Bidder shall thoroughly examine the site of the Work and shall include in its Bid the cost of removing all structures and obstructions in the way of the Work.

23.02 The Contractor shall remove any existing structures or part of structures, fence, building or other encumbrances or obstructions that interfere in any way with the Work. Compensations for the removal of any structure shall be made only if the item(s) to be removed was/were listed as pay item(s) on the Proposal.

23.03 If called for in the Special Conditions, all privately and publicly owned materials and structures removed shall be salvaged without damage and shall be piled neatly and in an acceptable manner upon the premises if it belongs to an abutting property owner, otherwise at accessible points along the improvements. Materials in structures which is the property of the Owner or property of any public body, private body or individual which is fit for use elsewhere, shall remain property of the original Owner. It shall be carefully removed without damage, in sections which may be readily transported; same shall be stored on or beyond the right of way. The Contractor will be held responsible for the care and preservation for a period of ten (10) days following the day the last or final portion of the materials stored at a particular location are placed thereon. When privately owned materials are stored beyond the right of way, the Contractor will be held responsible for such care and preservation for a period of ten (10) days responsibility period for care and preservation of the materials begins. The Contractor must furnish the Owner with evidence satisfactory that the proper owner of the materials has been duly notified by the Contractor that the said owner must assume responsibility for its materials on the date following the Contractor's ten (10) day responsibility.

24.00 INSURANCE

24.01 Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor, his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.

24.02 The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.

24.03 Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.

24.04 Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.

24.05 Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.

24.06 Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: A brief project description, including Project Name, Project Number and/or Contract Number, and Location.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages*.

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

24.07 The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract, include, but is not limited to:

1. Commercial General Liability insurance with a Combined Single Limit for bodily injury and property damage of at least $1,000,000 per Occurrence/$2,000,000 General Aggregate/Products-Completed Operations Per Project. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:

    a) Premises - operations;
    b) Broad form contractual liability;
    c) Products and completed operations;
    d) Personal Injury;
    e) Broad form property damage;
    f) Explosion and collapse.

2. Marine Liability/Protection and Indemnity insurance is required for any and all vessel and/or marine operations in the minimum limits of $1,000,000 per occurrence/$2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability.

3. Contractors' Pollution Liability and Environmental Liability insurance in the minimum amount of $1,000,000 per occurrence, $2,000,000 general aggregate and include coverage for full contractual liability and for all such environmental and/or hazardous waste exposures affected by this project.

4. Business Automobile Liability insurance with a Combined Single Limit of $1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:

    a) Any automobiles;
    b) Owned automobiles;
    c) Hired automobiles;
    d) Non-owned automobiles;
    e) Uninsured motorist.

5. Workers' Compensation/Employers Liability insurance: worker's compensation insurance coverage and limits as statutorily required; Employers' Liability Coverage shall be not less than $1,000,000 each accident, $1,000,000 each disease, $1,000,000 disease policy aggregate, except when projects include exposures covered under the United States Longshoremen and Harbor Workers Act, Maritime and/or Jones Act and/or Maritime Employers Liability (MEL) limits shall be not less than $1,000,000/$1,000,000/$1,000,000. *Coverage for owners, officers and/or partners shall be included in the policy and a statement of such shall be made by the insuring producer on the face of the certificate.*

6. Owners Protective Liability (OPL) (formerly Owners and Contractors Protective Liability (OCP) Insurance) shall be furnished by the Contractor naming St. Tammany Parish Government as the Named Insured and shall provide coverage in the minimum amount of $1,000,000 combined single limit (CSL) each occurrence, $2,000,000 aggregate. Any project valued in excess of $3,000,000 shall be set by the Office of Risk Management. The policy and all endorsements shall be addressed to St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434.

7. Builder's Risk Insurance shall be required on buildings, sewage treatment plants and drainage pumping stations, and shall be written on an "all-risk" or equivalent policy form in the amount of the full value of the initial Contract sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising 100% total value for the entire project including foundations. Deductibles should not exceed $5,000 and Contractor shall be responsible for any and all policy deductibles. This insurance shall cover portions of the work stored off the site, and also portions of the work in transit. In addition, Installation Floater

Insurance, on an "all-risk" form, will be carried on all pumps, motors, machinery and equipment on the site or installed. Both the Builder's Risk Insurance and the Installation Floater Insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors and shall terminate only when the Project has been accepted. St. Tammany Parish Government, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the Builder's Risk and Installation Floater Insurance.

8. Professional Liability (errors and omissions) insurance in the sum of at least One Million Dollars ($1,000,000) per claim with Two Million Dollars ($2,000,000) annual aggregate.

9. An umbrella policy or excess policy may be required and/or allowed to meet minimum coverage limits, subject to the review and approval by St. Tammany Parish Government, Office of Risk Management.

24.08 All policies of insurance shall meet the requirements of the Parish of St. Tammany prior to the commencing of any work. The Parish of St. Tammany has the right, but not the duty, to approve all insurance policies prior to commencing of any work. If at any time, it becomes known that any of the said policies shall be or becomes unsatisfactory to the Parish of St. Tammany as to form or substance; or if a company issuing any such policy shall be or become unsatisfactory to the Parish of St. Tammany, the Contractor shall promptly obtain a new policy, timely submit same to the Parish of St. Tammany for approval and submit a certificate thereof as provided above. The Parish agrees to not unreasonably withhold approval of any insurance carrier selected by Contractor. In the event that Parish cannot agree or otherwise authorize said carrier, Contractor shall have the option of selecting and submitting new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Contractor and thereafter deduct from Contractor's fee the cost of such insurance.

24.09 Upon failure of Contractor to furnish, deliver and/or maintain such insurance as above provided, the contract, at the election of the Parish of St. Tammany, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to maintain insurance shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Contractor concerning indemnification.

24.10 Contractor shall maintain a current copy of all annual insurance policies and provide same to the Parish of St. Tammany as may be reasonably requested.

24.11 It shall be the responsibility of Contractor to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Contractor. Contractor shall further ensure the Parish is named as additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project, and that renewal certificates for any policies expiring prior to the Parish's final acceptance of the project shall be furnished to St. Tammany Parish Government, Department of Legal, Office of Risk Management, without prompting.

NOTICE:

These are only an indication of the coverages that are generally required. Additional coverages and/or limits may be required for projects identified as having additional risks or exposures. Please note that some requirements listed may not necessarily apply to your specific services. St. Tammany Parish Government reserves the right to remove, replace, make additions to and/or modify any and all of the insurance requirement language upon review of the final scope of services presented to Office of Risk Management prior to execution of a contract for services.

For inquiries regarding insurance requirements, please contact:
St. Tammany Parish Government
Office of Risk Management
P. O. Box 628
Covington, LA 70434
Telephone: 985-898-5226
Email: riskman@stpgov.org

24.12 Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's Responsibility for payment of damages resulting from its operations under this Contract.

25.00 OWNER'S RIGHT TO OCCUPANCY

25.01 The Owner shall have the right to use, at any time, any and all portions of the Work that have reached such a stage of completion as to permit such occupancy, provided such occupancy does not hamper the Contractor or prevent its efficient completion of the Contract or be construed as constituting an acceptance of any part of the Work.

25.02 The Owner shall have the right to start the construction of houses, structures or any other building concurrent with the Contractor's Work.

26.00 SURVEY HORIZONTAL AND VERTICAL CONTROL

26.01 The Owner shall provide surveys for construction to establish reference points which in its judgment are necessary to enable Contractor to layout and proceed with its Work. Contractor shall be responsible for surveying and laying out the Work and shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Owner. Contractor shall report to Owner whenever any reference point is lost or destroyed and the Owner shall decide if the reference point shall be replaced by its or the Contractor's forces.

26.02 The Contractor shall establish lines and grades with its own forces in sufficient number and location for the proper execution of the Work.

26.03 If the Contractor, during the construction, damages the established property corners and/or other markers and thereafter requests the Owner to re-stake same in order to complete the project, this expense will be borne solely by the Contractor.

27.00 TERMINATION OF THE CONTRACT, OWNER'S AND CONTRACTORS RIGHT TO STOP WORK.

27.01 If the Contractor should be adjudged bankrupt (voluntarily or involuntarily) or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail (except in cases for which extension of time is provided) to supply enough properly skilled workmen or proper materials, or if it should fail to make prompt payment to Subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Owner, or otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner, upon the certificate of the Owner that, in its unilateral discretion and judgment, believes sufficient cause exists to justify such action, may,

without prejudice to any other right or remedy and after giving the Contractor ten (10) calendar days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the Work by whatever method the Owner may deem expedient.

27.02 Failure of the Contractor to start the Work within the time limit specified herein or substantial evidence that the progress being made by the Contractor is sufficient to complete the Work within the specified time shall be grounds for termination of the Contract by the Owner.

27.03 Before the Contract is terminated, the Contractor and its surety will first be notified in writing by the Owner of the conditions which make termination of the Contract imminent. When after ten (10) calendar days' notice is given and if satisfactory effort has not been made by the Contractor or its surety to correct the conditions, the Owner may declare, in its exclusive discretion, that the Contract is terminated and so notify the Contractor and its surety accordingly.

27.04 Upon receipt of notice from the Owner that the Contract has been terminated, the Contractor shall immediately discontinue all operations. The Owner may then proceed with the Work in any lawful manner that it may elect until Work is finally completed.

27.05 The exclusive right is reserved to the Owner to take possession of any machinery, implements, tools or materials of any description that shall be found upon the Work, to account for said equipment and materials, and to use same to complete the Project. When the Work is finally completed, the total cost of same will be computed. If the total cost is less than the Contract Price, the difference will not be paid to the Contractor or its surety.

27.06 In case of termination, all expenses incident to ascertaining and collecting losses under the Bond, including legal services, shall be assessed against the Bond.

27.07 If the Work should be stopped under any order of any court or public authority for period of sixty (60) calendar days, through no act or fault of the Contractor or anyone employed by it, or if the Owner shall fail to pay the Contractor within a reasonable time any sum certified by the Owner, then the Contractor may, upon ten (10) calendar days written notice to the Owner, stop Work or terminate this Contract and recover from the Owner payment for all Work properly and professionally executed in a workmanlike manner. This loss specifically includes actual cost of materials and equipment, together with all wages inclusive of all federal, state, and local tax obligations. This loss specifically includes reimbursement of all insurances on a pro-rata basis from the date of termination to date of policy period. This loss excludes and specifically does not include recovery by the Contractor for lost profit, indirect & direct expenses, overhead, and the like.

28.00 PAYMENTS TO THE CONTRACTOR

28.01 Monthly certificates for partial payment, in a form approved by the Owner, shall be transmitted to the Owner upon receipt from the Contractor and acceptance by the Owner. In accordance with LSA-R.S. 38:2248(A), when the Contract Price is less than five hundred thousand dollars, these certificates shall be equal to ninety percent (90%) of both the Work performed and materials stored at the site; and when the Contract Price is five hundred thousand dollars or more, these certificates shall be equal to ninety-five percent (95%) of both the Work performed and materials stored at the site. Partial payment certificates shall include only Work, materials and equipment that are included in official Work Order and which meet the requirements of plans, Specifications and Contract Documents. These monthly estimates shall show the amount of the original estimate for each item, the amount due on each item, the gross total, the retained percentage, the amount previously paid and the net amount of payment due.

28.02 After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is less than five hundred thousand dollars, the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety percent (90%) of the Contract Price. After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is five hundred thousand dollars or more, the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety-five percent (95%) of the Contract Price.

28.03 When the Contract Price is less than five hundred thousand dollars, the final payment certificate of the remaining ten percent (10%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. When the Contract Price is five hundred thousand dollars or more, the final payment certificate of the remaining five percent (5%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. Before issuance of the final payment certificate, the Contractor shall deposit with the Owner a certificate from the Clerk of Court and Ex-Officio Recorder of Mortgages from the Parish in which the Work is performed to the effect that no liens have been registered against Contract Work.

28.04 When, in the opinion of the Contractor, the Work provided for and contemplated by the Contract Documents has been substantially completed, the Contractor shall notify the Owner in writing that the Work is substantially complete and request a final inspection. The Owner shall proceed to perform such final inspection accompanied by the Contractor. Any and all Work found by this inspection to be Defective or otherwise not in accordance with the plans and Specifications shall be corrected to the entire satisfaction of the Owner and at the sole expense of the Contractor. If the Contract is found to be incomplete in any of its details, the Contractor shall at once remedy such defects, and payments shall be withheld and formal acceptance delayed until such Work has been satisfactorily completed.

28.05 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored and protected from damage and theft at the site, the Request for Payment shall also be accompanied by such data, satisfactory to the Owner, as will establish Owner's title to the material and equipment and protect its interest therein, including applicable insurance.

28.06 Each subsequent Request for Payment shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Request for Payment.

28.07 Each subsequent request for payment shall include an affidavit by Contractor that Contractor, all subcontractors, agents, material suppliers and all other persons supplying material to the project upon which State of Louisiana and/or St. Tammany sales taxes are lawfully due have paid these taxes and that all supplies and materials purchased for this project and for which Contractor has been paid have had all lawfully due State and/or St. Tammany sales taxes paid.

28.08 The Bid Proposal, unless otherwise modified in writing, and the Contract constitute the complete Project. The Contract Prices constitute the total compensation payable to Contractor and the cost of all of the Work and materials, taxes, permits and incidentals must be included into the Bid submitted by the Contractor and included into those items listed on the Proposal.

28.09 Any additional supporting data required by the Owner in order to substantiate Contractor's request for payment shall be furnished by Contractor at no cost to the Owner.

28.10 Owner may withhold from payment to Contractor as may be necessary to protect itself from loss on account of:

(1) Defective and/or inferior work;
(2) Damage to the property of Owner or others caused by Contractor;
(3) Failure by Contractor to make payments properly to sub-contractors or to pay for labor, materials or equipment used on this project;
(4) Failure by Contractor to pay taxes due on materials used on this project;
(5) Damage by Contractor to another Contractor;
(6) Insolvency;
(7) Bankruptcy, voluntary or involuntary;
(8) Revocation of corporate status;
(9) Failure to follow corporate formalities;
(10) Unprofessional activities;

(11) Unworkmanlike performance;
(12) Fraud and/or misrepresentation of any kind.

29.00 ACCEPTANCE AND FINAL PAYMENT(S)

29.01 Upon receipt of written notice from Contractor that the work is substantially complete and usable by Owner or the Pubic in suitable manner, the Owner and the Contractor shall jointly inspect the work.

29.02 If the Owner by inspection determines that the work is not substantially complete in a suitable manner for use by the Owner or the Public, then the Owner shall so notify the Contractor in writing stating such reason. All reasons need not be disclosed unless actually known. The Owner is afforded an opportunity to amend said notices as are reasonably possible.

29.03 If the Owner by its inspection determines that the work is substantially complete, it shall prepare a list of all items not satisfactorily completed and shall notify the Contractor and Owner in writing that the work is substantially complete and subject to satisfactory resolution of those items on the list (punch list). Punch lists may be amended from time to time by Owner in the event that additional deficiencies are discovered. In accordance with LSA-R.S. 38:2248(B), any punch list generated during a construction project shall include the cost estimates for the particular items of work the design professional has developed based on the mobilization, labor, material, and equipment costs of correcting each punch list item. The design professional shall retain his working papers used to determine the punch list items cost estimates should the matter be disputed later. The contract agency shall not withhold from payment more than the value of the punch list. Punch list items completed shall be paid upon the expiration of the forty-five (45) day lien period. The provisions of this Section shall not be subject to waiver.

29.04 Upon determination of substantial completeness with the punch list, the Contract Time is interrupted and the Contractor is given a reasonable time not to exceed thirty (30) consecutive calendar days to effect final completion by correcting or completing all of those items listed on the punch list. If the items on the punch list are not completed in a satisfactory manner within the thirty day period, then the Contract Time will begin to run again and will include for purposes of determining liquidated damages the thirty day period the grace period being withdrawn.

29.05 Upon receipt by Owner of written determination that all work embraced by the contract has been completed in a satisfactory manner, the Owner shall provide a written acceptance to Contractor who shall record Owner's written acceptance with the recorder of Mortgages, St. Tammany Parish. The Contractor shall properly prepare, submit and pay for all costs associated with said Acceptance. The Contractor is also responsible for preparation, re-submission and payment of any and all updated certificates.

29.06 Retainage monies, minus those funds deducted in accordance to the requirements of this agreement including but not limited to Paragraph 28.10, shall be due Contractor not earlier than forty-six (46) calendar days after recordation of certificate of Owner's acceptance provided the following:

(1) Contractor shall prepare, secure, pay for and submit clear lien and privilege certificate, signed and sealed by Clerk of Court or Recorder of Mortgages, Parish of St. Tammany and dated at least forty-six (46) days after recordation of certificate of acceptance;

(2) Ensure that the official representative of the Owner has accepted as per LSA-R.S. 38:2241.1, *et seq*. and that all following sub-sections have been properly satisfied as per law;

(3) Ensure that all signatures are affixed and that there exists the requisite authority for all signatures;

(4) Ensure accurate and proper legal descriptions;

(5) Properly identify all parties and/or signatories;

(6) Properly identify all mailing addresses;

(7) Correctly set for the amount of the contract, together with all change orders;

(8) Set out a brief description of the work performed;

(9) Reference to any previously recorded contract, lien or judgment inscription that may affect the property;

(10) Certification that substantial completion has occurred, together with any applicable date(s);

(11) Certification that no party is in default and/or that the project has been abandoned.

29.07 After securing the clear lien and privilege certificate the Contractor shall prepare its final application for payment and submit to Owner. The Owner shall approve application for payment, or state its objections in writing and forward to Contractor for resolution.

30.00 NOTICE AND SERVICE THEREOF

30.01 Any Notice to Contractor from the Owner relative to any part of this Contract shall be in writing and shall be considered delivered and the service thereof completed when said notice is posted; by certified mail, return receipt requested to the said Contractor at its last given address, or delivered in person to said Contractor or its authorized representative on the Work.

31.00 INTENTION OF THESE GENERAL CONDITIONS

31.01 These General Conditions shall be applicable to all contracts entered into by and between the Owner and Contractors, except as may be altered or amended with the consent of the Owner, and/or provided for in the Special Conditions of each contract. Contractor shall be presumed to have full knowledge of these General Conditions which shall be applicable to all contracts containing these General Conditions, whether Contractor has obtained a copy thereof or not.

32.00 SEVERABILITY

32.01 If any one or more or part of any of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

32.02 CHANGING THESE CONDITIONS: Owner reserves the right to change or modify these General Conditions as it deems best, or as required by law. The General Conditions may also be modified for a particular project by the use of Special Conditions prior to the issuance of the Advertisement for Bid. However, once an advertisement for bid is made for any specific project, any changes to the General Conditions as they affect that specific project must be made in writing and issued via an addendum in accordance with State Law.

33.00 LAW OF THE STATE OF LOUISIANA

33.01 The Contract Documents shall be governed by the Law of the State of Louisiana.

33.02 The Contractor agrees to pay reasonable attorney's fees and other reasonable attendant costs, in the event that it becomes necessary for the Owner to employ an attorney in order to enforce compliance with or any remedy relating to any covenants, obligations, or conditions imposed upon the Contractor by this Agreement. Attorney fees shall be based upon the prevailing hourly rate of attorney rates in the private sector. In no case shall the

hourly rate be less than $175.00 per hour. All attorney fees collected shall be paid the operating budget of the Office of the Parish President.

33.03 The jurisdiction and venue provisions shall apply to all contractors, sureties, and subcontractors. The 22nd Judicial District for the Parish of St. Tammany shall be the court of exclusive jurisdiction and venue for any dispute arising from these General Conditions and/or any contract executed in conjunction with these General Conditions. All parties specifically waive any rights they have or may have for removal of any disputes to Federal Court, or transfers to different State District Court.

33.04 Contractor warrants that it has and/or had received a copy of these General Conditions at all times material hereto; Contractor further agrees that it has read and fully and completely understands each and every condition herein.

33.05 The property description will be more fully set out by an attached exhibit.

33.06 The Contractor warrants that it has the requisite authority to sign and enter this agreement.

33.07 It is specifically understood and agreed that in the event Contractor seeks contribution from the Parish or pursues its legal remedies for any alleged breach of this agreement by the Parish, then the following list of damages SHALL NOT BE RECOVERABLE BY CONTRACTOR. This list includes, but is not limited to:

1. indirect costs and/or expenses;
2. direct costs and/or expenses;
3. time-related costs and/or expenses;
4. award of extra days;
5. costs of salaries or other compensation of Contractor's personnel at Contractor's principal office and branch offices;
6. expenses of Contractor's principal, branch and/or field offices;
7. any part of Contractor's capital expenses, including any interest on Contractor's capital employed for the work;
8. any other charges related to change orders;
9. overhead and general expenses of any kind or the cost of any item not specifically and expressly included in Cost of Work.

33.08 DEFAULT AND WAIVERS

It is understood that time is of the essence. It is specifically understood between the parties that Contractor waives any and all notice to be placed in default by the Owner. This subsection shall supersede and prime any other subsection herein above that is in conflict. The Owner specifically reserves its right and specifically does not waive the requirement to be placed in default by the Contractor as per law.

33.09 St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.

33.10 It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be concise and logically presented to facilitate review by the Parish. The written protest shall include:

1. The protester's name, address, and fax and telephone numbers and the solicitation, bid, or contract number;

2. A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;

3. Copies of relevant documents;

4. All information establishing that the protester is an interested party and that the protest is timely; and

5. A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to Director of Procurement, St. Tammany Parish Government, P.O. Box 628, Covington, LA 70434.

The protest review shall be conducted by the Parish Procurement Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and, fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF _____ INCORPORATED.

AT THE MEETING OF DIRECTORS OF _____ INCORPORATED, DULY NOTICED AND HELD ON _____, A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT WAS:

RESOLVED THAT _____, BE AND IS HEREBY APPOINTED, CONSTITUTED AND DESIGN ATED AS AGENT AND ATTORNEY-IN-FACT OF THE CORPORATION WITH FU LL POWER AND AUTHORITY TO ACT ON BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS AND TRANSACTIONS WITH THE PARISH OF ST. TAMMANY OR ANY OF ITS AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES, CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTINGEACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-FACT.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE AND CORRECT COPY OF AN EXCERPT OF THE MINUTES OF THE ABOVE DATED MEETING OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THE SAME HAS NOT BEEN REVOKED OR RESCINDED.

SECRETARY-TREASURER

_____

DATE

_____

Sample

Certificate of Insurance Instructions

The below information is intended to guide Contractors on what information is needed to be listed on the Certificate of Insurance. All Insurance limit requirements can be found in Section 06.

- **Certificate Holder** – STPG must be listed as the certificate holder, and it must include our address of: P.O. Box 628, Covington, LA 70434
    - Reason: the certificate holder is where cancellations of coverage, or updated certificates are mailed. If a vendor terminates a policy, we will be notified.
- **Additional Insured** – We must be named as an additional insured so that if there is a lawsuit against the vendor for a project, their coverage will cover STPG as well if we are named in the lawsuit.
    - We must be named in the Description of Operations box – reason: there could be other additional insureds, and we want to have no doubt that we are one of the additional insureds.
    - We must be named as additional insured on the following coverages: General liability, Auto Liability, Umbrella/Excess Liability, Environmental/Pollution Liability.
    - Professional Liability policies do not allow for an additional insured by most carriers.
- **Project Name & Contract #** - We need this listed in the Description of Operations, again so that if there is a lawsuit, we have proof that coverage was active for that project.
- **Waiver of Subrogation –** This can either be listed in the Description of Operations or checked off in the appropriate columns.

    From the Insurance Requirement form:

    Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.
- **Owners Protective Liability (OPL) or (OCP)** – Certificate of Insurance for OCP names St. Tammany Parish Government as the Insured and the Certificate Holder.

- Sample of Certificate of Insurance (COI) can be found on page 2.

- Please refer to this section in the package labeled "Insurance Requirements" for limits required for this project

Any questions regarding insurance requirements please contact the Risk Department at 985-898-5226 or email riskman@stpgov.org

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO-JECT ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N / A **(Mandatory in NH)**						E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project Name:
Contract #:

(Name St. Tammany Parish Government as an additional insured).

CERTIFICATE HOLDER

St. Tammany Parish Government
P.O. Box 628
Covington, LA 70434

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Sample

© 1988-2010 ACORD CORPORATION. All rights reserved.
The ACORD name and logo are registered marks of ACORD

Bond No.:_____

CONTRACT AGREEMENT

BETWEEN PARISH AND CONTRACTOR

BY: ST. TAMMANY PARISH GOVERNMENT

WITH: «TXTCOMPANYNAME»

UNITED STATES OF AMERICA

STATE OF LOUISIANA

ST. TAMMANY PARISH

SAMPLE

This agreement is entered into this_____day of_____, 20___, by and between: «TXTCOMPANYNAME», hereinafter called the "Contractor", whose business address is «TXTADDRESS», «TXTCITY», «TXTSTATE» «txtZip» and the St. Tammany Parish Government, hereinafter called the "Parish", whose business address is P.O. Box 628, Covington, LA 70434 (collectively, the "Parties") for «TXTPROJECTNAME» project. Witnessed that the Contractor and the Parish, in consideration of premises and the mutual covenants, consideration and agreement herein contained, agree as follows:

1. SCOPE OF SERVICES

«txtScopeSummary»

2. CONSTRUCTION DOCUMENTS

It is recognized by the Parties herein that said Construction Documents, including by way of example and not of limitation, the plans and Specifications, General Conditions, Supplementary General Conditions, any addenda thereto, the drawings (if any), and the bid, quote or other procurement documents impose duties and obligations upon the Parties herein, and said Parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Construction Documents are incorporated herein by reference with the same force and effect as though said Construction Documents were herein set out in full. Copies of the aforementioned Construction Documents are in the possession of both the Contractor and the Parish for reference.

SAMPLE

3. TIME FOR COMPLETION

The work shall be commenced on a date to be specified in a written order of the Parish and shall be completed within «intCompletionTime» ( ) calendar days from and after said date.

4. COMPENSATION TO BE PAID TO THE CONTRACTOR

The Parish will pay and the Contractor will accept in full consideration for the performance of the Contract the sum of «curREQGrandTotal».

5. RETAINAGE

A retainage fee will be applied to all contracts with a total price of $100,000.00 or more. For contracts priced between $100,000.00 and $499,999.99, the retainage shall be 10% of the amount. For contracts priced at $500,000.00 or more, the retainage shall be 5%. Retainage will be deducted from each payment and released in accordance with the contract closeout and acceptance requirements.

6. PERFORMANCE AND PAYMENT BOND

To these presents personally came and intervened _____, herein acting for _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned

(Name of Attorney in Fact)

(Surety)

SAMPLE

herein, he hereby in his capacity as its Attorney in Fact obligates his company, as surety for the said Contractor, unto the said Parish, up to the sum of «curREQGrandTotal». The condition of this performance and payment bond shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Parish from all costs and damages which he may suffer by said Contractor's non-performance or should said Contractor not pay all persons who have fulfilled obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example, workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said surety agrees and is bound to so perform the Contract and make said payment(s).

Contractor and Parish specifically agree to and recognize (1) the statutory employer relationship existing between the Parish and any employees performing work under this Contract as employees of the Contractor or employees of the "Sub-Contractor", and (2) that the work performed by the employees of the Contractor and the employees of the "Sub-Contractor" is part of the Parish's

SAMPLE

business, occupation or trade and is essential to the ability of the Parish to generate their products or services, all of which is in accordance with LSA-R.S. 23:1061, and as may be amended.

7. LIABILITY AND INDEMNIFICATION

A. Duty to Defend

Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.

B. Contractor Liability

Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments,

SAMPLE

forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.

C. Force Majeure

It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.

SAMPLE

D. Indemnification

Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.

E. Intellectual Property Indemnification

Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation,

SAMPLE

including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

SAMPLE

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not furnished by Contractor; or, iii) use of the product, material or service in other than the specified operating conditions and environment.

8. MODIFICATION OF CONTRACT TERMS

Provided that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Parish of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Parish or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions or other forbearance being hereby waived.

SAMPLE

8. TERMINATION, CANCELLATION, AND SUSPENSION

A. Termination

The term of this Contract shall be binding upon the Parties hereto until the work has been

completed by the Contractor and accepted by the Parish, and all payments required to be made to the Contractor have been made. But, this Contract may be terminated upon thirty (30) days written notice under any or all of the following conditions:

1) By mutual agreement and consent of the Parties hereto;

2) By the Parish as a consequence of the failure of the Contractor to comply with the terms, progress, or quality of the work in a satisfactory manner, proper allowances being made for circumstances beyond the control of the Contractor;

3) By either party upon failure of the other party to fulfill its obligations as set forth in this Contract;

4) By the Parish with less than thirty (30) days' notice due to budgetary reductions and changes in funding priorities by the Parish;

5) In the event of the abandonment of the project by the Parish.

Upon termination, the Contractor shall be paid for actual work performed prior to the Notice of Termination, either based upon the established hourly rate for services actually performed, or on a pro-rata share of the basic fee based upon the phase or percentage of

SAMPLE

work actually completed, depending on the type of compensation previously established under this Contract.

Upon Termination, the Contractor shall deliver to the Parish all original documents, notes, drawings, tracings, computer files, and other files pertaining to this Contract or the Work performed, except for the Contractor's personal and administrative files.

B. Cancellation

The continuation of this Contract is contingent upon the appropriation of funds to fulfill the requirements of the Contract by the Parish. If the Parish fails to appropriate sufficient monies to provide for the continuation of this or any other Contract, or if such appropriation is reduced by the veto of Parish President by any means provided in the appropriations Ordinance to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the Contract, the Contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated. It is understood and agreed that paragraph (9)(C) below may preempt this paragraph, all at the exclusive and unilateral option of the Parish.

SAMPLE

C. Suspension

Should the Parish desire to suspend the work, but not definitely terminate the Contract, the Parish shall supply the Contractor with thirty (30) days' notice. The Parish will also supply Contractor thirty (30) days' notice that the work is to be reinstated and resumed in full force. Contractor shall receive no additional compensation during the suspension period. The Parties may revisit the terms of this Contract during the suspension period. The suspension shall not exceed six (6) months, unless mutually agreed upon between the Parties.

D. Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.

E. In the event of a default and/or breach of this agreement and this matter is forwarded to

SAMPLE

legal counsel, then the prevailing party may be entitled to collect a reasonable attorney fees and all costs associated therewith whether or not litigation is initiated. Attorney fees shall be based upon the current, reasonable prevailing rate for counsel in the private sector. The Parties agree to be responsible for such attorney fees, together for all with legal interest from date of agreement breach, plus all costs of collection.

F. Termination or cancellation of this agreement will not affect any rights or duties arising under any term or condition herein.

G. As to the filing of voluntary or involuntary bankruptcy by Contractor, Contractor agrees that if any execution or legal process is levied upon its interest in this Contract, or if any liens or privileges are filed against its interest, or if a petition in bankruptcy is filed against it, or if it is adjudicated bankrupt in involuntary proceedings, or if it should breach this Contract in any material respect, the Parish shall have the right, at its unilateral option, to immediately cancel and terminate this Contract. In the event that Contractor is placed in any chapter of bankruptcy, voluntarily or involuntarily, or otherwise triggers any provision of the preceding sentence herein, it is understood and agreed that all materials, goods and/or services provided shall be and remain the property of the Parish. All rights of Contractor as to goods, wares, products, services, materials and the like

SAMPLE

supplied to Parish shall be deemed forfeited.

9. AUTHORITY TO ENTER CONTRACT

The undersigned representative of Contractor warrants and personally guarantees that he/she has the requisite and necessary authority to enter and sign this Contract on behalf of the corporate entity, partnership, etc. The undersigned Parties warrant and represent that they each have the respective authority and permission to enter this Contract. In the event that Contractor is a member of a corporation, partnership, L.L.C., L.L.P., or any other juridical entity, the Parish requires, as an additional provision, that Contractor supply a certified copy of a corporate resolution authorizing the undersigned to enter and sign this Contract. Another option to fulfill this additional provision he/she can supply Louisiana Secretary of State Business filings confirming that he/she is a managing member of a corporation, partnership, L.L.C., L.L.P., or any other juridical entity which authorizes the undersigned to enter and sign this Contract.

SAMPLE

In Witness thereof, the Parties hereto on the day and year first above written have executed this Contract in **One (1)** counterpart, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:

_____
Signature

_____
Print Name

_____
Signature

_____
Print Name

CONTRACTOR:

_____
Signature

_____
Print Name

_____
Title

_____
Date

SAMPLE

Bond No.:_____

WITNESSES:

_____
Signature

_____
Print Name

_____
Signature

_____
Print Name

ST. TAMMANY PARISH GOVERNMENT:

_____
Michael B. Cooper
Parish President

_____
Date

APPROVED BY:

_____
Assistant District Attorney
Civil Division

_____
Date

_____
(Surety)

_____
Signature

_____
Print Name

SAMPLE

T. BAKER SMITH

Section 12

P.O. Box 2266
Houma, LA 70361

412 South Van Ave.
Houma, LA 70363

985.868.1050
866.357.1050
985.868.5843 FAX

tbsmith.com

March 10, 2026

Via Email

Mr. Truman Sharp, III
St. Tammany Parish Government
21454 Koop Drive
Mandeville, LA 70471

RE: Permits for pedestrian bridge replacement Tammany Trace Bike Trail Bridge 13 located in St. Tammany Parish, Louisiana

Dear Mr. Sharp,

Enclosed are the following original permit(s) for the above referenced project:

These permits, or a copy thereof, shall be available for inspection at the site of work at all times during operations.

1) Coastal Use Permit – La. Dept. of Conservation and Entergy **(Please note: Upon commencement of the project, you mut notify LDCE).**
   - That a right-of-way be purchased from the Division of Administration, State Land Office prior to initiation of any construction activities.
   - The requirement for compensatory mitigation for impacts to marsh habitat resulting from the referenced project will be determined after one full growing season (March 1 to November 1) following the completion of the permitted activities. This assessment shall include both primary impacts and secondary impacts which may result from the permitted activities.
   - Permittee shall provide on-ground pre- and post-construction photographic documentation, including a photograph key that shows location and direction of each photograph, that clearly shows all vegetated wetland occurring within the permitted project area. The post-construction photos should be taken at the same location and in the same direction as the pre-construction photos. The post-construction documentation shall be acquired (photos actually taken) and submitted within 60 days of the end of the first full growing season following completion of the project. Permittee shall notify OPC of the date of completion of permitted activities within 5 working days of completion.
   - If OPC determines permanent impacts to wetlands or other coastal resources has resulted from permitted activities following one full growing season, the permittee shall be responsible for restoration or mitigation of those damages. The permittee shall submit a restoration plan proposal of if site restoration is anticipated to be unachievable, a compensatory mitigation plan to OPC within 30 days of notification of assessment of permanent impacts. Evaluation of the restoration or mitigation proposal will require consideration of landowner rights, location factors, and interagency coordination. A compensatory mitigation plan shall include a written alternative analysis or justification document outlining the reason(s) site restoration of permanent impacts is not feasible.
   - All necessary approvals shall be obtained for the restoration or compensatory mitigation plan and the plan shall be implemented as directed by OPC. A processing fee will be assessed for

the determination of compensatory mitigation requirements and evaluation of the proposed compensatory mitigation plan in accordance with LAC Title 43, Part I Chapter 7, §724.D. This fee shall apply regardless of which compensatory mitigation option is selected and does not include the cost incurred to implement the required compensatory mitigation.

- All equipment utilized to perform activities authorized under this permit shall stay within the access routes and work areas designated on the permit plats utilizing the least damaging route and/or open water areas.
- Permittee shall restore pre-project elevations and contours immediately upon completion of permitted activities including all work areas and access routes. Please be advised that a permit amendment will be required if it is determined that additional fill is needed to restore pre-project elevations and contours.
- The applicant shall properly install adequate erosion control measures around construction areas that require land based earthwork (i.e. excavation and/or deposition of fill materials, land contouring, machinery rutting, fill maneuvering and redistribution, etc.), to ensure that no project related sediments, debris and other pollutants enter adjacent wetlands or Bayou Castine. Acceptable measures include but are not limited to the proper use and positioning of temporary silt fences, straw bales, fiber/core logs, wooden barriers, seeding or sodding of exposed soils, or other approved EPA construction site storm-water runoff control and best practices. Control techniques shall be installed prior to the commencement of earthwork activities and maintained until the project is complete and/or the subject areas are stabilized. Upon the completion of construction activities or if at any time construction activities cease for more than 14 days, all disturbed soils shall be re-vegetated by sod, seed, or another acceptable method, as necessary, to restore cover and prevent erosion.

2) PGP- Cat I – U.S. Army Corps of Engineers **(Please note all conditions within this permit, paying special attention to:**
   - Permittee must comply with the enclosed " Standard Manatee Conditions for In-Water Activities".

3) No Objection – La. Dept. of Culture, Recreation & Tourism
4) No Permit required – St. Tammany Parish Government

Sincerely,

T. BAKER SMITH, LLC

Samantha Baier

Samantha Baier, Project Manager
Environmental Discipline

SOB/lmf
Enclosure(s)

Department of Conservation and Energy

P.O. BOX 44487
BATON ROUGE, LOUISIANA 70804-4487
(225)342-7591
1-800-267-4019

COASTAL USE PERMIT/CONSISTENCY DETERMINATION

C.U.P. No.: **P20250864**

C.O.E. No.: **MVN-2025-00965-ENP**

NAME: **ST. TAMMANY PARISH GOVERNMENT**
c/o T. BAKER SMITH, LLC
P.O. BOX 2266
HOUMA, LA 70361
Attn: Michael Trahan

LOCATION: **Saint Tammany Parish, LA**
Lat 30-21-00.77N, Long -90-02-20.7W; Tammany Trace Bike Trail; Bayou Castine; Section 47, T08S-R12E

DESCRIPTION: Proposed replacement of the Tammany Trace Bike Trail pedestrian bridge #13, which has been deemed structurally deficient, with a new 255' fabricated bridge. Approx. 170 CY of native material will be excavated and hauled offsite. Approx. 100 CY of concrete is required for the concrete abutments and piles, 30 CY of crushed stone/gravel and 85 CY of asphalt required for the asphalt base course on either side of the bridge, and 160 CY of rock required for the riprap on either side of the bridge. Limited side trimming of forested wetlands is proposed for access to the temporary workspace.

In accordance with the rules and regulations of the Louisiana Coastal Resources Program and Louisiana R.S. 49, Sections 214.21 to 214.41, the State and Local Coastal Resources Management Act of 1978, as amended, the permittee agrees to:

1. Carry out, perform, and/or operate the use in accordance with the permit conditions, plans and specifications approved by the Department of Conservation and Energy.
2. Comply with any permit conditions imposed by the Department of Conservation and Energy.
3. Adjust, alter or remove any structure or other physical evidence of the permitted use if, in the opinion of the Department of Conservation and Energy, it proves to be beyond the scope of the use as approved or is abandoned.
4. Provide, if required by the Department of Conservation and Energy, an acceptable surety bond in an appropriate amount to ensure adjustment, alteration, or removal should the Department of Conservation and Energy determine it necessary.
5. Hold and save the State of Louisiana, the local government, the department, and their officers and employees harmless from any damage to persons or property which might result from the use, including the work, activity, or structure permitted.
6. Certify that the use has been completed in an acceptable and satisfactory manner and in accordance with the plans and specifications approved by the Department of Conservation and Energy. The Department of Conservation and Energy may, when appropriate, require such certification to be given by a registered professional engineer.
7. All terms of the permit shall be subject to all applicable federal and state laws and regulations.
8. This permit, or a copy thereof, shall be available for inspection at the site of work at all times during operations.
9. The applicant will notify the Office of Permitting and Compliance of the date on which initiation of the permitted activity described under the "Coastal Use Description" began. The applicant shall notify the Office of Permitting and Compliance by entering a commencement date through the online system, or by mailing said information to OPC.
10. Unless specified elsewhere in this permit, this permit authorizes the initiation of the coastal use described under "Coastal Use Description" for two (2) years from the date of the signature of the Secretary or his designee on the original permit which was February 25, 2026. If the coastal use is not initiated within this two (2) year period, then this permit will expire and the applicant will be required to submit a new application. Initiation of the coastal use, for the purposes of this permit, means the actual physical beginning of the use of activity for which the permit is required. Initiation does not include preparatory activities, such as movement of equipment onto the coastal use site, expenditure of funds, contracting out of work, or performing activities which by themselves do not require a permit. In addition, the permittee must, in good faith, and with due diligence, reasonably progress toward completion of the project once the coastal use has been initiated.
11. The following special conditions must also be met in order for the use to meet the guidelines of the Coastal Resources Program:

a. This permit does not convey any property rights, mineral rights, or exclusive privileges; nor does it authorize injury to property.

b. That a right-of-way grant be purchased from the Division of Administration, State Land Office prior to initiation of any construction activities.

c. To mitigate for the unavoidable loss of 0.03 acres of fresh marsh habitat that will result from the above captioned project, the Office of Permitting and Compliance (OPC) is in receipt of check No. 519201 received on 02/12/2026 in the amount of $1,944.60 from Permittee and that said check is payable to the OPC Coastal Mitigation Account. This check satisfies the requirements for compensatory mitigation and allows the permittee to conduct the activities authorized under this permit.

d. The requirement for compensatory mitigation for impacts to marsh habitat resulting from the referenced project will be determined after one full growing season (March 1 to November 1) following the completion of the permitted activities. This assessment shall include both primary impacts and secondary impacts which may result from the permitted activities.

Permittee shall provide on-ground pre- and post-construction photographic documentation, including a photograph key that shows location and direction of each photograph, that clearly shows all vegetated wetlands occurring within the permitted project area. The post-construction photos should be taken at the same location and in the same direction as the pre-construction photos. The post-construction documentation shall be acquired (photos actually taken) and submitted within 60 days of the end of the first full growing season following completion of the project. Permittee shall notify OPC of the date of completion of permitted activities within 5 working days of completion.

If OPC determines permanent impacts to wetlands or other coastal resources has resulted from permitted activities following one full growing season, the permittee shall be responsible for restoration or mitigation of those damages. The permittee shall submit a restoration plan proposal or if site restoration is anticipated to be unachievable, a compensatory mitigation plan to OPC within 30 days of notification of assessment of permanent impacts. Evaluation of the restoration or mitigation proposal will require consideration of landowner rights, location factors, and interagency coordination. A compensatory mitigation plan shall include a written alternatives analysis or justification document outlining the reason(s) site restoration of permanent impacts is not feasible.

All necessary approvals shall be obtained for the restoration or compensatory mitigation plan and the plan shall be implemented as directed by OPC. A processing fee will be assessed for the determination of compensatory mitigation requirements and evaluation of the proposed compensatory mitigation plan in accordance with LAC Title 43, Part I, Chapter 7, §724.D. This fee shall apply regardless of which compensatory mitigation option is selected and does not include the cost incurred to implement the required compensatory mitigation.

e. All equipment utilized to perform activities authorized under this permit shall stay within the access routes and work areas designated on the permit plats utilizing the least damaging route and/or open water areas. Where access routes traverse vegetated wetlands, marsh buggy/tracked equipment access shall be limited to one pass ingress and one pass egress and shall not fall within the same tracks.

f. No clearing, except for limited branch trimming, or rutting in forested wetlands is authorized to perform activities under this permit.

g. Structures must be marked/lighted in accordance with U. S. Coast Guard regulations.

h. All logs, stumps and other debris encountered during dredging activities shall be removed from the site during or immediately after the activity and disposed of in accordance with all applicable laws and regulations.

i. All fill material shall be clean and free of contaminants and shall not contain hazardous materials such as asbestos or asbestos residue, shingles, tires, oil/grease residue, exposed rebar, protruding objects, etc.

j. All fill and/or dredged material to be hauled off-site shall be disposed of at a State approved facility.

k. LA Department of Wildlfie & Fisheries (LDWF) recommendations:
The applicant shall properly install adequate erosion/siltation control measures around construction areas that require land based earthwork (i.e. excavation and/or deposition of fill materials, land contouring, machinery rutting, fill maneuvering and redistribution, etc.), to ensure that no project related sediments, debris and other pollutants enter adjacent wetlands or Bayou Castine. Acceptable measures include but are not limited to the proper use and positioning of temporary silt fences, straw bales, fiber/core logs, wooden barriers, seeding or sodding of exposed soils, or other approved EPA construction site storm-water runoff control and best practices. Control techniques shall be installed prior to the commencement of earthwork activities and maintained until the project is complete and/or the subject areas are stabilized. Upon the completion of construction activities or if at any time construction activities cease for more than 14 days, all disturbed soils shall be re-vegetated by sod, seed, or another acceptable method, as necessary, to restore cover and prevent erosion.

LDWF Wildlife Diversity Program:
No impacts to rare, threatened or endangered species or critical habitats are anticipated from the proposed project. The Wildlife Diversity Program (WDP) reports summarize the existing information known at the time of the request regarding the location in question. WDP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. If at any time WDP tracked species are encountered within the project area, please contact our biologist at 225-763-3554.

l. All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.

m. The permittee shall ensure that all sanitary sewage and/or related domestic wastes generated during the subject project activity and at the site, thereafter, as may become necessary shall not be discharged into any of the streams or adjacent waters of the area without authorization from DH and/or DEQ or, in the case of total containment, shall be disposed of in approved sewerage and sewage treatment facilities, as is required by the State Sanitary Code and DEQ regulations. Such opinion as may be served by those comments offered herein shall not be construed to suffice as any more formal approval(s) which may be required of possible sanitary details (i.e. provisions) scheduled to be associated with the subject activity. Such shall generally require that appropriate plans and specifications be submitted to DH for purpose of review and approval prior to any utilization of such provisions.

n. Permittee is subject to all applicable state laws related to damages which are demonstrated to have been caused by this action.

o. Permittee shall allow representatives of the Office of Permitting and Compliance or authorized agents to make periodic, unannounced inspections to assure the activity being performed is in accordance with the conditions of this permit.

p. Permittee shall comply with all applicable state laws regarding the need to contact the Louisiana One Call (LOC)

system (1-800-272-3020) to locate any buried cables and pipelines.

q. This permit authorizes the initiation of the Coastal Use described under "Coastal Use Description" for two (2) years from the date of the signature of the Secretary or his designee on the original permit which was February 25, 2026. Initiation of the Coastal Use, for purposes of this permit, means the actual physical beginning of the use or activity for which the permit is required. Initiation does not include preparatory activities, such as movement of equipment onto the Coastal Use site, expenditure of funds, contracting out of work, or performing activities which by themselves do not require a permit. In addition, Permittee must, in good faith and with due diligence, reasonably progress toward completion of the project once the Coastal Use has been initiated. If the Coastal Use is not initiated within this two (2) year period, an extension may be granted pursuant to the requirements contained in the Rules and Procedures for Coastal Use Permits (Title 43:I.723.D.). Please note that a request for permit extension MUST be made no sooner than one hundred eighty (180) days and no later than sixty (60) days prior to the expiration of the permit.

   The expiration date of this permit is five (5) years from the date of the signature of the Secretary or his designee on the original permit which was February 25, 2026. If the Coastal Use is not completed within this five (5) year period, an extension may be granted pursuant to the requirements contained in the Rules and Procedures for Coastal Use Permits (LAC 43:I.723(D)).

   Upon expiration of this permit, a new Coastal Use Permit will be required for completion of any unfinished or uncommenced work items and for any maintenance activities involving dredging or fill that may become necessary. Other types of maintenance activities may also require a new Coastal Use Permit.

r. This determination does not eliminate the need to obtain a permit from the United States Army, Corps of Engineers or any other Federal, state or local approval that may be required by law. The drawings submitted with your referenced application are attached hereto and made a part of the record.

********** End of Conditions **********

By accepting this permit the applicant agrees to its terms and conditions.

I affix my signature and issue this permit this 25th day of February, 2026.

THE DEPARTMENT OF CONSERVATION AND ENERGY

Kyle F. Balkum, Administrator
Office of Permitting and Compliance

This agreement becomes binding when signed by Administrator of
the Office of Permitting and Compliance/Ecology Division, Department of Conservation and Energy.

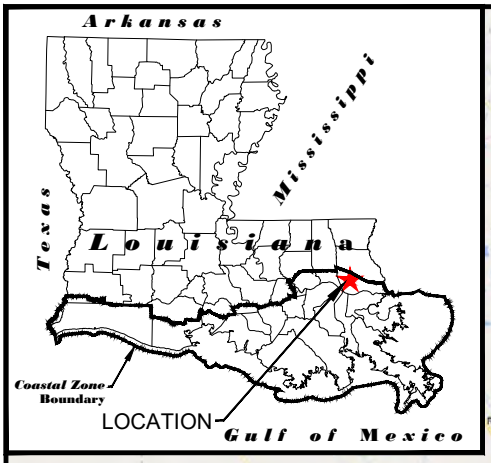
Attachments

Final Plats:

1) P20250864 Final Plats 11/10/2025

cc: Brad Guarisco, COE w/attachments
Dave Butler, LDWF w/attachments
Les Rosso, State Land w/attachments
Sharon Pecquet, OPC w/attachments
Jordan Cobbs, OPC w/attachments
Samuel Welty, OCM/FI w/attachments
Saint Tammany Parish w/attachments

ST. TAMMANY PARISH GOVERNMENT w/attachments



PROJECT LOCATION

X = 3,689,058' NAD 83
Y = 675,162'
LAT = 30° 21' 0.77" NAD 83
LONG = 90° 2' 20.70"

PROJECT VICINITY

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_VICINITY.DWG		
SHEET NO:	1	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

SCALE: 1" = 4 MILES

4 MI 2 MI 0' 4 MI

VICINITY MAP

ST. TAMMANY PARISH GOVERNMENT

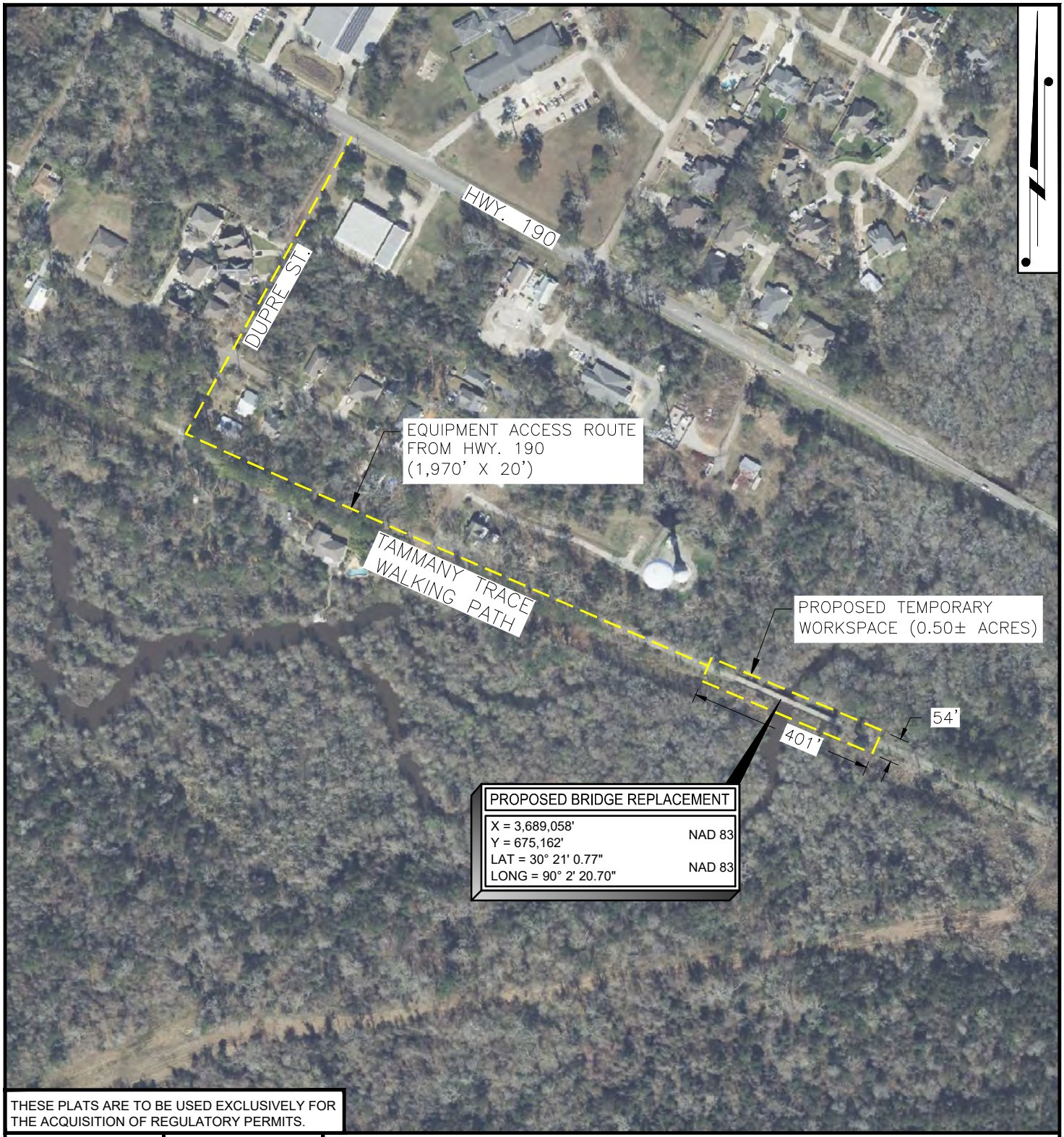
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
00	--/--/--	---

REVISION DESCRIPTION:
--

10/24/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_VICINITY.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_ACCESS.DWG		
SHEET NO:	2	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

SCALE: 1" = 300'

300' 150' 0' 300'

ACCESS VIEW

ST. TAMMANY PARISH GOVERNMENT

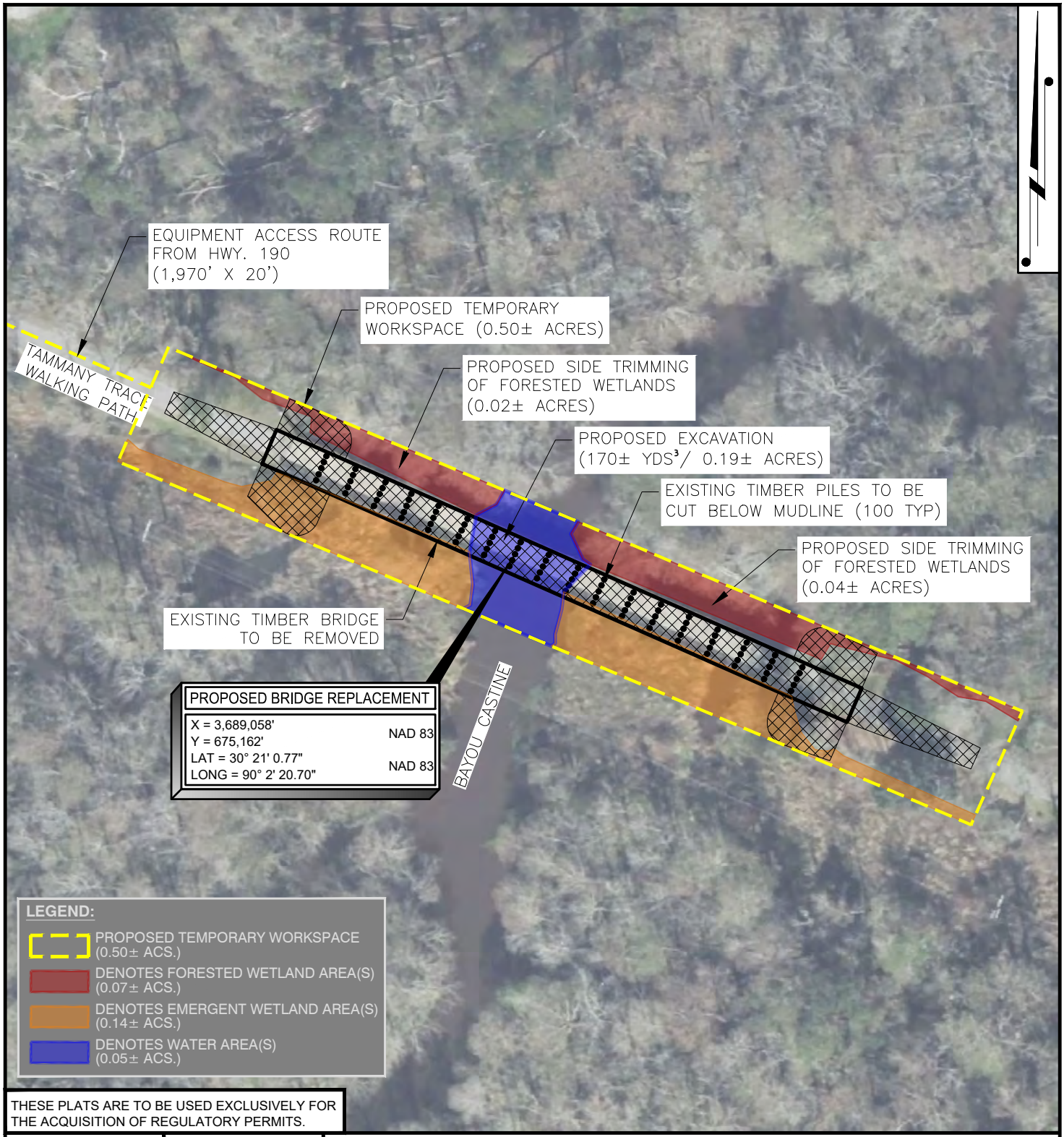
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
00	--/--/--	---

REVISION DESCRIPTION:
--

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_ACCESS.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH
DATE: 10/23/2025	JOB NO: 2025.0756
DRAWING NAME: 2025.0756P- B13_PLAN.DWG	
SHEET NO: 3 OF 8	
PROJECTION: LOUISIANA SOUTH ZONE GEO. DATUM: NAD83 | VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

SCALE: 1" = 60'

60' 30' 0' 60'

BRIDGE REMOVAL - PLAN VIEW

ST. TAMMANY PARISH GOVERNMENT

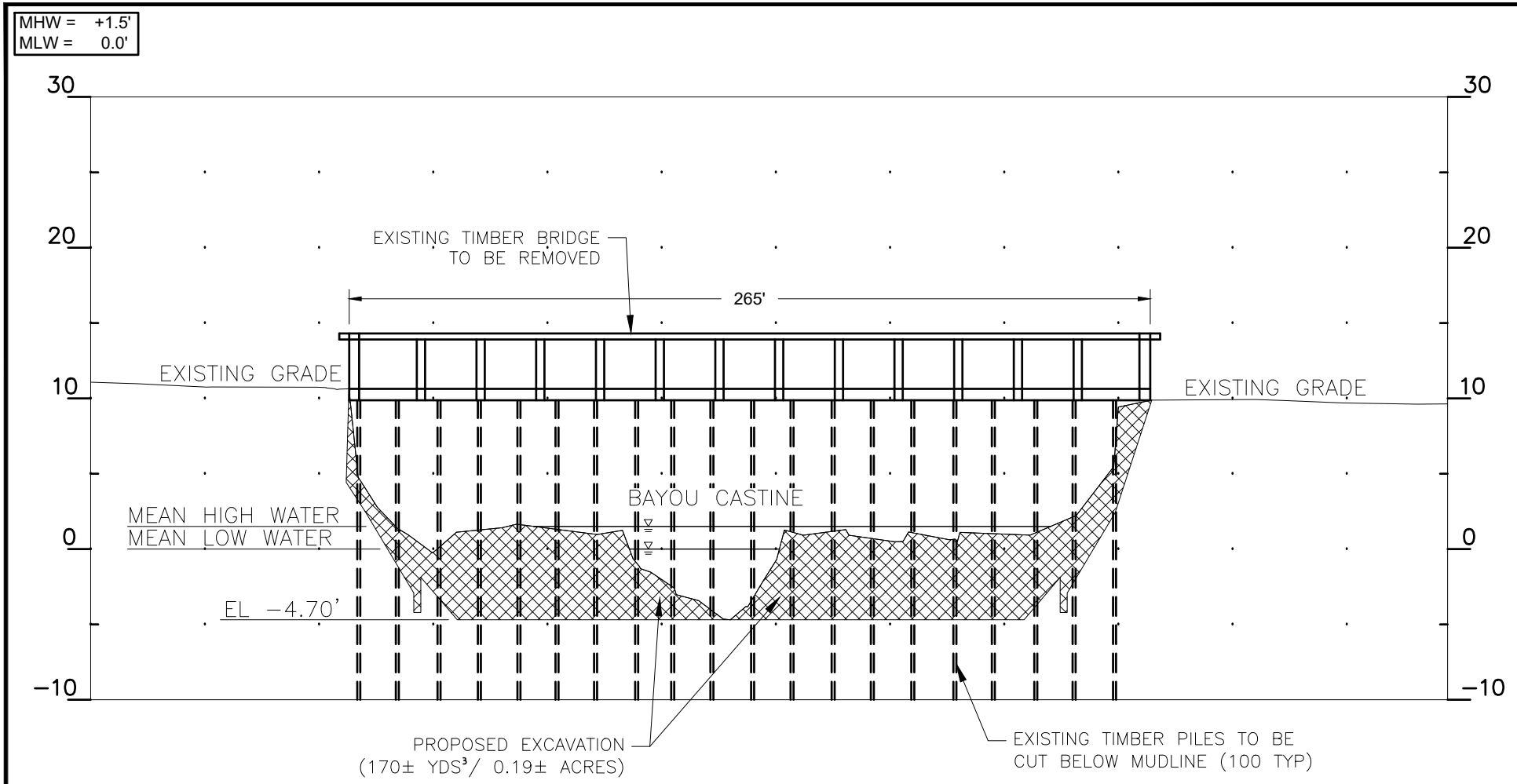
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



BRIDGE REMOVAL PROFILE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

HORIZONTAL SCALE: 1" = 50'
50' 25' 0' 50'
VERTICAL SCALE: 1" = 20'
10' 5' 0' 10'

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	4	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

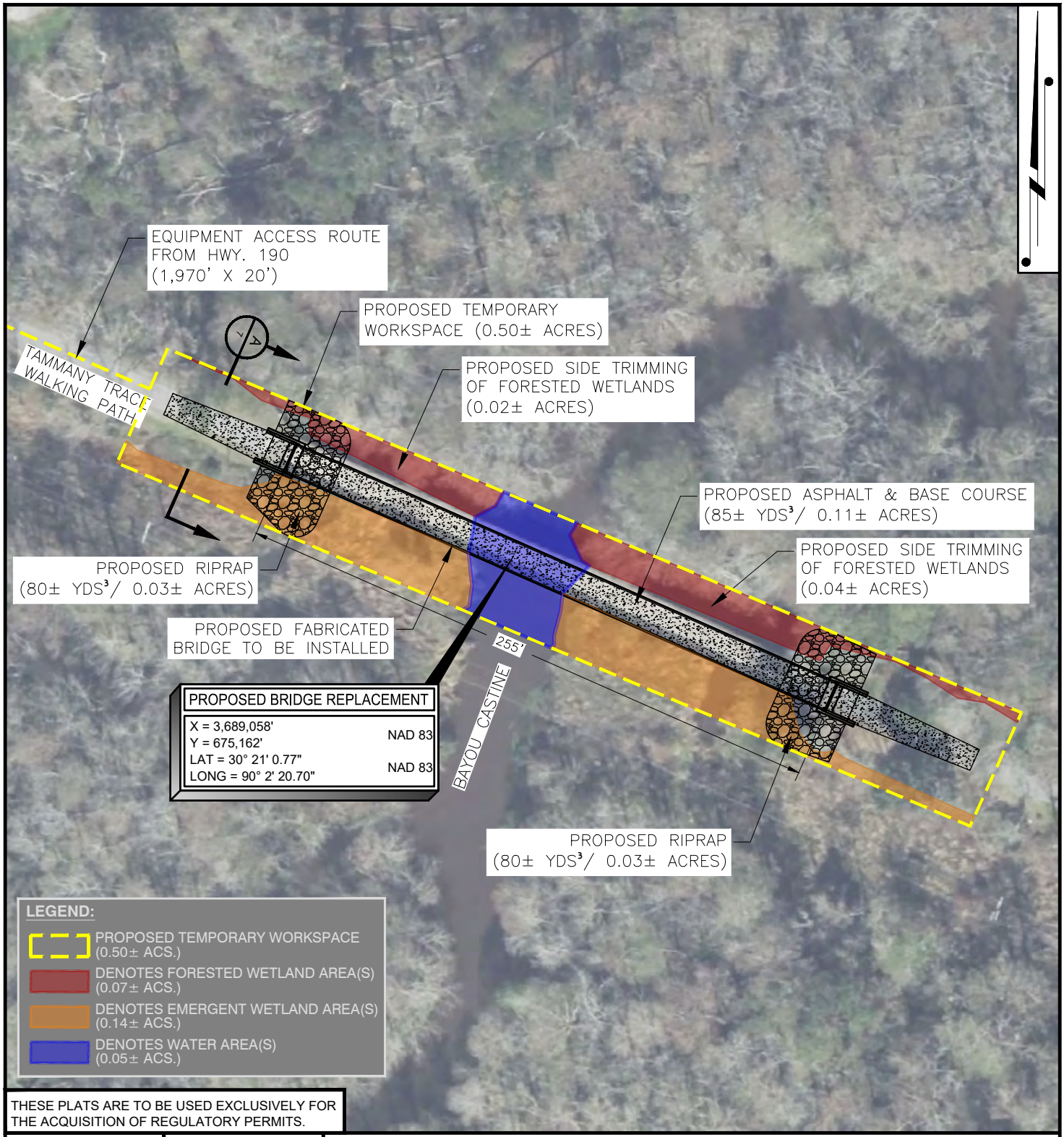
REV. NO:	REV. DATE:	REV. BY:	REVISION DESCRIPTION:
01	10/29/2025	SPM	UPDATED EXCAVATION AREA.

BRIDGE REMOVAL - PROFILE VIEW

ST. TAMMANY PARISH GOVERNMENT

TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH
DATE: 10/23/2025	JOB NO: 2025.0756
DRAWING NAME: 2025.0756P- B13_PLAN.DWG	
SHEET NO: 5 OF 8	
PROJECTION: LOUISIANA SOUTH ZONE GEO. DATUM: NAD83 | VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

SCALE: 1" = 60'

60' 30' 0' 60'

BRIDGE INSTALLATION - PLAN VIEW

ST. TAMMANY PARISH GOVERNMENT

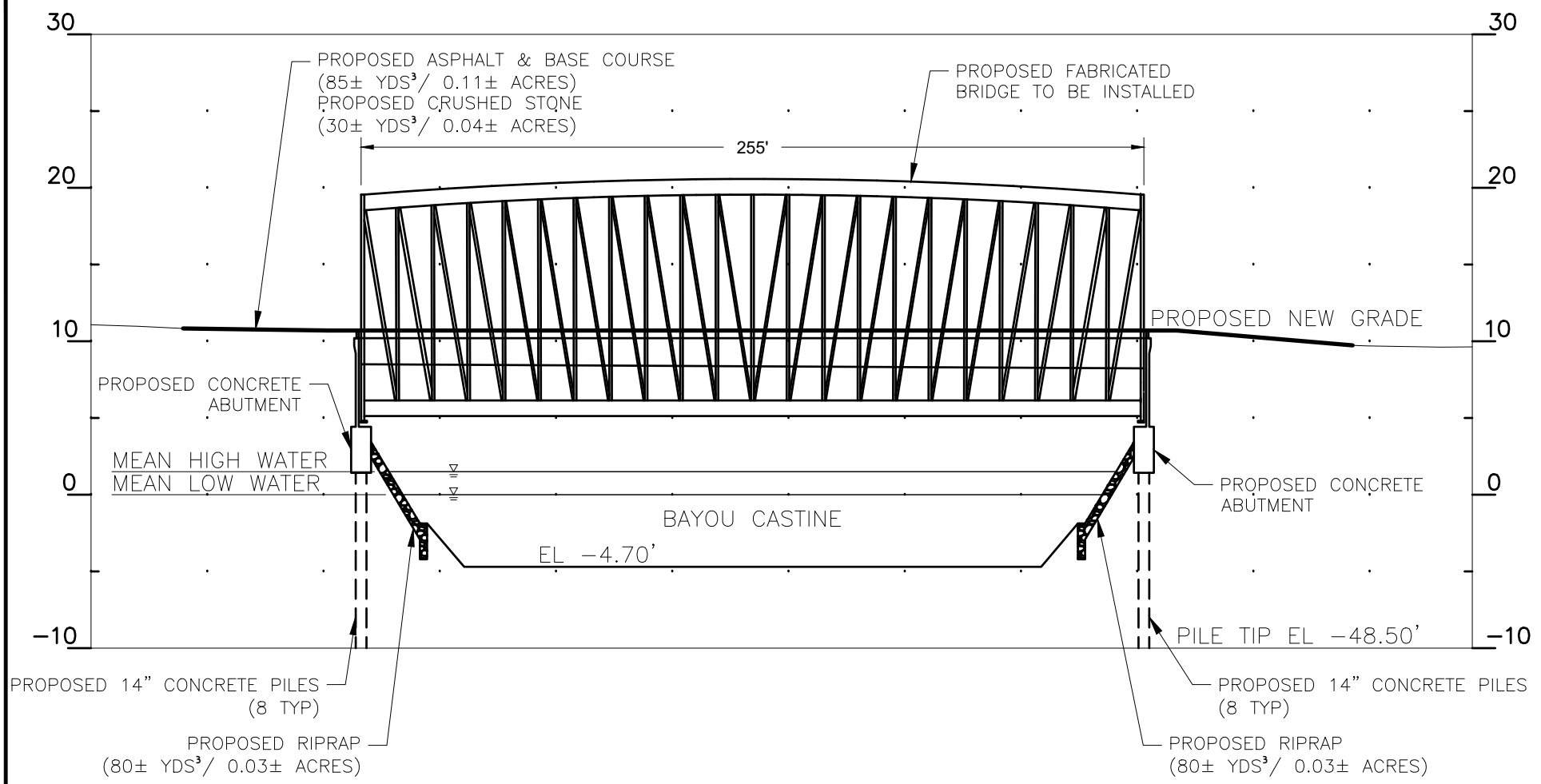
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



NOTE: CRUSHED STONE TO BE USED ON WALKING PATH ONLY & NOT ON BRIDGE STRUCTURE.

PROPOSED BRIDGE PROFILE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

HORIZONTAL SCALE: 1" = 50'
50' 25' 0' 50'
VERTICAL SCALE: 1" = 20'
10' 5' 0' 10'

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	6	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

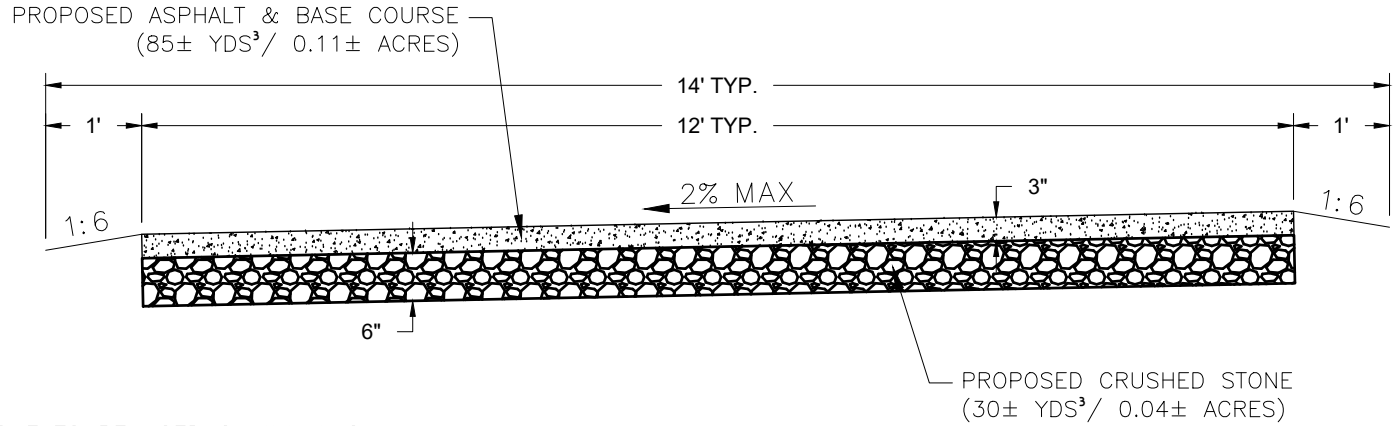
REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

BRIDGE INSTALLATION - PROFILE VIEW

ST. TAMMANY PARISH GOVERNMENT

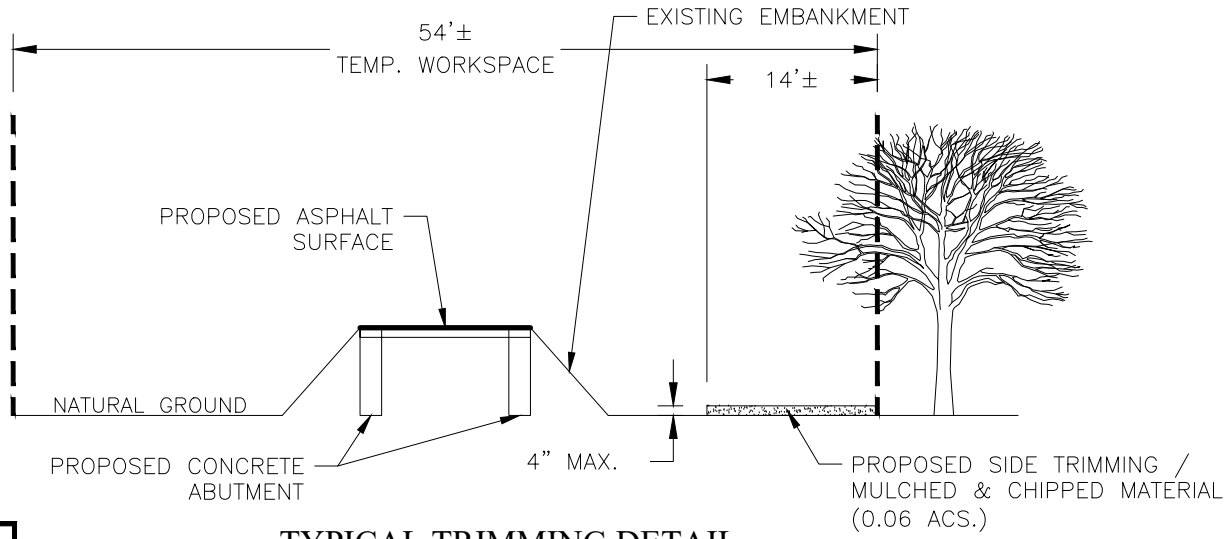
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



NOTE: CRUSHED STONE TO BE USED ON WALKING PATH ONLY & NOT ON BRIDGE STRUCTURE.

SECTION A - TYPICAL WALKING PATH



TYPICAL TRIMMING DETAIL

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

NOT TO SCALE

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	7	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:	REVISION DESCRIPTION:
02	11/06/2025	SPM	ADDED TRIMMING DETAIL.

TYPICAL SECTIONS

ST. TAMMANY PARISH GOVERNMENT

TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG

NOTES:

AS-BUILT DRAWINGS AND/OR PLATS SHALL HAVE WRITTEN ON THEM THE DATE OF COMPLETION OF SAID ACTIVITIES AND SHALL BE SUBMITTED TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, OFFICE OF COASTAL MANAGEMENT, P.O. BOX 44487, BATON ROUGE, LA 70804-4487 WITHIN 30 DAYS FOLLOWING PROJECT COMPLETION.

ALL STRUCTURES BUILT UNDER THE AUTHORIZATION AND CONDITIONS OF THIS PERMIT SHALL BE REMOVED FROM THE SITE WITHIN 120 DAYS OF ABANDONMENT OF THE FACILITIES FOR THE HEREIN PERMITTED USE, OR WHEN THESE STRUCTURES FALL INTO A STATE OF DISREPAIR SUCH THAT THEY CAN NO LONGER FUNCTION AS INTENDED. THIS CONDITION DOES NOT PRECLUDE THE NECESSITY FOR REVISING THE CURRENT PERMIT OR OBTAINING A SEPARATE COASTAL USE PERMIT, SHOULD ONE BE REQUIRED, FOR SUCH REMOVAL ACTIVITIES.

STRUCTURES MUST ALSO BE MARKED/LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

IN ORDER TO ENSURE THE SAFETY OF ALL PARTIES, THE PERMITEE SHALL CONTACT THE LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY.

LIMITED SURVEY DATA WAS COLLECTED IN THE PREPARATION OF THESE PLANS. INFORMATION USED TO PREPARE THESE PLANS WAS GATHERED FROM THE FOLLOWING SOURCES, EXISTING SURVEY/DATABASE DATA, CLIENT INFORMATION, INTERNET OR GOVERNMENT WEB SITE DATA.

EXCAVATED MATERIAL TO BE HAULED OFF TO A NON-WETLAND LOCATION FOR DISPOSAL.

APPROXIMATELY 0.01± ACS. OF FORESTED WETLANDS WILL BE FILLED AS A RESULT OF THIS PROJECT.

ANY TREES MULCHED/CHIPPED IN WETLANDS WILL BE SPREAD IN THIN LAYERS NOT TO EXCEED 4 INCHES ON SITE IN A MANNER TO MINIMIZE IMPACTS TO WETLANDS.

TOTAL IMPACTS

EXCAVATIONS

NON-VEGETATED	15 CU. YDS.
WATER BOTTOMS:	0.02 ACS.
WETLANDS:	35 CU. YDS.
	0.04 ACS.
NON-WETLANDS:	120 CU. YDS.
	0.13 ACS.

FILL AREAS

NON-VEGETATED	0 CU. YDS.
WATER BOTTOMS:	0.00 ACS.
WETLANDS:	80 CU. YDS.
	0.03 ACS.
NON-WETLANDS:	295 CU. YDS.
	0.14 ACS.

FILL MATERIALS

CONCRETE MATERIAL:	100 CU. YDS.
RIPRAP MATERIAL:	160 CU. YDS.
CRUSHED STONE MATERIAL:	30 CU. YDS.
ASPHALT MATERIAL:	85 CU. YDS.

EQUIPMENT

EARTH MOVERS(S) - 18"± Track

EXCAVATOR(S) - 18"± Track

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH
DATE: 10/29/2025	JOB NO: 2025.0756
DRAWING NAME: 2025.0756P- B13_PLAN.DWG	
SHEET NO: 8 OF 8	

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

NOTES

ST. TAMMANY PARISH GOVERNMENT

TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118-3651

January 22, 2026

Regulatory Division
Eastern Evaluation Branch

SUBJECT: MVN-2025-00965-ENP

St. Tammany Parish Government
c/o T. Baker Smith, LLC
Attn: Michael Trahan
P.O. Box 2266
Houma, Louisiana 70361

Mr. Trahan,

The proposed work, to remove and replace the existing Tammany Trace Bike Trail pedestrian bridge 13 as shown on the enclosed drawings, is authorized under **Category I** of the **Programmatic General Permit**, provided that all conditions of the permit are met.

The following special condition is hereby added to this authorization:

1. If abandoned cemeteries, unmarked graves, or human remains are discovered during the permitted activity, the permittee will stop work immediately and comply with the Louisiana Unmarked Human Burial Sites Preservation Act (La. R.S. 8:671 et seq.). The permittee will notify local law enforcement, U.S. Army Corps of Engineers New Orleans District Regulatory Division (CEMVN-RG), and the Louisiana Division of Archaeology (LDOA), within the Louisiana Department of Culture, Recreation and Tourism, Office of Cultural Development, by telephone at 225-342-8170 to assess the nature and age of the human skeletal remains within twenty-four (24) hours of the discovery of unmarked human remains and will accompany local law enforcement personnel during all field investigations. If the appropriate local law enforcement official determines that the remains are not a crime scene, and the remains are more than 50 years old, LDOA has jurisdiction over the remains. In no instance will human remains be removed from the discovery site until jurisdiction is established. In cases where the LDOA assumes jurisdiction and the remains are determined to be American Indian, LDOA will consult with Tribes, CEMVN-RG, and the permittee to determine the appropriate course of action.

2. Permittees that discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the permitted activity must immediately notify CEMVN-RG, halt all construction activity at the location of discovery, and avoid construction activities within a fifty (50) foot buffer zone of the location of discovery until the required coordination has been completed. CEMVN-RG will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

3. Permittee must comply with the enclosed: “Standard Manatee Conditions for In-Water Activities”.

This authorization has a blanket water quality certification from the Louisiana Department of Environmental Quality; therefore, no additional authorization from DEQ is required.

However, prior to commencing work on your project, you must obtain approvals from state and local agencies as required by law and by terms of this permit. These approvals include, but are not limited to, a permit, consistency determination or determination of “no direct or significant impact (NDSI) on coastal waters” from the Louisiana Department of Natural Resources, Office of Coastal Management.

This approval to perform work is valid for 5 years from the date of this letter.

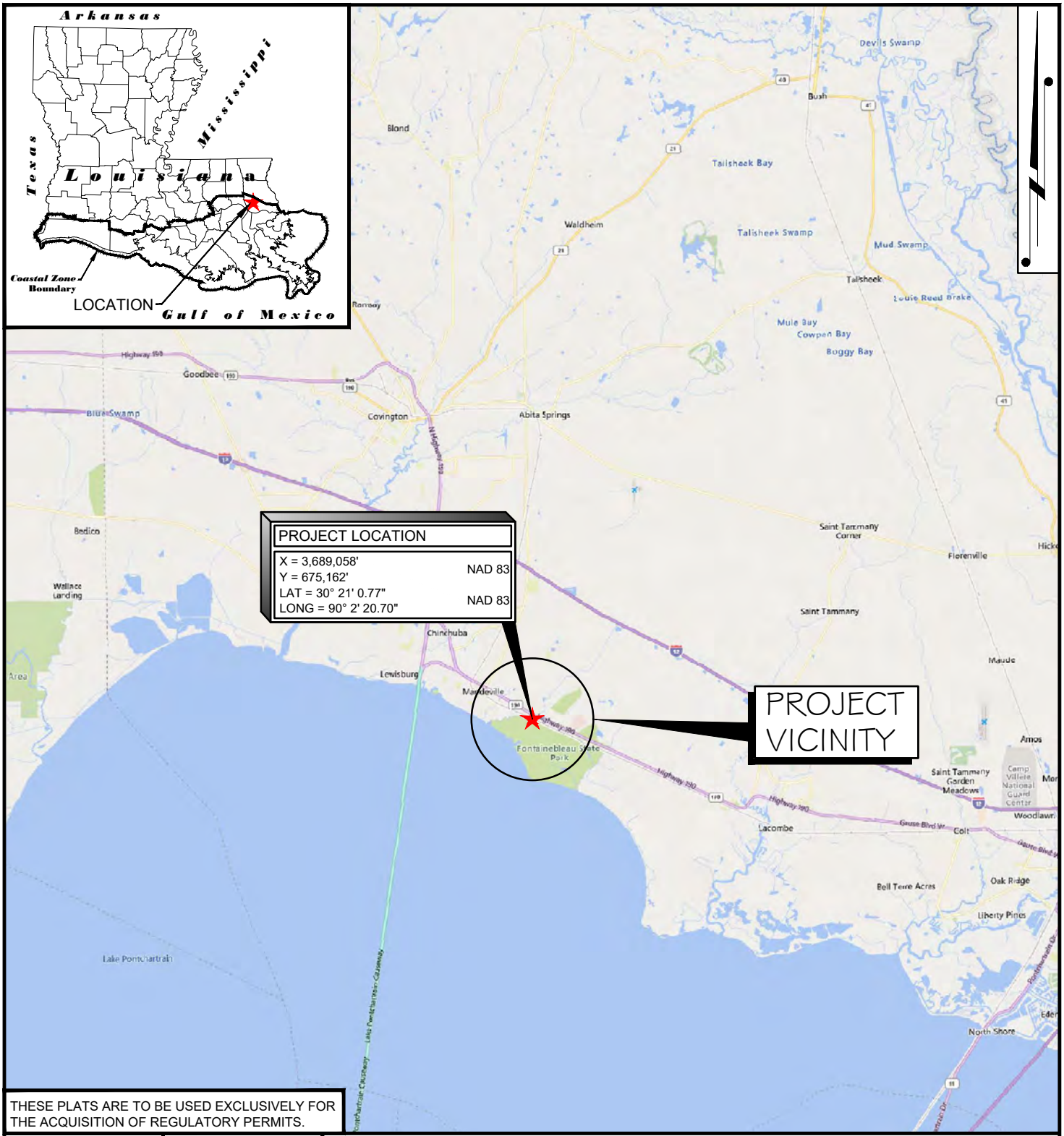
Permittee is aware that this office may reevaluate its decision on this permit at any time the circumstances warrant.

Should you have any further questions concerning this matter, please contact Natalie Page at natalie.r.page@usace.army.mil or at (504) 862-2045.

Sincerely,

For:
Brad A. Guarisco
Chief, Regulatory Division

Enclosures



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_VICINITY.DWG		
SHEET NO:	1	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

SCALE: 1" = 4 MILES

4 MI 2 MI 0' 4 MI

VICINITY MAP

ST. TAMMANY PARISH GOVERNMENT

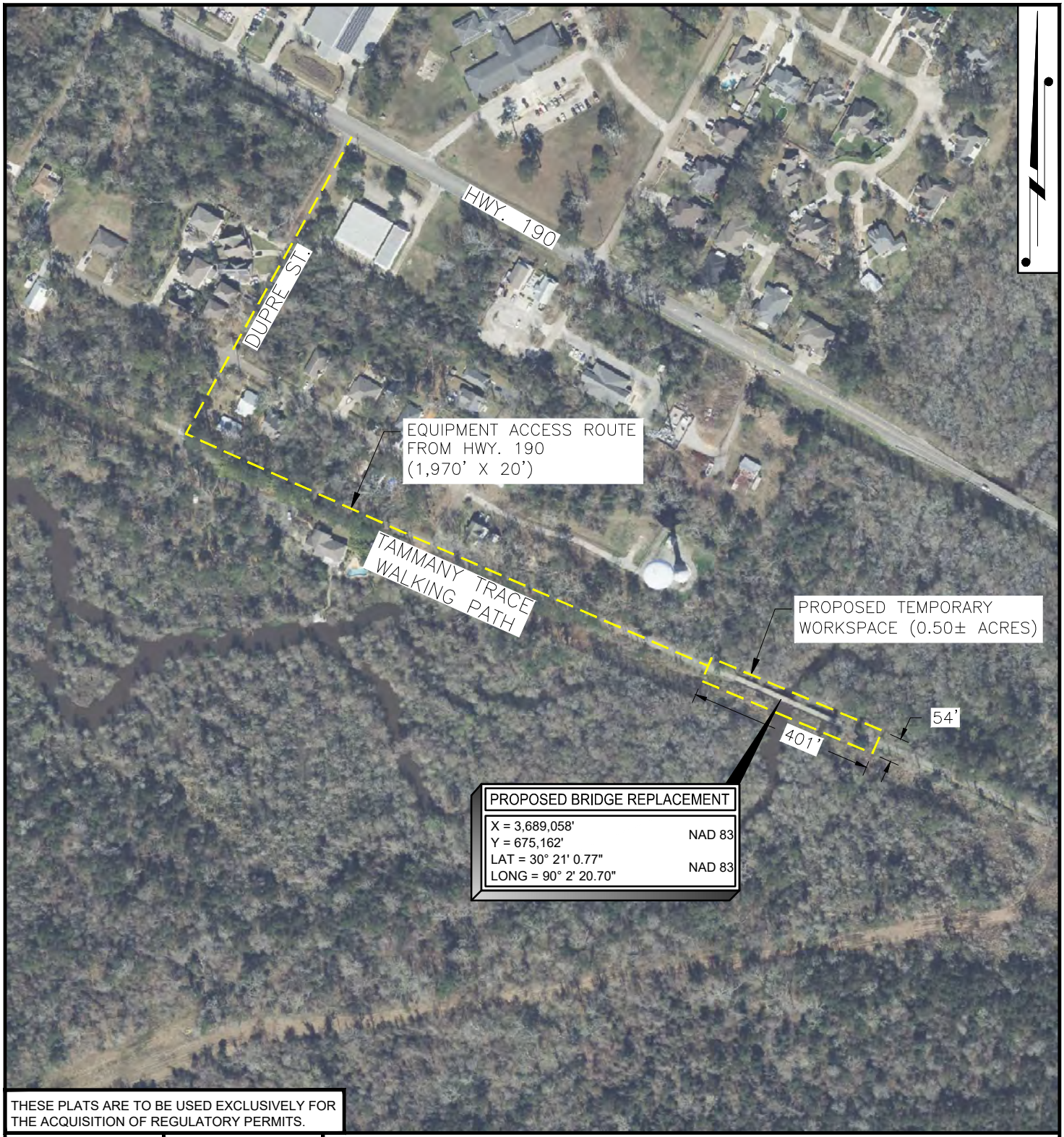
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
00	--/--/--	---

REVISION DESCRIPTION:
--

10/24/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_VICINITY.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_ACCESS.DWG		
SHEET NO:	2	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

SCALE: 1" = 300'

300' 150' 0' 300'

ACCESS VIEW

ST. TAMMANY PARISH GOVERNMENT

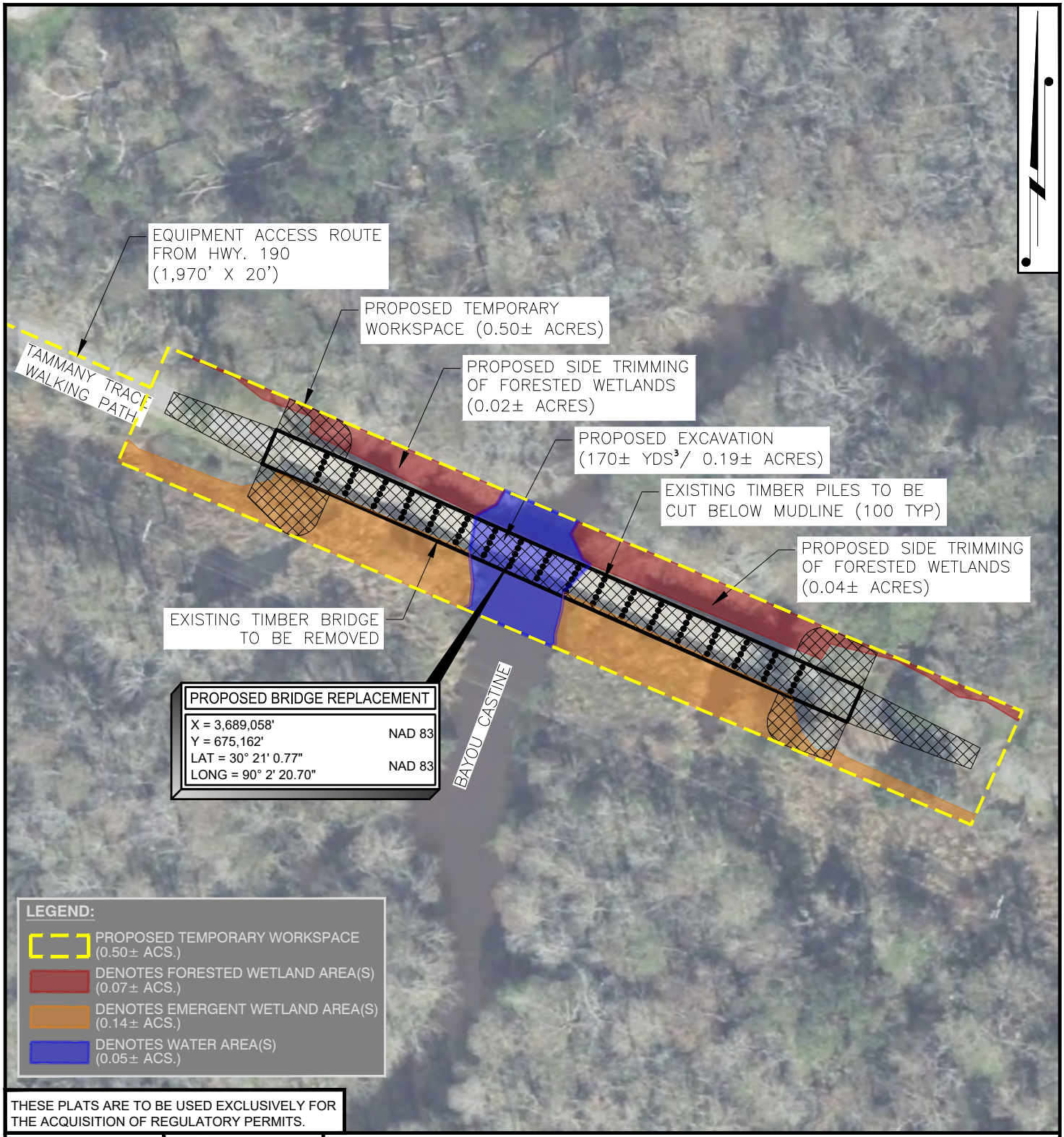
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
00	--/--/--	---

REVISION DESCRIPTION:
--

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_ACCESS.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH
DATE: 10/23/2025	JOB NO: 2025.0756
DRAWING NAME: 2025.0756P- B13_PLAN.DWG	
SHEET NO: 3 OF 8	
PROJECTION: LOUISIANA SOUTH ZONE GEO. DATUM: NAD83 | VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

SCALE: 1" = 60'

60' 30' 0' 60'

BRIDGE REMOVAL - PLAN VIEW

ST. TAMMANY PARISH GOVERNMENT

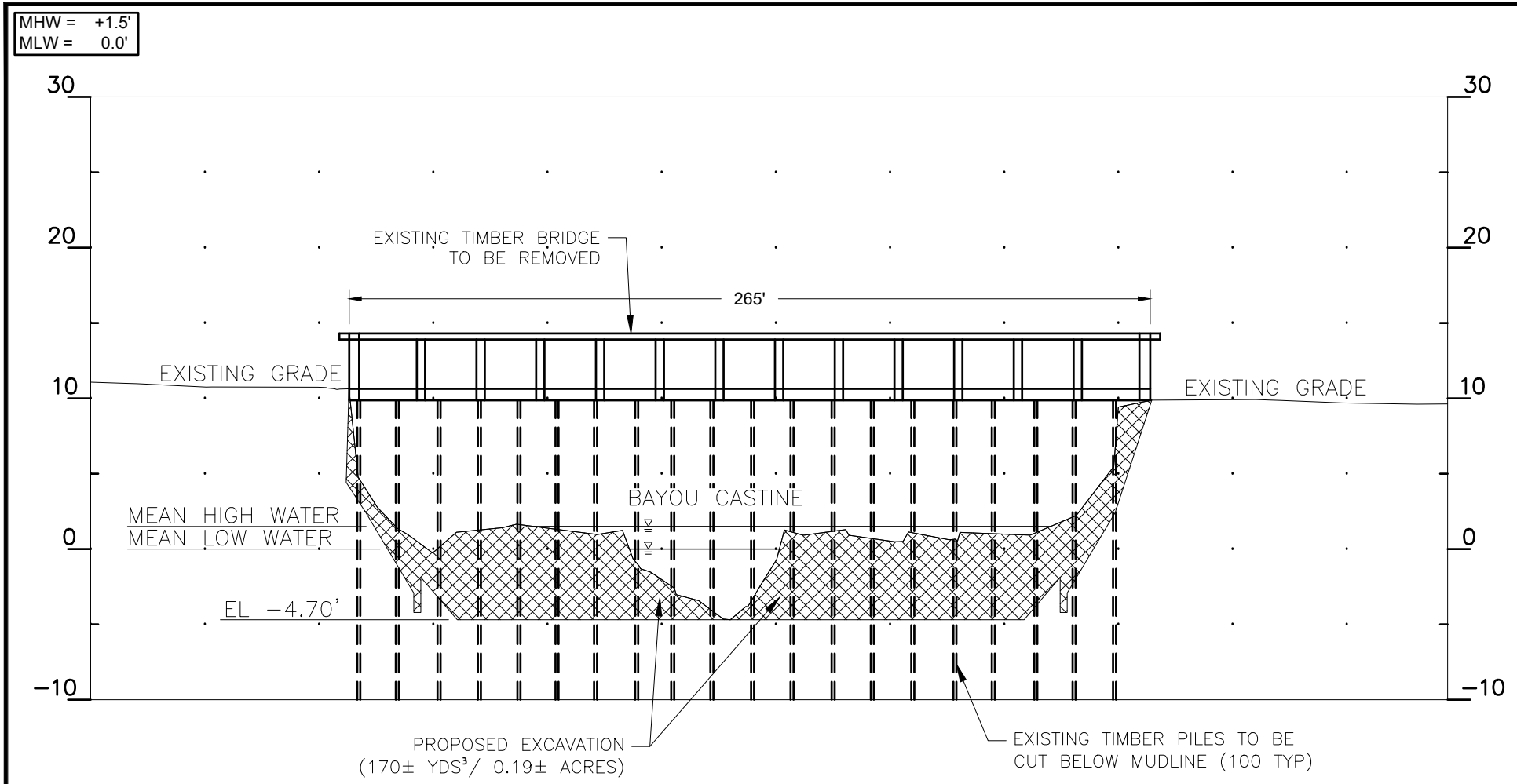
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



BRIDGE REMOVAL PROFILE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

HORIZONTAL SCALE: 1" = 50'
50' 25' 0' 50'
VERTICAL SCALE: 1" = 20'
10' 5' 0' 10'

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	4	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

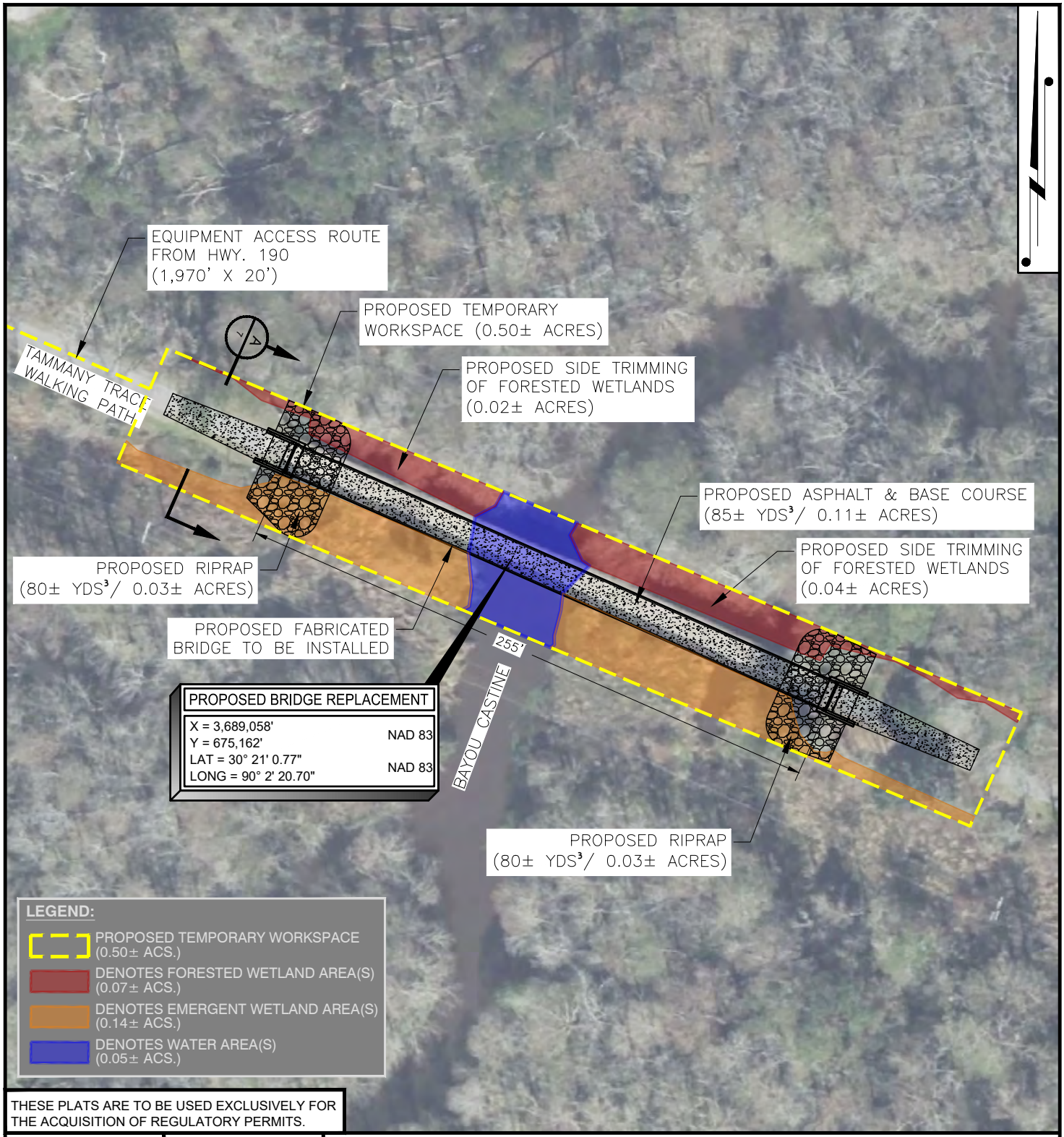
REV. NO:	REV. DATE:	REV. BY:	REVISION DESCRIPTION:
01	10/29/2025	SPM	UPDATED EXCAVATION AREA.

BRIDGE REMOVAL - PROFILE VIEW

ST. TAMMANY PARISH GOVERNMENT

TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH
DATE: 10/23/2025	JOB NO: 2025.0756
DRAWING NAME: 2025.0756P- B13_PLAN.DWG	
SHEET NO: 5 OF 8	
PROJECTION: LOUISIANA SOUTH ZONE GEO. DATUM: NAD83 | VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

SCALE: 1" = 60'

60' 30' 0' 60'

BRIDGE INSTALLATION - PLAN VIEW

ST. TAMMANY PARISH GOVERNMENT

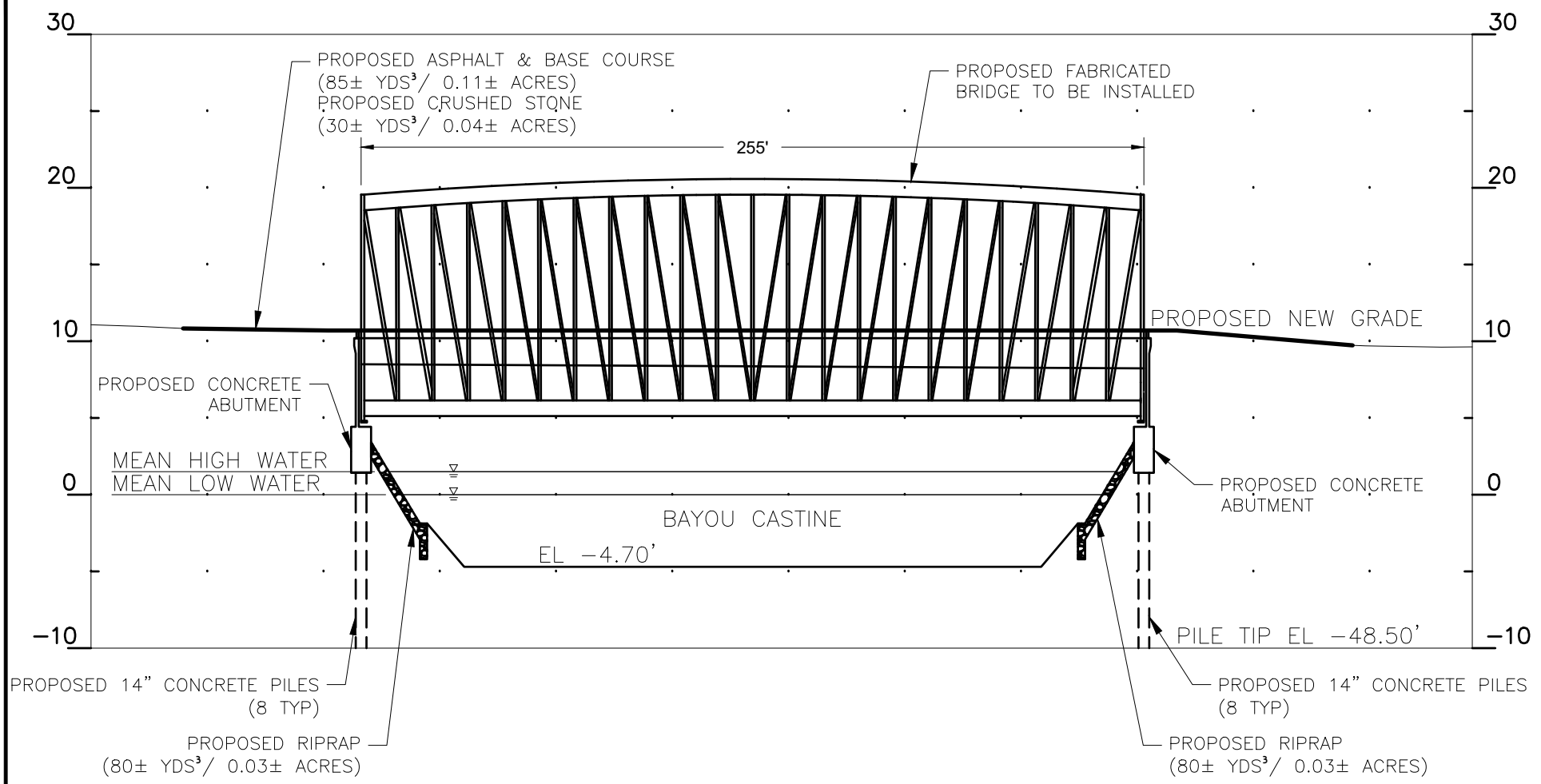
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



NOTE: CRUSHED STONE TO BE USED ON WALKING PATH ONLY & NOT ON BRIDGE STRUCTURE.

PROPOSED BRIDGE PROFILE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

HORIZONTAL SCALE: 1" = 50'
50' 25' 0' 50'
VERTICAL SCALE: 1" = 20'
10' 5' 0' 10'

T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	6	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

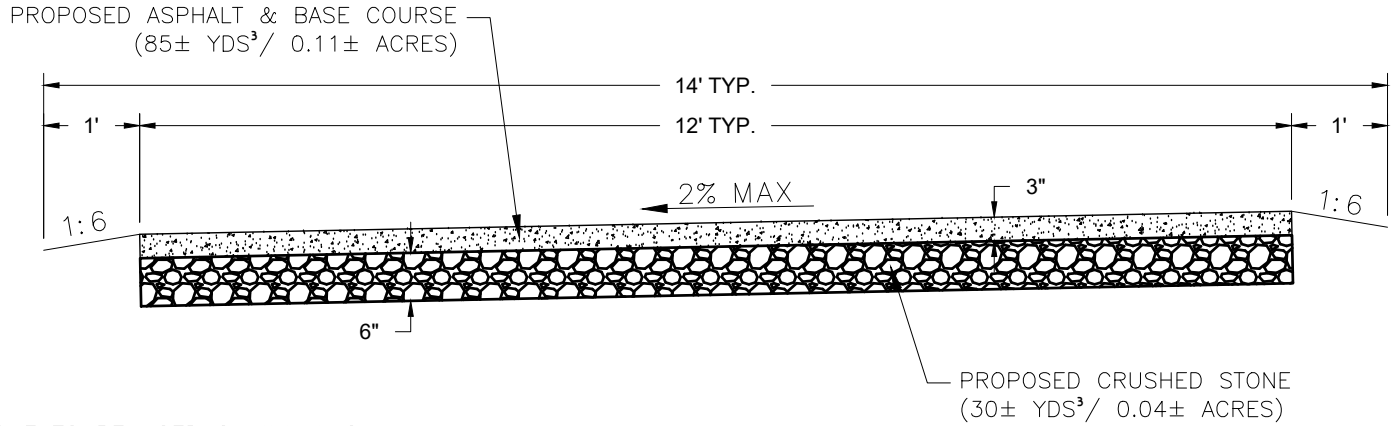
REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

BRIDGE INSTALLATION - PROFILE VIEW

ST. TAMMANY PARISH GOVERNMENT

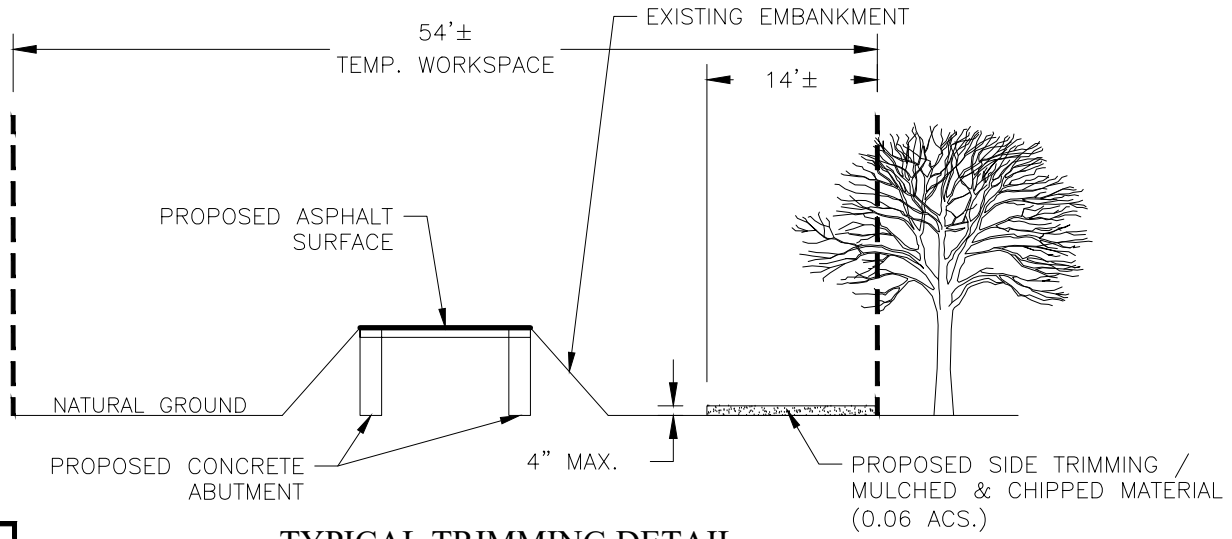
TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG



NOTE: CRUSHED STONE TO BE USED ON WALKING PATH ONLY & NOT ON BRIDGE STRUCTURE.

SECTION A - TYPICAL WALKING PATH



TYPICAL TRIMMING DETAIL

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

NOT TO SCALE

DRAWN BY:	SPM	APPROVED BY:	VCH
DATE:	10/23/2025	JOB NO:	2025.0756
DRAWING NAME:	2025.0756P- B13_PLAN.DWG		
SHEET NO:	7	OF	8

PROJECTION: LOUISIANA SOUTH ZONE
GEO. DATUM: NAD83 | VERT. DATUM: NAVD88
GRID UNITS: US SURVEY FEET

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:	REVISION DESCRIPTION:
02	11/06/2025	SPM	ADDED TRIMMING DETAIL.

TYPICAL SECTIONS

ST. TAMMANY PARISH GOVERNMENT

TAMMANY TRACE BRIDGES GROUP 2
BRIDGE #13 REPLACEMENT
LOCATED IN SECTION 46 & 47, T08S - R12E
ST. TAMMANY PARISH, LOUISIANA

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG

NOTES:

AS-BUILT DRAWINGS AND/OR PLATS SHALL HAVE WRITTEN ON THEM THE DATE OF COMPLETION OF SAID ACTIVITIES AND SHALL BE SUBMITTED TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, OFFICE OF COASTAL MANAGEMENT, P.O. BOX 44487, BATON ROUGE, LA 70804-4487 WITHIN 30 DAYS FOLLOWING PROJECT COMPLETION.

ALL STRUCTURES BUILT UNDER THE AUTHORIZATION AND CONDITIONS OF THIS PERMIT SHALL BE REMOVED FROM THE SITE WITHIN 120 DAYS OF ABANDONMENT OF THE FACILITIES FOR THE HEREIN PERMITTED USE, OR WHEN THESE STRUCTURES FALL INTO A STATE OF DISREPAIR SUCH THAT THEY CAN NO LONGER FUNCTION AS INTENDED. THIS CONDITION DOES NOT PRECLUDE THE NECESSITY FOR REVISING THE CURRENT PERMIT OR OBTAINING A SEPARATE COASTAL USE PERMIT, SHOULD ONE BE REQUIRED, FOR SUCH REMOVAL ACTIVITIES.

STRUCTURES MUST ALSO BE MARKED/LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

IN ORDER TO ENSURE THE SAFETY OF ALL PARTIES, THE PERMITEE SHALL CONTACT THE LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY.

LIMITED SURVEY DATA WAS COLLECTED IN THE PREPARATION OF THESE PLANS. INFORMATION USED TO PREPARE THESE PLANS WAS GATHERED FROM THE FOLLOWING SOURCES, EXISTING SURVEY/DATABASE DATA, CLIENT INFORMATION, INTERNET OR GOVERNMENT WEB SITE DATA.

EXCAVATED MATERIAL TO BE HAULED OFF TO A NON-WETLAND LOCATION FOR DISPOSAL.

APPROXIMATELY 0.01± ACS. OF FORESTED WETLANDS WILL BE FILLED AS A RESULT OF THIS PROJECT.

ANY TREES MULCHED/CHIPPED IN WETLANDS WILL BE SPREAD IN THIN LAYERS NOT TO EXCEED 4 INCHES ON SITE IN A MANNER TO MINIMIZE IMPACTS TO WETLANDS.

TOTAL IMPACTS

EXCAVATIONS

NON-VEGETATED	15 CU. YDS.
WATER BOTTOMS:	0.02 ACS.
WETLANDS:	35 CU. YDS.
	0.04 ACS.
NON-WETLANDS:	120 CU. YDS.
	0.13 ACS.

FILL AREAS

NON-VEGETATED	0 CU. YDS.
WATER BOTTOMS:	0.00 ACS.
WETLANDS:	80 CU. YDS.
	0.03 ACS.
NON-WETLANDS:	295 CU. YDS.
	0.14 ACS.

FILL MATERIALS

CONCRETE MATERIAL:	100 CU. YDS.
RIPRAP MATERIAL:	160 CU. YDS.
CRUSHED STONE MATERIAL:	30 CU. YDS.
ASPHALT MATERIAL:	85 CU. YDS.

EQUIPMENT

EARTH MOVERS(S) - 18"± Track

EXCAVATOR(S) - 18"± Track

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPM	APPROVED BY: VCH	NOTES
DATE: 10/29/2025	JOB NO: 2025.0756	ST. TAMMANY PARISH GOVERNMENT
DRAWING NAME: 2025.0756P- B13_PLAN.DWG		TAMMANY TRACE BRIDGES GROUP 2 BRIDGE #13 REPLACEMENT LOCATED IN SECTION 46 & 47, T08S - R12E ST. TAMMANY PARISH, LOUISIANA
SHEET NO: 8 OF 8		
PROJECTION: LOUISIANA SOUTH ZONE GEO. DATUM: NAD83 | VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET		

TBS T. BAKER SMITH
412 South Van Avenue
Houma, LA 70363
(985)868-1050 - tbsmith.com

REV. NO:	REV. DATE:	REV. BY:
01	10/29/2025	SPM

REVISION DESCRIPTION:
UPDATED EXCAVATION AREA.

11/6/2025 - P:\Y-2025\2025.0756\ENVIRONMENTAL\DRAWINGS\PERMIT - BRIDGE 13\2025.0756P- B13_PLAN.DWG

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LA 70118-365

June 1, 2022

CEMVN
Regulatory Division

SUBJECT: Programmatic General Permit

A PROGRAMMATIC GENERAL PERMIT FOR USE IN THE NEW ORLEANS DISTRICT WITHIN THE BOUNDARIES OF THE LOUISIANA COASTAL ZONE

Under authorization granted by applicable sections of Parts 320 through 332 of Title 33, Code of Federal Regulations, and delegated authority from the Commander, US Army Corps of Engineers, the District Commander at New Orleans has determined that it is in the public interest to extend the programmatic general permit (**PGP**) to authorize those activities that result in minimal adverse impacts within the boundaries of the Louisiana Coastal Zone, as specified by the terms and conditions of this PGP.

Specific Legislation requiring Department of the Army permits for work of this nature:

Section 10 of the Rivers and Harbors Act of 3 March 1899 (33 USC 403).

Section 404 of the Clean Water Act (33 USC 1344).

Waters of the United States are defined in Part 328 of Title 33, Code of Federal Regulations.

Special aquatic sites means wetlands, mudflats, vegetated shallows, coral reefs, sanctuaries and refuges, and riffle and pool complexes, as defined at 40 CFR 230.40 through 230.45.

This PGP does not authorize dams in navigable waters of the United States pursuant to Section 9 of the Rivers and Harbors Act of 3 March 1899 (33 USC 401) or transportation of dredged material for ocean disposal pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act (33 USC 1413).

GENERAL EXCLUSIONS

I. The following work will not be eligible under this PGP. Applications for this work will be processed in accordance with 33 CFR Part 325:

(1) Work outside the boundaries of the Louisiana Coastal Zone.

(2) Activities which are not covered under the Louisiana Coastal Resources Program as implemented by the Louisiana Department of Natural Resources, Office of Coastal Management (LDNR, OCM).

(3) No activity is authorized under this PGP which may adversely affect the continued existence, or which will destroy or adversely modify the critical habitat, of a threatened or endangered species, or a species proposed for such a designation, as identified under the Federal Endangered Species Act.

(4) Work or structures within 1,500 feet of any mainline flood control and hurricane damage risk reduction levees, structures, etc. constructed and/or maintained with federal funds without prior coordination with, and the concurrence from, CEMVN. Work that might alter US Army Corps of Engineers Civil Works projects will not qualify for this general permit until Permission pursuant to 33 USC 408 is granted by the District Commander.

(5) Structures or work in or that would impinge upon the value (habitat, hydrology, etc.) of any National Wildlife Refuge, National Forest, areas administered by the National Park Service of the US Department of the Interior, areas administered by the Louisiana Departments of Natural Resources or Wildlife and Fisheries, or other similar publicly held areas administered by federal, state, or local governmental authority unless special permission from these agencies is submitted during the review of, or with, the application for this general permit.

(6) Projects of national or individual concern. This exclusion is invoked on a case-by-case basis and represents, a special class of projects that receive particular attention in Corps decisions on whether to exercise the discretionary authority to require individual applications for work that otherwise meets all of this permit's conditions. While a precise definition is not possible, this category of work normally includes, but is not limited to, the following examples: projects that could cause an unreasonable interference with navigation; significant wetland fills; major power plants, shipping facilities and oil refineries; major commercial, residential or industrial developments; and work that could adversely affect habitats important to migratory birds, endangered or threatened species, estuarine-dependent fishes and shellfishes, or other species of high federal interest; or historic, cultural or archaeological sites listed in the National Register of Historic Places or sites listed in the National Registry of Natural Landmarks; or specific activities for which agencies request, and provide justification for, the requirement of an individual permit review.

(7) The PGP does not authorize dredging or the deposition of dredged and/or fill material for construction of oilfield access roads, drilling locations, pits, ring levees, and associated facilities in jurisdictional waters of the U.S. including wetlands, within the Atchafalaya Basin (as defined by USGS Hydrologic Unit Code: 08080101).

II. The following activities will likely be <u>excluded</u> for consideration under this PGP:

a. Work within 1 mile of offshore navigation fairways and anchorages
b. Commercial sand dredging in the Mississippi River

c. Barge fleeting
d. Mid-stream transfer facilities in the Mississippi River
e. Channel ward extensions of existing facilities in federally maintained waterways
f. Waterway closures (excluding plugs in abandoned canals)
g. New marsh management
h. New water control structures (except open culverts sized and set to maintain natural flow)
i. Contaminated sediment excavation and/or disposal, including but not limited to such activities proposed in Harvey Canal and Calcasieu River
j. Activities that would adversely impact environmentally sensitive areas (e.g., barrier islands, bird rookeries, coral reefs, seagrass beds, etc.)
k. Activities adversely affecting Coastal Wetlands Planning, Protection and Restoration Act (PL 646) projects
l. Projects which would impact the hydrology of adjacent wetlands such that the acreage criteria established in this permit are exceeded

INCLUSIONS

Category I Activities

What follows is a listing of activities which fall under Category I. The format of this general permit has been designed so that all similar activities have been grouped together where the purpose and the nature of that impact is similar. These activities are further limited, **unless otherwise noted**, by the acreage being impacted. CEMVN will verify qualification of specific activities for Category I authorization. The procedures for properly applying for and obtaining approval are found in the section of this document entitled 'Reporting/Acknowledgment Procedures'.

For the purposes of this permit, the acreage limitations established include the area flooded, drained, filled, or excavated, unless otherwise indicated. For activities to comply with Category I, they cannot cause the loss of greater than 0.5 of an acre of special aquatic sites.

1. Oil and gas activities including shell pads for drilling activities, exploration and production structures or extensions thereof, new channels or slips less than 0.5 of a mile in length in open water, and other related activities.

2. Survey activities not including 3D seismic activities.

3. Flowlines/pipelines 25,000 linear feet or less in length. Includes minor activities associated with pipeline abandonment.

4. Hazardous condition response activities. For purposes of this general permit, a hazardous condition is a situation which would result in an imminent safety and/or environmental hazard, loss of property, or immediate economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time period needed to

process the application. Applicants will submit sufficient information to document the hazardous condition and scope of work. This authorization is conditional. Within 30 days of the authorization, permittees will be required to submit an application for any work performed, or needed to be performed, to rectify the hazardous situation. The application will be processed in the appropriate manner. Alternatively, if the structures and/or fill installed to remediate the hazard are no longer necessary, the permittee must submit a site restoration plan for review and authorization by CEMVN. Restoration plans must be implemented within 30 days of receipt of CEMVN concurrence, unless otherwise specified **(acreage limits for the initial request do not apply)**.

5. Dredging of existing waterbodies. Excavation cannot exceed 40,000 cubic yards of material.

6. Maintenance of existing structures and fill provided the structures or fill are not put to uses differing from those uses specified or contemplated for it. The activity must be the repair, rehabilitation or replacement of a currently serviceable structure or fill. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. This does not include maintenance dredging or beach restoration.

7. Miscellaneous structures including mooring buoys and aids to navigation which are approved by and installed in accordance with the requirements of the U.S. Coast Guard.

8. Scientific measuring devices. Devices to measure and record scientific data such as staff gauges, tide gauges, water quality testing, etc.

9. Sealed forms or cells for pile supported structures.

10. Single piles, pile clusters.

11. Trenasse (pirogue ditch) maintenance. The maximum width of the trenasse shall not exceed 6 feet with a maximum depth of 3 feet.

12. Minor road crossings. Placement of fill for a road, including the placement of culverts provided bank full flow is maintained. Includes cattle crossings.

13. Bank stabilization. Activity may not exceed 200 feet in length and greater than 1 cubic yard per linear foot of fill placement below the plane of the ordinary highwater mark or mean high water line whichever applies.

14. Erosion Protection and Restoration along public highways which parallels or is adjacent to waterbody, up to one mile in length provided the work is performed by LA DOTD, parish or municipal highway department. No dredging is authorized (except that material which has sloughed from the embankment), bulkheads must be placed at the existing bank line, and work may include revetment and fill to repair and maintain existing bridge

sites.

15. Wharves, piers, and similar structures, structures in manmade canals, small boat slips, boat ramps, and associated fill and appurtenances. Structures may neither exceed 600 square feet in area, nor extend channel ward more than 10 percent of the waterway bank-to-bank distance, nor cause unreasonable interference to navigation. Boat slips/ramps up to 30 feet by 15 feet in area.

16. Artificial reefs constructed for the purpose of enhancing fishing opportunities.

17. Categorical Exclusions: Activities which are undertaken, funded, authorized, regulated, or financed, in whole or in part, by another federal agency or department where that agency or department has determined, pursuant to the Council on Environmental Quality Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act, that the activity work or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment, and the Office of the Chief of Engineers has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination.

18. Work not specifically excluded which clears, grades, fills or excavates no greater than 0.5 of an acre of special aquatic sites, as deemed applicable by CEMVN.

Category II Activities

What follows is a listing of all of the activities which fall under Category II. The format of this general permit has been designed so that all similar activities have been grouped together where the purpose and the nature of that impact is similar. These activities are further limited, **unless otherwise noted**, by the acreage being impacted. For activities to comply with Category II the impact is limited as follows:

Non-oil and gas related activities may result in the loss of no greater than 2.0 acres of tidal or 3.0 acres of non-tidal, special aquatic sites. Oil and gas related activities may result in the loss of no greater than 3.5 acres tidal or non-tidal special aquatic sites.

1. Oil and gas activities, including board roads, ring levees, exploration and production structures or extensions, new oil and gas canals and slips, parallel/perpendicular slips, etc.

2. Seismic surveys **(acreage limits do apply)**.

3. Any flowlines, pipelines and utility lines up to 50,000 linear feet in length, and all aerial transmission lines. Must utilize the least damaging, practicable route and construction method, otherwise an individual permit will be required. Power transmission lines must

comply with regulations found at 33 CFR Part 322.5(i).

4. Cleanup of hazardous and toxic waste. For toxic and hazardous waste, the activity must be sponsored by a government agency with established legal or regulatory authority or be court ordered **(acreage limits do not apply)**.

5. Oil spill cleanup. Activities will be subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), and work must be done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR part 112.3. Work must also comply with any State Contingency plan and the Regional Response Team must concur with the action **(acreage limits do not apply)**.

6. Dredging of existing waterbodies. Excavation cannot exceed 100,000 cubic yards of material (volume limits do not apply to activities being conducted for the purpose of wetland restoration, and; up to 250,000 cubic yards allowed for removal of silt accumulations around existing docks, barge fleets and mooring areas in the Mississippi River with disposal beyond the minus 55-foot contour).

7. Outfall structures. Provided the effluent is in compliance with regulations issued under the National Pollutant Discharge Elimination System (Section 402 of the Clean Water Act).

8. Wharves, piers, and similar structures, structures in manmade canals, small boat slips, boat ramps, and associated fill and appurtenances. Structures may exceed 600 square feet in area, but may neither extend channel ward more than 20 percent of the waterway bank-to-bank distance, nor cause unreasonable interference to navigation. Boat slips/ramps up to 60 feet by 25 feet in area.

9. Erosion Protection and Restoration along public highways which parallels or is adjacent to waterbody, one mile in length and greater provided the work is performed by the LA DOTD, parish or municipal highway department. No dredging is authorized (except that material which has sloughed from the embankment), bulkheads must be placed at the existing bank line, and work may include revetment to repair and maintain existing bridge sites.

10. Bank stabilization. Activities that are greater than 200 linear feet in length, but do not exceed 500 linear feet, or where fill placement exceeds 1 cubic yard per running foot below the plane of the ordinary highwater mark or mean high water line whichever applies. District Engineer may grant a waiver to this limitation for proposed activities up to 1000 feet if determined to have minimal individual and cumulative adverse environmental effect.

11. Categorical Exclusions. Activities which are undertaken, funded, authorized, regulated, or financed, in whole or in part, by another federal agency or department where that agency or department has determined, pursuant to the Council on Environmental Quality

Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act, that the activity work or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually or cumulatively have a significant effect on the human environment, and the Office of the Chief of Engineers has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination.

12. Small weirs, flumes and similar scientific measuring devices provided aquatic organism movement is minimally impeded.

13. Wetland restoration and creation activities. Activities specifically designed which have a beneficial effect on wetlands and/or aquatic resources, as determined applicable by CEMVN. Limits on the volume of dredged material and acreage of fill area do not apply. Mitigation banks/areas excluded.

14. Work not specifically excluded which clears, grades, fills or excavates no greater than 2.0 acres of tidal, or 3.0 acres of non-tidal, special aquatic sites, as determined applicable by CEMVN.

REPORTING/ACKNOWLEDGMENT PROCEDURES

A. COMPLETE APPLICATION

Requests for authorization under the PGP require the applicant to submit an application to the DNR, OCM; **an electronic version of the application can be found** at http://www.dnr.la.gov. The applicant's submittal must include a fully completed joint application form and project plans showing all work for which a permit is being requested. LDNR, OCM will electronically forward the application to CEMVN.

A "**complete**" application consists of the following:

(1) A completely filled out joint on-line application form.

(2) Vicinity Map - You may use an existing road map or U.S. Geological Survey topographic map. This map should include:

(i) Location of activity site (draw an arrow showing the exact location of the site on the map).

(ii) Latitude, longitude, and section, township and range, if known.

(iii) Names, descriptions and location of landmarks.

(iv) Name of and distance to nearest town, community, or other identifying locations, including parish.

(v) Names or numbers of all roads in the vicinity of the site.

(vi) North arrow.

(vii) Appropriate dimensions (length x width x depth) or drawings to scale.

(3) Plan view and cross section drawings of the proposed work which include:

(a) Primary dimensions of the activity.

(b) Appropriate dimensions (length x width x depth) or drawings to scale.

(c) Volume (cubic yards), source, and type of dredged/fill material(s).

(d) Mean low and highwater marks.

(4) A statement that the proposed project is consistent with the approved state coastal zone management program.

For the following application types to be considered "complete", additional information may be required:

1) New oil/gas well or reinjection well applications that would result in adverse impacts to special aquatic sites must have undergone an interagency Geologic Review Meeting. The least damaging practicable alternative identified therein may qualify for PGP authorization provided it complies with the criteria of the PGP.

2) Residential subdivisions or an individual single-family home within an existing subdivision must include a subdivision layout.

3) Activities on state operated wildlife management areas or federal refuges must include a written approval from the management area/refuge manager.

4) Projects where the permitted activity requires site restoration upon abandonment of the activity must include signed statements from the affected landowners that they have no objection to the required restoration and that they agree not to develop the restoration areas without prior approval from CEMVN.

5) Projects where a Corps jurisdictional determination is necessary in order to assess the potential impacts of the proposed work.

Proposals not considered "complete" will be placed "on-hold" until such time as **all** required information is obtained.

B. PROCEDURE

1. Category I activities:

Within 10 working days of CEMVN receiving a complete application, it will determine whether the requirements of Category I are met and advise the applicant if the application is complete or if additional information is needed. CEMVN will finalize a permit decision upon completion of all requisite reviews.

2. Category II activities:

Within 10 working days of CEMVN receiving a complete application, it will notify the applicant that the project will be evaluated as a Standard Permit or forward a copy of the application and drawings to the National Marine Fisheries Service, US Environmental Protection Agency, and Louisiana Department of Wildlife and Fisheries for review. These agencies will have 5 working days to submit comments or request additional review time not to exceed 20 working days total. Concurrences may be forwarded to CEMVN via telephone or electronic mail, non-concurrences must be made in writing with an information copy sent to the applicant which includes a description of the impact(s) considered to be more than minimal*. Lack of a response from these resource agencies within the appropriate time frame will be considered as no objection or no position by those agencies.

To the extent practicable and subject to completion of all requisite reviews within 15 days thereafter, CEMVN will either:

a) issue an authorization letter (with any necessary special conditions), to the permittee, or;

b) issue an authorization letter with modifications as recommended by the resource agencies or CEMVN, or;

c) issue a notice to the applicant that the project will be evaluated as a Standard Permit.

To the extent practicable, LDNR, OCM will be notified at the same time the applicant is notified of CEMVN's determination in all of the above situations.

* CEMVN's non-concurrence with the reviewing resource agencies objections and/or recommendations will be made in writing by the District Commander (or his designee) to the respective agency.

C. MITIGATION

Appropriate compensatory mitigation will be required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been attained. The objective of compensatory mitigation is to replace wetland functions, values and services impacted by implementation of the permitted activity. Compensatory mitigation may include, but is not limited to, contracting with a mitigation bank to provide the credits to fully offset the impact; acquisition of credits from the Louisiana Department of Natural Resources' In-lieu Fee Program for the creation, restoration or enhancement of wetlands, or; the permittee's implementation of a wetland mitigation project determined to be acceptable by CEMVN and LDNR, OCM (i.e., permittee responsible mitigation).

CEMVN is obligated to ensure the appropriateness and adequacy of compensatory mitigation in accordance with the 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Part 332 and 40 CFR Part 230. CEMVN recognizes that although the State supports a goal of achieving no net loss of coastal wetlands as specified in the April 1997 Louisiana Coastal Wetlands Conservation Plan, differences in regulations and policies promulgated by the state and federal programs may not facilitate alignment of compensatory mitigation requirements in all instances. When CEMVN determines potentially affected resource values to be of sufficient concern so as to ensure the compliance of a prospective PGP with Corps mitigation policy, CEMVN will coordinate such findings with LDNR, OCM with the intent to implement compensatory mitigation requirements that are consistent with state and federal regulations. Should CEMVN and LDNR, OCM achieve concurrence on compensatory mitigation requirements, CEMVN will finalize the decision on the PGP accordingly. In the event concurrence on the compensatory mitigation requirement is not achieved, CEMVN will either stipulate its compensatory mitigation requirements in the PGP authorization or pursue evaluation of the activity in accordance with Standard Permit application procedures, whichever is appropriate. Although it is recognized that the complexity of compensatory mitigation coordination may increase process time, CEMVN will adhere to the procedural timeframe defined above to the extent practicable.

CEMVN also recognizes the interest of the State in locating compensatory mitigation for those actions located outside the Louisiana Coastal Zone, but within the Louisiana Coastal Wetlands Conservation Plan Area (LCPA), within the LCPA. CEMVN is committed to facilitate mitigation site selection within the LCPA to the extent that adherence to Corps national mitigation policy is not compromised.

CEMVN and LDNR, OCM will assess mitigation performance instituted pursuant to PGP implementation as needed, or when requested by either agency.

D. GENERAL CONDITIONS

1. Activities authorized under this general permit shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single and complete project shall be treated together as constituting one single and complete project. All planned phases of multi-phased projects shall be treated together as constituting one single and complete project. This general permit shall not be used for any activity that is part of an overall project for which an individual permit is required.

2. No activity is authorized under this general permit which may adversely affect significant cultural resources listed or eligible for listing in the National Register of Historic Places until the requirements for Section 106 of the National Historic Preservation Act are met. Upon discovery of the presence of previously unknown historic and/or prehistoric cultural resources, all work must cease and the permittee must notify the State Historic Preservation Office and the Corps of Engineers (CEMVN). We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. The authorization is suspended until it is determined whether or not the activity will have an adverse effect on cultural resources. The authorization may be reactivated or modified through specific conditions if necessary, if it is determined that the activity will have no adverse effect on cultural resources. The Programmatic General Permit (PGP) authorization will be revoked if it is determined that cultural resources would be adversely affected, and an individual permit may be necessary.

3. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the activity's primary purpose is to block or impound water.

4. If the **authorized** activity involves the installation of aerial transmission lines, submerged cable, or submerged pipelines across navigable waters of the United States the following is applicable:

> The National Ocean Service (NOS) has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notification to NOS will be sent to the following address: National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Spring, Maryland 20910-3282.

5. For pipelines under an anchorage or a designated fairway in the Gulf of Mexico the following is applicable: The NOS has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Within 30 days of completion of the pipeline, 'as built' drawings certified by a professional engineer registered in Louisiana or by a registered surveyor shall be furnished to this office, the Commander (dpw), Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Room 1230, New Orleans, Louisiana 70130, and to the Director, National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Spring, Maryland 20910-3282. The plans must include the location, configuration and actual burial depth of the completed pipeline project.

6. All activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (PL 92-500:86 Stat 816), or pursuant to applicable state and local laws.

7. Substantive changes to the Louisiana Coastal Resources Program may require immediate suspension and revocation of this permit in accordance with 33 CFR 325.7.

8. Irrespective of whether a project meets the other conditions of this permit, the Corps of Engineers retains discretionary authority to require an individual Department of the Army permit when circumstances of the proposal warrant this requirement.

9. Any individual authorization granted under this permit may be modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest.

10. CEMVN may suspend, modify, or revoke this general permit if it is found in the public interest to do so.

11. Activities authorized under the PGP must comply with all other necessary federal, state, and/or local permits, licenses, or approvals. Failure to do so would result in a violation of the terms and conditions of the PGP.

12. The permittee shall allow the District Commander or his authorized representative(s) or designee(s) to make periodic inspections of the project site(s) at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

13. This general permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations nor does it obviate the requirements to obtain state or local assent required by law for the activity authorized herein.

14. In issuing authorizations under this permit, the federal government will rely upon information and data supplied by the applicant. If, subsequent to the issuance of an authorization, such information and data prove to be false, incomplete, or inaccurate, the authorization may be modified, suspended, or revoked, in whole or in part.

15. For activities resulting in sewage generation at the project site, such sewage shall be processed through a municipal sewage treatment system or, in areas where tie-in to a municipal system is not practical, the on-site sewerage system must be approved by the local parish sanitarian before construction

16. Any modification, suspension, or revocation of the PGP, or any individual authorization granted under this permit, will not be the basis for any claim for damages against the United States.

17. Additional conditions deemed necessary to protect the public interest may be added to the general permit by the District Commander at any time. If additional conditions are added, the public will be advised by public notice. Individual authorizations under the PGP may include special conditions deemed necessary to ensure minimal impacts and compliance with the PGP.

18. The PGP is subject to periodic formal review by CEMVN and the Louisiana Department of Natural Resources, Office of Coastal Management (LDNR, OCM) in coordination with the Environmental Protection Agency, the National Marine Fisheries Service, and the Louisiana Department of Wildlife and Fisheries. Comments from reviewing agencies will be considered in determination as to whether modifications to the general permit are needed. Should the District Commander decide not to incorporate a change proposed by a reviewing agency, after normal negotiations between the respective agencies, the District Commander will explain in writing to the reviewing agency the basis and rationale for his decision.

19. CEMVN retains discretion to review the PGP, its terms, conditions, and processing procedures, and decide whether to modify, reissue, or revoke the permit. If the PGP is not modified or reissued within 5 years of its effective date, it automatically expires and becomes null and void.

20. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

21. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

22. You must install and maintain, at your expense, any safety lights, signs and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on your authorized facilities. Any inquiries concerning a U.S. Coast Guard Private Aids to Navigation marking determination may be directed to the Eighth Coast Guard District (dpw), Hale Boggs Federal Building, 500 Poydras St., Suite 1230, New Orleans, Louisiana 70130, at (504) 671-2330 or via email to: D8oanPATON@uscg.mil. For general information related to Private Aids to Navigation, you may visit the Eighth CG District web site at: http://www.atlanticarea.uscg.mil/district-8/district-divisions/waterways/PATON

23. If the authorized project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.) in the waterway, you are advised to notify the Eighth Coast Guard District so that a Notice to Mariners, if required, may be prepared. Notification with a copy of this permit approval and drawings can be emailed to: D8MarineInfo@uscg.mil, or mailed to the Commander (dpw), Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Suite 1230, New Orleans, Louisiana 70130. Telephone inquiries can be directed to the Eighth Coast Guard District, Waterways Management at (504) 671-2118.

24. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party as described in General Condition 25 below. Should you wish to cease to maintain the authorized activity, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

25. If you sell the property associated with this permit, you must provide this office with a copy of the permit and a letter noting your agreement to transfer the permit to the new owner and the new owner's agreement to accept the permit and abide by all conditions of the permit. This letter must be signed by both parties.

26. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. If your project involves dredging and/or placement of fill, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your activities with local floodplain ordinances, regulations or permits. Project designs and any associated drainage plans associated with the undertaking shall comply with all local Parish Government, Drainage Authority, Flood Plain Administrator, and/or other applicable agency requirements. Should it be determined by any of these agencies that the project is creating unnatural inundation conditions on adjacent properties, the permittee will be required to remediate the situation, as directed by these agencies. Should there be any changes required in

the project design, the permittee shall coordinate with this office to obtain a permit amendment and/or review and decision on the plans, prior to commencement of those alterations.

27. In issuing authorizations under this permit, the federal government does not assume any liability for: damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit, and; design or construction deficiencies associated with the permitted work.

28. All work shall be done in accordance with the approved plans and confined to the permitted work area(s) represented within the attached drawings. If the project requires modifications to the authorized plans, the permittee shall contact this office to obtain a permit amendment and/or review and decision on the plans, prior to commencement of those alterations. The permittee is responsible for ensuring that any contractors and/or workers associated with project construction and implementation, are equally aware of the authorized plans, conditions, and/or restrictions associated with this approval.

29. The permittee shall properly install adequate erosion/siltation control measures around construction areas that require land-based earthwork (i.e., excavation and/or deposition of fill materials, land contouring, machinery rutting, fill maneuvering and redistribution, etc.), to aid in preventing project related sediments, debris and other pollutants from entering adjacent wetlands or waters. Acceptable measures include but are not limited to the proper use and positioning of temporary silt fences, straw bales, fiber/core logs, wooden barriers, seeding or sodding of exposed soils, or other approved EPA construction site storm-water runoff control and best management practices. Control techniques shall be installed prior to the commencement of earthwork activities and maintained until the project is complete and/or the subject areas are stabilized.

E. AUTHORIZATIONS

No work may be performed under the PGP unless and until:

(1) CEMVN has reviewed the application and has issued a written authorization or, in exceptional cases, a verbal authorization.

(2) All required local, state and other federal permits, licenses, authorizations, and certifications are obtained. This includes, but is not limited to:

(a) A Coastal Use Permit, consistency determination, or finding of No Direct Significant Impact signed by the Secretary of the Louisiana Department of Natural Resources or his designee, and

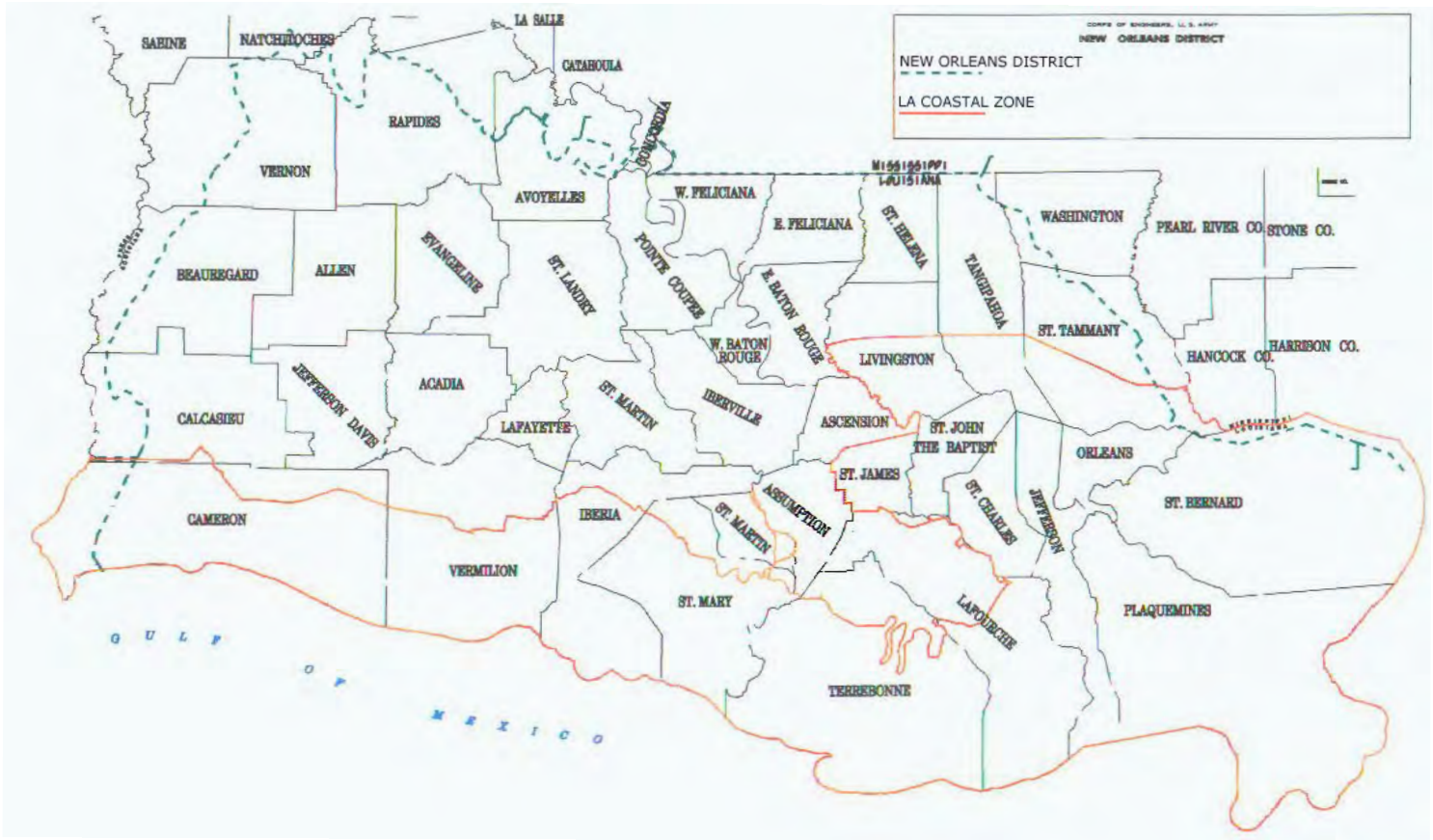
The PGP expires on ***June 1, 2027***, unless otherwise modified or reissued.

Individual authorizations granted to applicants under this PGP are valid for 5 years from the date of the authorization letter.

BY THE AUTHORITY OF THE SECRETARY OF THE ARMY:

Martin S. Mayer
Chief, Regulatory Division

Attachment 1



DEPARTMENT OF THE ARMY PERMIT

Permittee _____

Permittee No. _____

Issuing Office _____

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Project Location:

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on _____. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(☐) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(☐) Section 404 of the Clean Water Act (33 U.S.C. 1344).

(☐) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

2. Limits of the authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

(REVERSE OF ENG FORM 1721)

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

_____ _____

(PERMITTEE) *(DATE)*

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ _____

(DISTRICT ENGINEER) *(DATE)*

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) *(DATE)*

* U.S. GOVERNMENT PRINTING OFFICE: 1986 - 717-425

From: Louisiana Department of Conservation and Energy
To: DEQ-WATERQUALITYCERTIFICATIONS@LA.GOV; LES.ROSSO@LA.GOV; JOHAN.FORSMAN@LA.GOV; SECTION106@la.gov; STORMWATER@STPGOV.ORG; SAMUEL.WELTY@LA.GOV; BRYAN.HITT@LA.GOV; RANDALL.WITHERS@LA.GOV; TOBY.PICARD@LA.GOV; SARA.KRUPA@LA.GOV; MAGGIE.JAMES@LA.GOV; ANNA.CATALANELLO@LA.GOV; STEVEN.GIAMBRONE@LA.GOV; TDSHARP@STPGOV.ORG; PERMITS.HMA@TBSMITH.COM
Subject: P20250864 - Notice
Date: Thursday, November 6, 2025 2:03:06 PM

If you would like to respond, provide comment or contact someone about this application please click the OPC Analyst name below to send an email to the permit analyst, use the "Make Comments" link below to post a comment to the administrative record or call the OPC Analyst at 225-342-7591 or 800-267-4019. Be sure to reference your P# as found in the subject of this email. Do not use the "reply" button to respond to this email as this account is not monitored for incoming messages.

Coastal Use Permit Application Information

Applicant:	St. Tammany Parish Government
Project:	Proposed Pedestrian Bridge Replacement Tammany Trace Bike Trail Bridge 13
Project Parish(es):	SAINT TAMMANY

OPC Analyst:	Maggie James (Maggie.James@la.gov)
Preliminary Determination:	Coastal Use Permit
Application Modification:	MLW/MHW added to plats. No sensitive features have been added since the last distribution.

Notice for the above application has been initiated.

You can view the Notice at:

Notice
Application
Make Comments

The proposed undertaking will have no adverse effect on historic properties. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.

Carrie Broussard

Carrie Broussard
State Historic Preservation Officer

Date 11/24/2025

GEOTECHNICAL DATA REPORT

ST. TAMMANY PARISH
ST. TAMMANY TRACE BRIDGES
BRIDGES 6, 9, 10, 11, 12, 13
ST. TAMMANY PARISH, LA

FOR

ST. TAMMANY PARISH, LA
MANDEVILLE

GULF SOUTH ENGINEERING AND TESTING FILE NO. 24-057

November 6, 2024

GULF SOUTH
ENGINEERING AND TESTING, INC.
15 Veterans Memorial Blvd | Kenner LA 70062
504-305-4401 | www.gulfsoutheng.com

GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

15 Veterans Memorial Boulevard, Kenner, LA 70062
PN: 504-305-4401 FN: 504-305-4408 E-mail: info@gulfsoutheng.com

November 6, 2024

St. Tammany Parish
21454 Koop Drive
Mandeville, LA 70471

Attn: Mr. Truman D. "Trip" Sharp, III
E-mail: tdsharp@stpgov.org

Re: Geotechnical Data Report
St. Tammany Parish
St. Tammany Trace Bridges
Bridges 6, 9, 10, 11, 12, 13
St. Tammany Parish, LA
Gulf South Engineering & Testing File No. 24-057

Dear Trip,

Please find attached our geotechnical data report that was completed for the referenced project. We appreciate the opportunity to serve your geotechnical needs. Please contact us should you have any questions.

Sincerely,
GULF SOUTH ENGINEERING AND TESTING, INC.

CHAD M. POCHE, P.E.
Executive Vice President

BRYSON S. BEARD, E.I.
Associate Geotechnical Engineer

TABLE OF CONTENTS

Page No.

1.0 INTRODUCTION & PROJECT DESCRIPTION 1

2.0 SOIL BORINGS 1

3.0 LABORATORY TESTING 2

4.0 SUBSOIL CONDITIONS 3
- 4.1 Subsoil Description 3
  - 4.1.1 Bridge 6 (Borings B-1 and B-2) 3
  - 4.1.2 Bridge 9 (Borings B-3 and B-4) 3
  - 4.1.3 Bridge 10 (Borings B-5 and B-6) 3
  - 4.1.4 Bridge 11 (Boring B-8) 3
  - 4.1.5 Bridge 12 (Borings B-9 and B-10) 4
  - 4.1.6 Bridge 13 (Borings B-11 and B-12) 4
- 4.2 Groundwater 4

5.0 CLOSING 5

FIGURE – Nos. 1.1 through 1.6 Boring Plan
Nos. 2.1 through 2.6 Soil Design Profiles

APPENDIX A – Boring Logs and Cross Section Report

APPENDIX B – Hammer Calibration Reports

APPENDIX C – Laboratory Data Results

GEOTECHNICAL DATA REPORT

ST. TAMMANY PARISH
ST. TAMMANY TRACE BRIDGES
BRIDGES 6, 9, 10, 11, 12, 13
ST. TAMMANY PARISH, LA

GULF SOUTH ENGINEERING AND TESTING FILE NO. 24-057

1.0 INTRODUCTION & PROJECT DESCRIPTION

This report contains the results of a geotechnical field exploration made at the subject site. Instructions to proceed with the exploration were received from St. Tammany Parish (Client) via approval of our proposal dated April 26, 2024.

We understand the project will consist of the construction or replacement of a bridge at six (6) location (Bridges 6, 9, 10, 11, 12, 13) along the St. Tammany Trace in St. Tammany Parish, LA.

The study included drilling soil test borings and the performance of soil mechanics laboratory tests to evaluate the soil's physical characteristics. Twelve (12) soil borings were originally proposed for this project. Boring B-7 was abandoned after 5 separate attempts to complete the boring due to drilling complications.

This report has been prepared for the exclusive use of our client. Geotechnical engineering recommendations will be provided in a full Geotechnical Exploration report once loads are furnished form the design engineer.

2.0 SOIL BORINGS

Eleven (11) undisturbed soil borings were each drilled to a depth of 100 feet (Borings B-1 through B-6, B-8 through B-12) below the ground/pavement surface on September 27, 2024. The borings were drilled with ATV/truck mounted drilling rigs equipped with ARDCO top drive rotary drilling systems at the designated locations as approximately shown on Figure Nos. 1.1 through 1.6.

Undisturbed sampling was performed continuously or on approximate 5 foot centers in all cohesive or semi-cohesive materials with a three inch diameter thin wall tube sampler. The samples were extruded in the field, representative portions of each sample were trimmed and placed in moisture

proof containers, the samples were properly labeled and secured for transport to the laboratory.

When cohesionless material was encountered or when soils could not be adequately sampled by undisturbed methods, the Standard Penetration Test was performed on 3 foot centers until 15 feet of sand was observed then on approximate 5 foot centers after. This test consists of driving a two-inch diameter split spoon sampler a total of approximately 18 inches with a 140 lb. hammer falling 30 inches. All SPT testing was performed with an automatic hammer. Hammer calibration reports are provided in Appendix B of this report. The number of blows required to drive the sampler per 6 inch increment is recorded and gives an indication of the density of the material. The blows per foot shown on the boring log are the total of the blow counts for the final 12 inches of penetration. If the blow counts reached 50 blows, the test was stopped and driven distance recorded for the sampling interval.

3.0 LABORATORY TESTING

Soil mechanics laboratory tests were performed on samples obtained from the borings. The testing consisted of natural moisture content, unit weight, Atterberg limits, grain size analyses, and tri-axial compression strength testing. A summary of the laboratory tests completed are shown below.

Table 3.1 – Laboratory Test Summary

Laboratory Test Type	Number of Tests Completed	ASTM Standard
Moisture Content	279	D2216
Unit Weight	150	D7263
Atterberg Limit	141	D4318
Grain Size Analysis (200 only)	60	D6913
Grain Size Analysis (Full Sieve)	3	D2850
Unconsolidated Unconfined Tri-Axial Strength Test (UU)	145	D1140

The results of the laboratory tests are shown on the soil boring logs in Appendix A and the details of the lab tests are provided in Appendix C of this report. Soil design profiles for each bridge are shown on Figure Nos. 2.1 through 2.6.

4.0 SUBSOIL CONDITIONS

4.1 Subsoil Description

4.1.1 Bridge 6 (Borings B-1 and B-2)

Reference to the borings show there is approximately 2.5 inches of asphalt over a sandy clay base from the ground surface to the approximate 1 foot depth. Stiff to very stiff silty clay and sandy clay follows to the approximate 10 foot depth. Dense to very dense sand, silty sandy, and gravelly sand is present to the approximate 26 foot depth. Below, interbedded layers of soft to very stiff clay, sandy clay, and silty clay follow to the approximate 76 foot depth. Between the approximate 76 foot and 93 foot depths, very loose to dense silty sand is present. Loose to medium dense clayey sand and stiff to very stiff sandy clay follow at the borings' termination depth of 100 feet below the ground surface.

4.1.2 Bridge 9 (Borings B-3 and B-4)

Reference to the borings show there is approximately 2 to 3 inches of asphalt over a sandy clay base from the ground surface to the approximate 1 foot depth. Below, interbedded layers of soft to very stiff clay, silty clay, and sandy clay follow to the approximate 63 foot depth. Between the approximate 63 to 83 foot depths, loose to very dense sand and silty sand are present. Very soft to stiff clay and silty clay follow to the borings' termination depth at 100 feet below the ground surface.

4.1.3 Bridge 10 (Borings B-5 and B-6)

Reference to the borings show there is approximately 4 inches of asphalt over a stone base from the ground surface to the approximate 2 foot depth. Below, interbedded layers of soft to very stiff clay, silty clay, and sandy clay follow to the approximate 63 foot depth. Between the approximate 67 to 83 foot depths, very dense sand is present. Very soft to stiff clay follows to the borings' termination depth at 100 feet below the ground surface.

4.1.4 Bridge 11 (Boring B-8)

Reference to the boring shows there are interbedded layers of soft to very stiff clay and silty clay are present from the ground surface to the approximate 47 foot depth. Loose to medium dense silty sand follows to the approximate 51 depth. Very stiff clay is present to the approximate 62 foot depth. Medium dense to very dense silty sand and clayey sand follows to the

approximate 83 foot depth. Medium stiff to stiff clay and silty clay are present to the boring's termination depth at 100 feet below the ground surface.

4.1.5 Bridge 12 (Borings B-9 and B-10)

Reference to the borings show there is approximately 3 to 4 inches of asphalt over sand and stone bases from the ground surface to the approximate 2 foot depth. Interbedded layers of soft to very stiff clay, silty clay, sandy clay, and silt follow to the approximate 76 foot depth. Medium dense to very dense sand, silty sand, and clayey sand follow to the borings' termination depth at 100 feet below the ground surface.

4.1.6 Bridge 13 (Borings B-11 and B-12)

Reference to the borings show there is 4 to 7 inches of asphalt over a stone base from the ground surface to the approximate 2 foot depth. Medium stiff clay, silty clay, and sandy clay follow to the approximate 33 to 37 foot depths. Medium dense to very dense sand is present to the approximate 58 to 63 foot depths. Below, interbedded layers of very soft to stiff clay, silty clay, and sandy clay and very loose to medium dense silty sand and clayey sand follow to the borings' termination depth at 100 feet below the ground surface.

4.2 Groundwater

At the time of making the borings, the groundwater readings at each boring are shown on the following table. After waiting approximately 15 minutes from the initial groundwater observation, a secondary groundwater reading was taken to determine if groundwater rose within the borehole.

Table 4.1 – Groundwater Level Observations and Readings

Boring No.	Initial Groundwater Observation	Secondary Groundwater Reading
B-1	13' 0"	8' 0"
B-2	8' 0"	N/A*
B-3	13' 0"	6' 0"
B-4	N/A	N/A
B-5	18' 0"	6' 0"
B-6	12' 0"	11' 0"
B-8	N/A	N/A*
B-9	13' 0"	N/A*
B-10	13' 0"	N/A*
B-11	13' 0"	N/A*
B-12	17' 0"	16' 0"

* - Borehole caved-in before secondary reading was attempted

These observations were made during a short period of time and groundwater may not have become fully realized at the time of observation. Groundwater can fluctuate with seasonal precipitation, drainage, and prolonged drought. If the depth to groundwater is important to construction, it should be measured at that time.

5.0 CLOSING

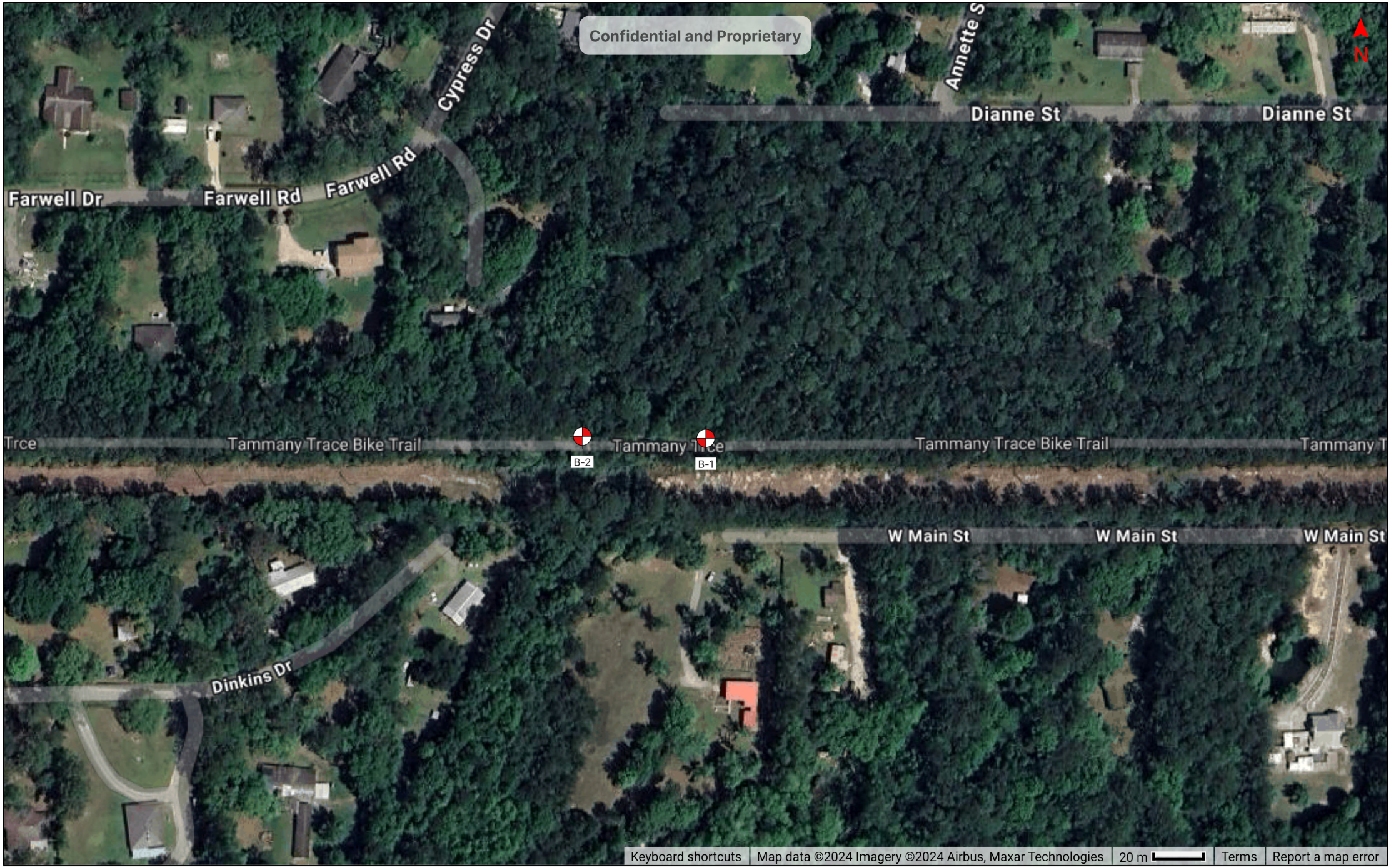
Gulf South is available to answer any questions you may have concerning this report. We appreciate the opportunity to provide this report and look forward to working with you again in the future.

Sincerely,
GULF SOUTH ENGINEERING AND TESTING, INC.

CHAD M. POCHE, P.E.
Executive Vice President

BRYSON S. BEARD, E.I.
Associate Geotechnical Engineer

FIGURES



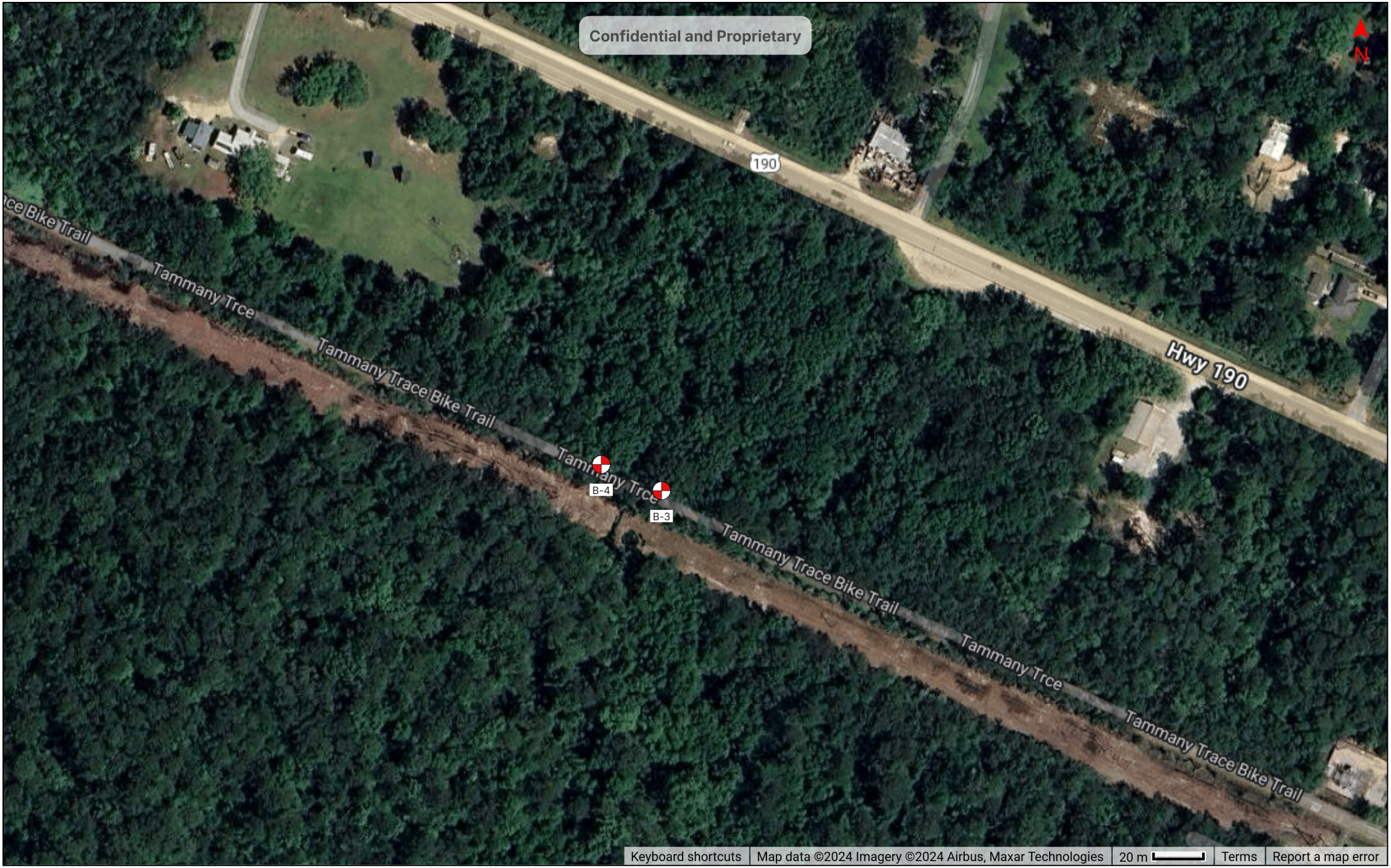
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

FIGURE NO. 1.1

PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 6

SYMBOL KEY
Soil Boring



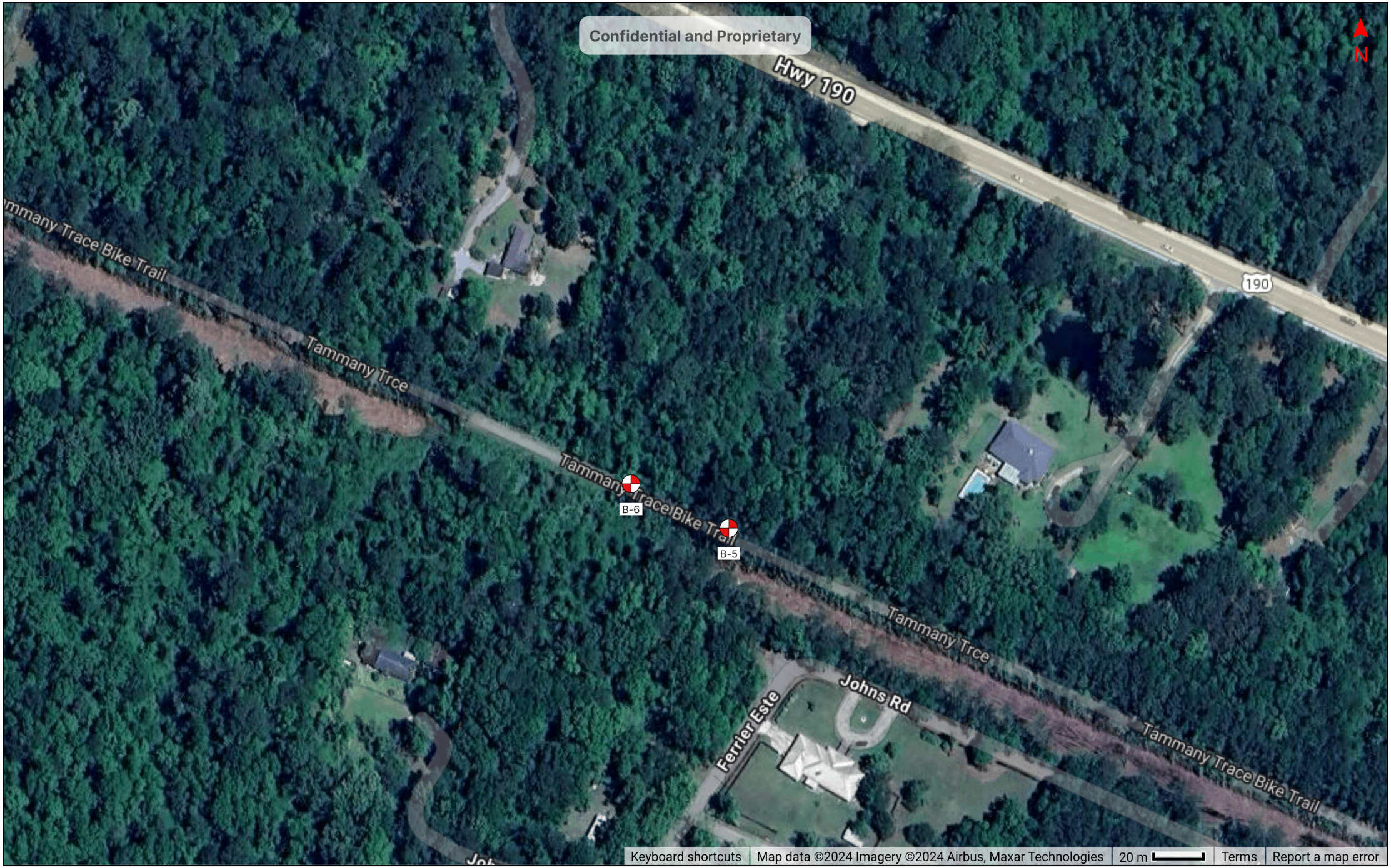
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

FIGURE NO. 1.2

PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 9

SYMBOL KEY
Soil Boring



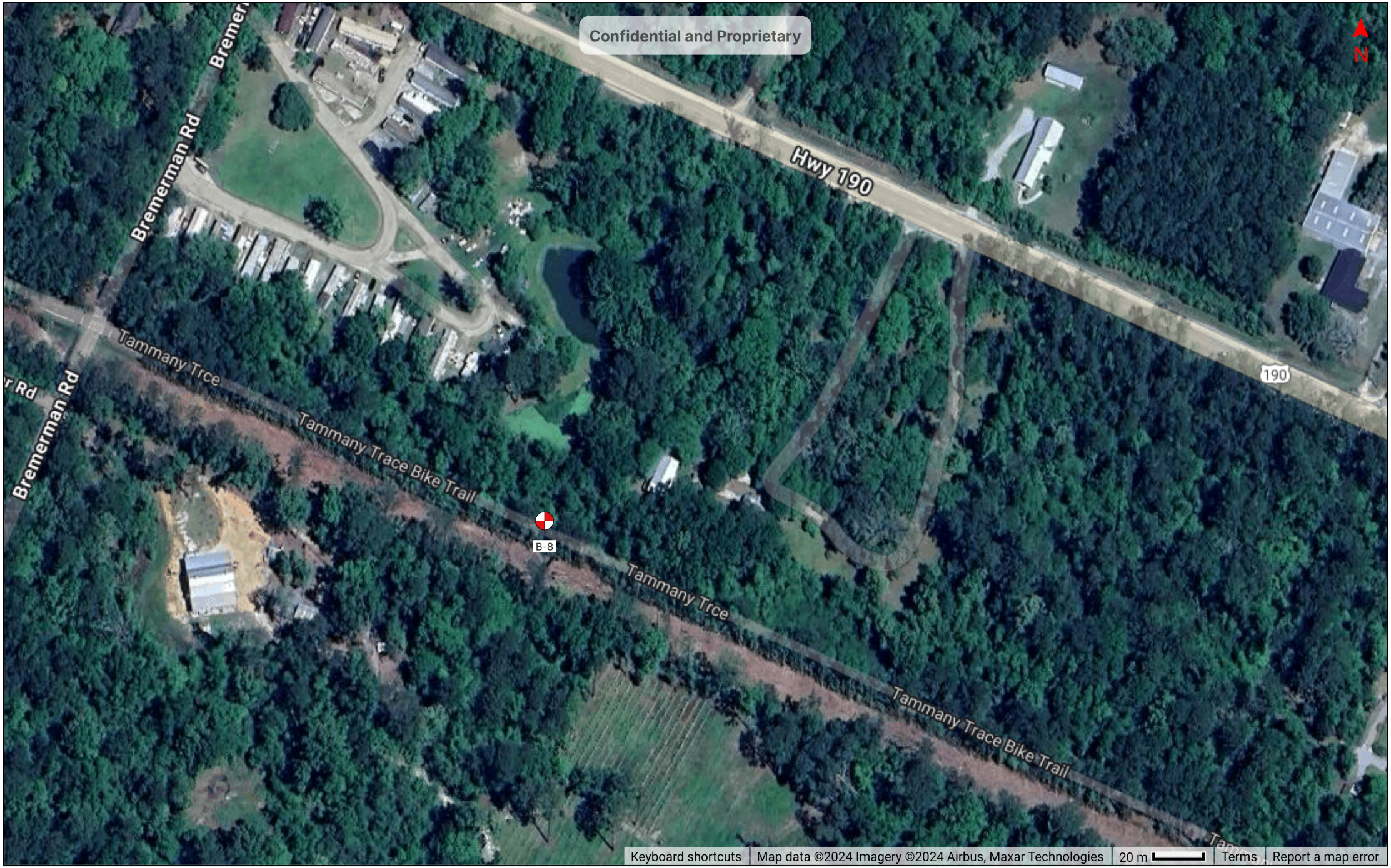
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

FIGURE NO. 1.3

PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 10

SYMBOL KEY
Soil Boring



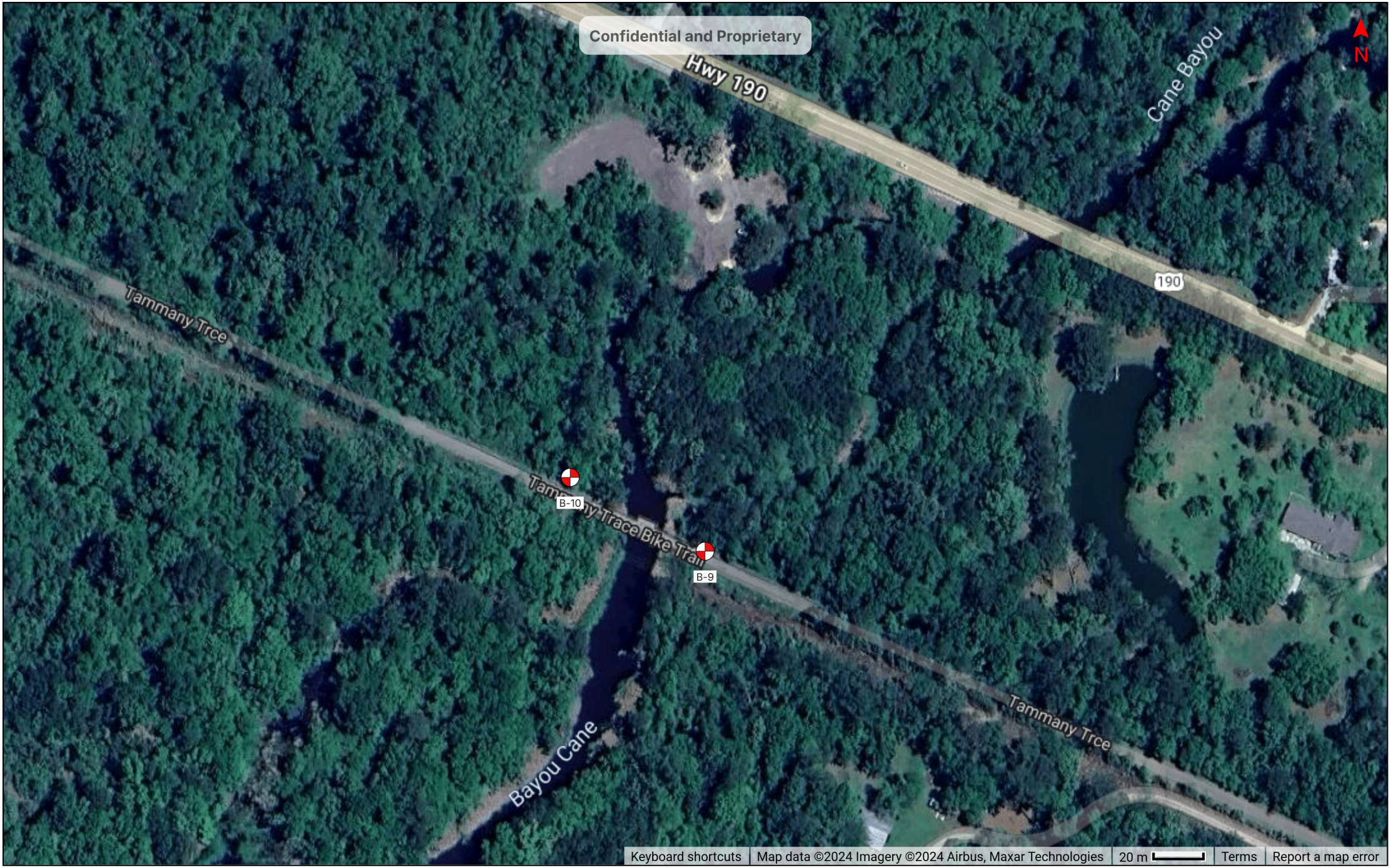
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

FIGURE NO. 1.4

PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 11

SYMBOL KEY
Soil Boring



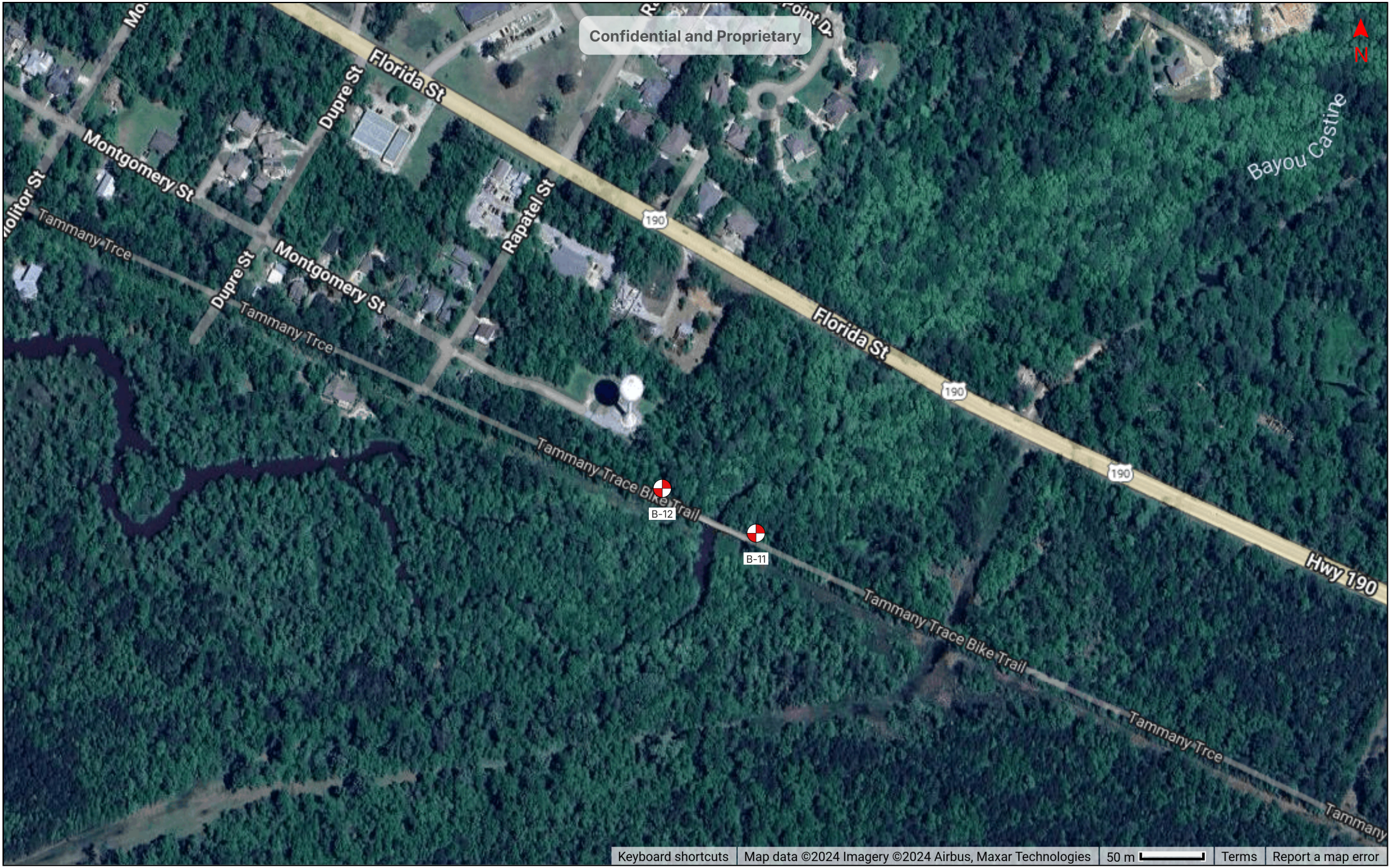
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

FIGURE NO. 1.5

PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 12

SYMBOL KEY
Soil Boring



GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

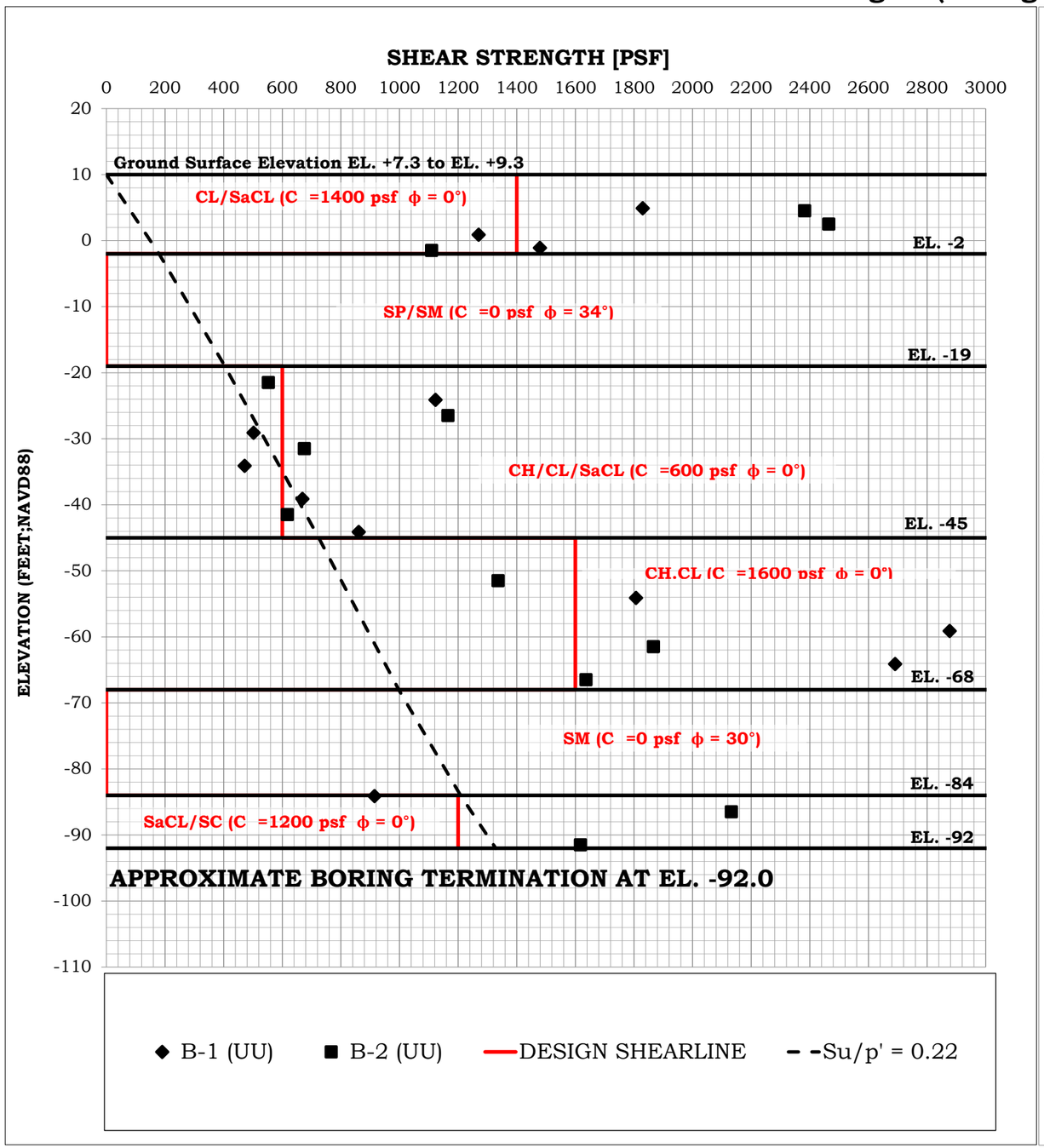
FIGURE NO. 1.6

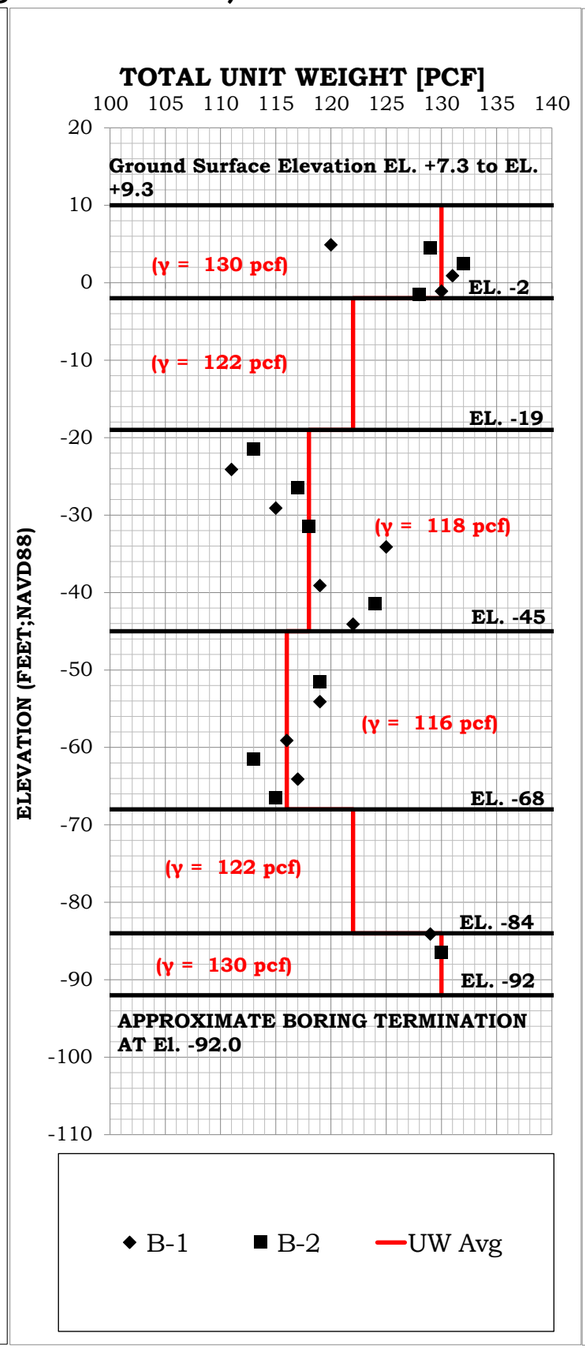
PROJECT
Name: St. Tammany Trace Bridges
Number: 24-057

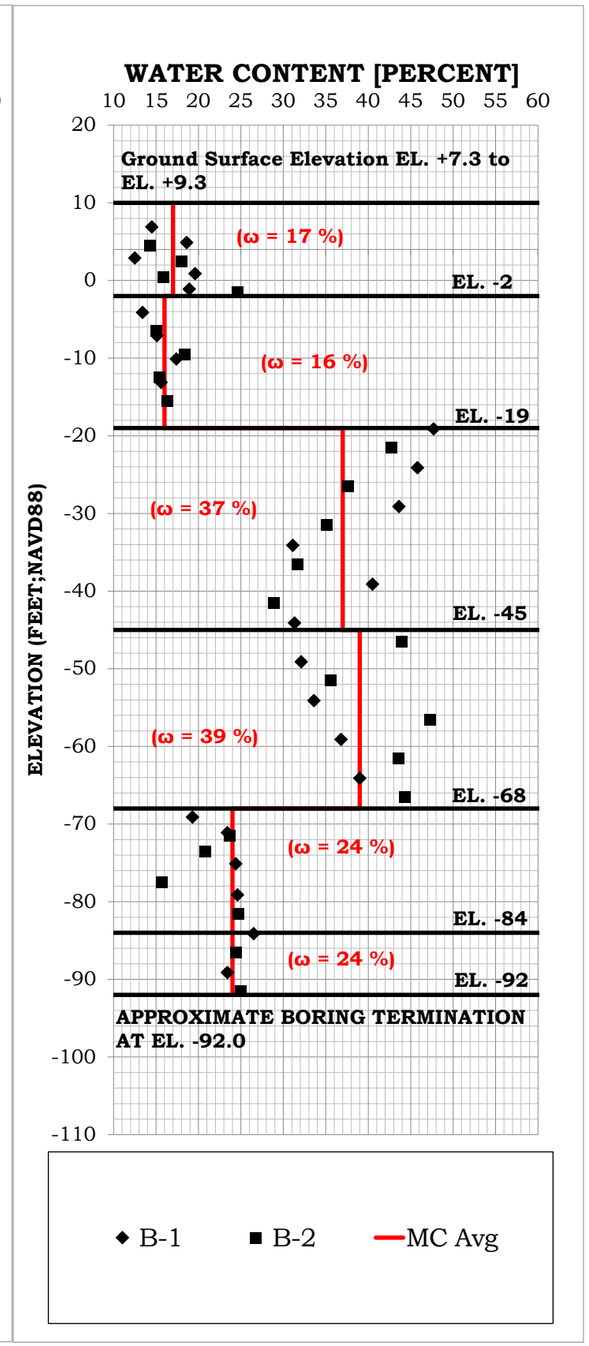
LOCATION
30.301275, -89.904753
Lacombe, LA
Bridge 13

SYMBOL KEY
Soil Boring

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 6 (Borings B-1 and B-2)

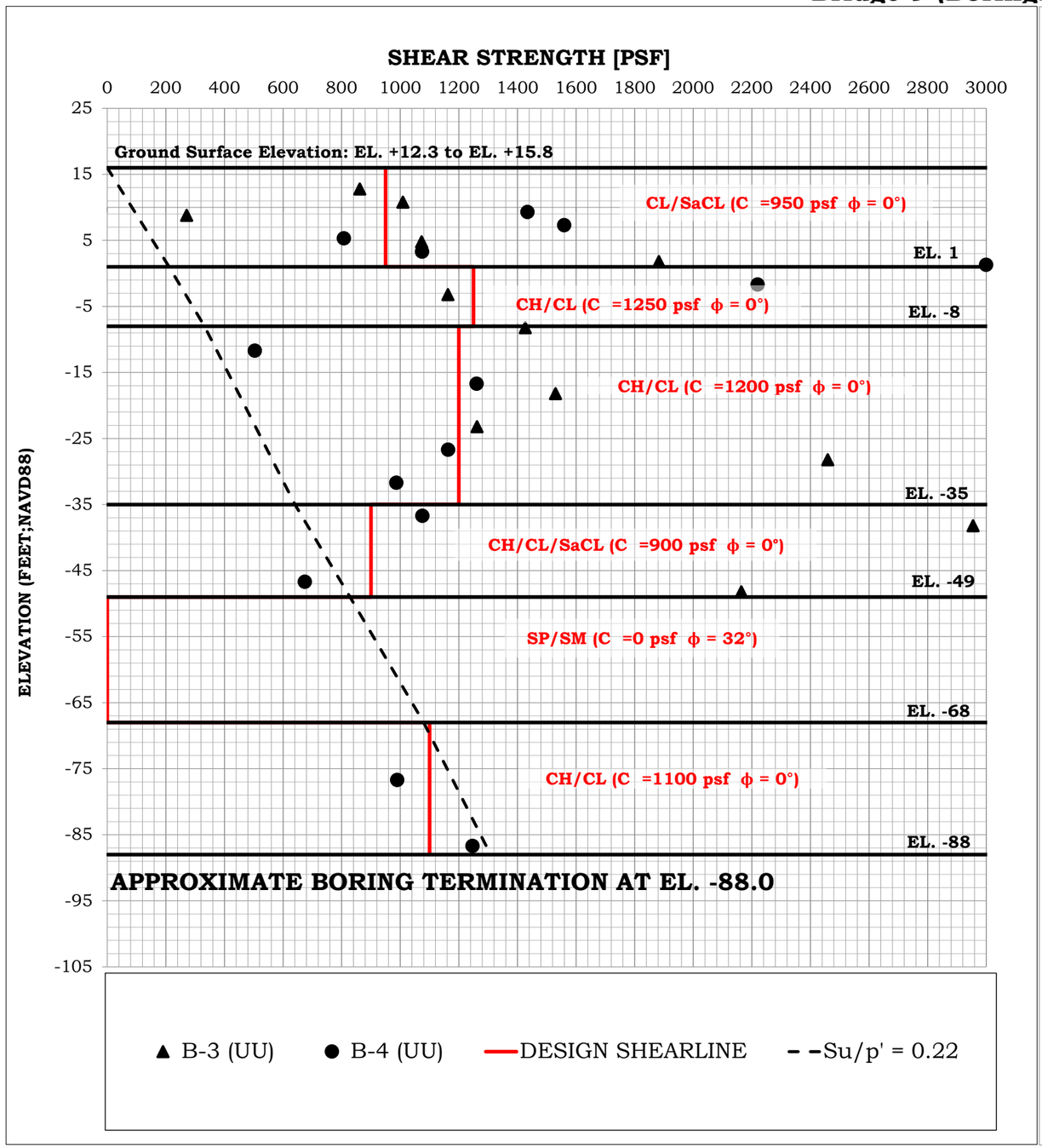


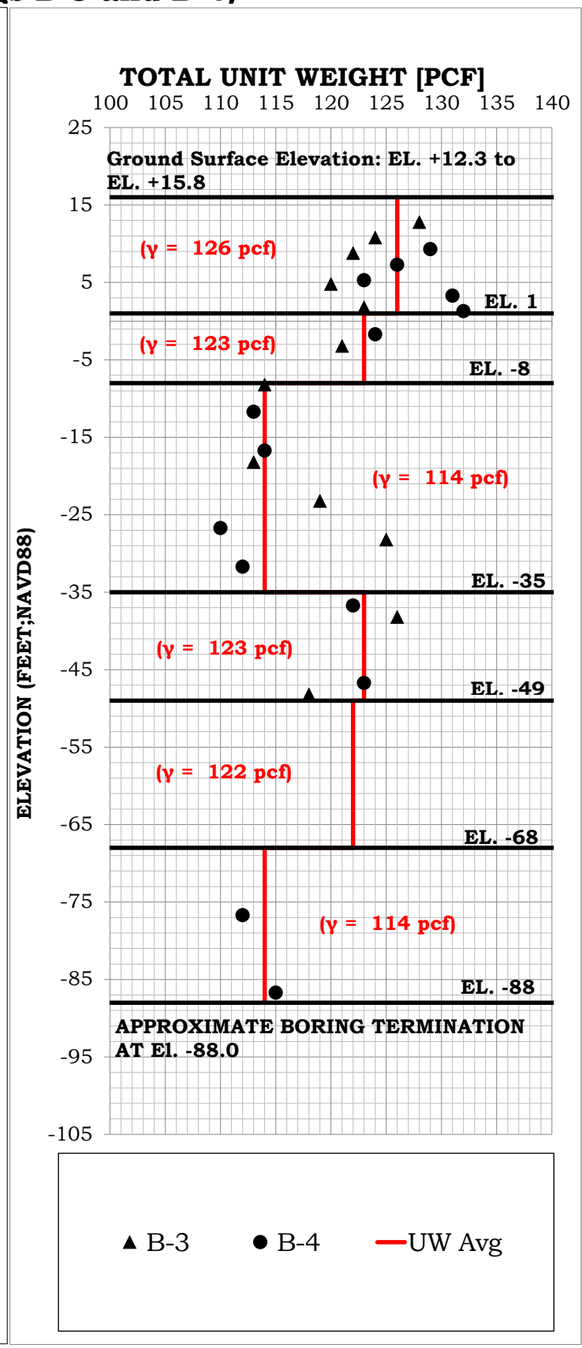


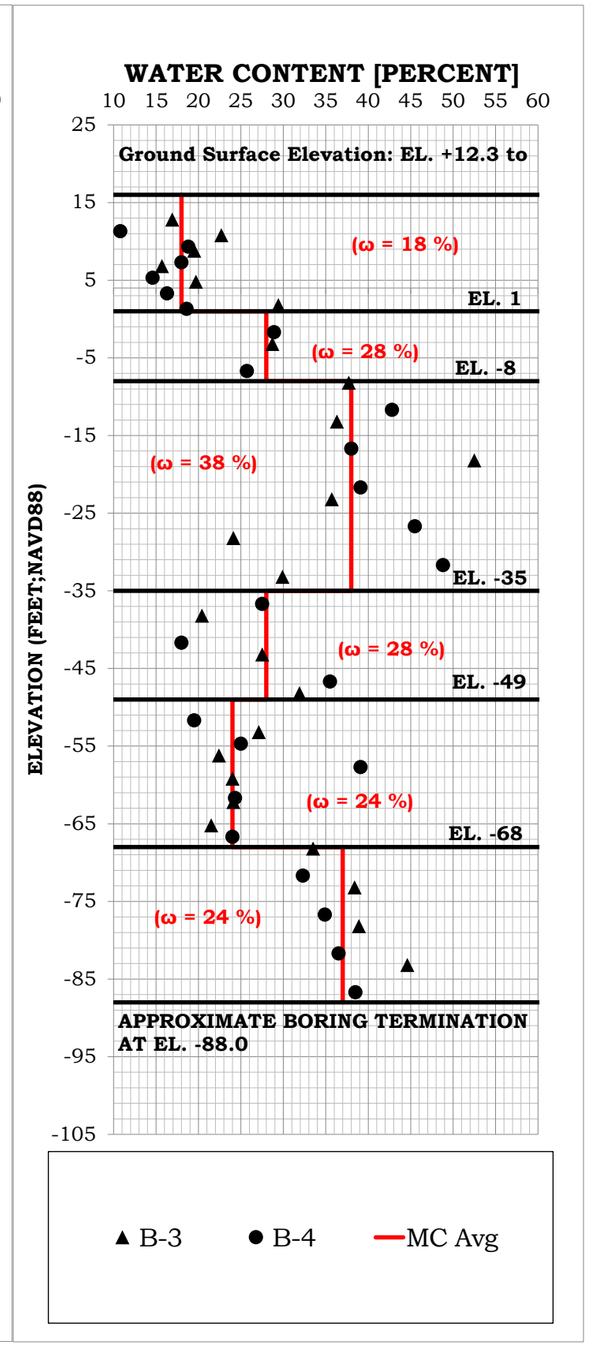


Gulf South File 24-057 **(Date: 11-06-2024)**	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	**St. Tammany Parish** **St. Tammany Trace Bridges** **St. Tammany Parish, LA**	**For** **St. Tammany Parish** **Covington, LA**	**Soil Design Parameters** **FIGURE NO. 2.1**

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 9 (Borings B-3 and B-4)

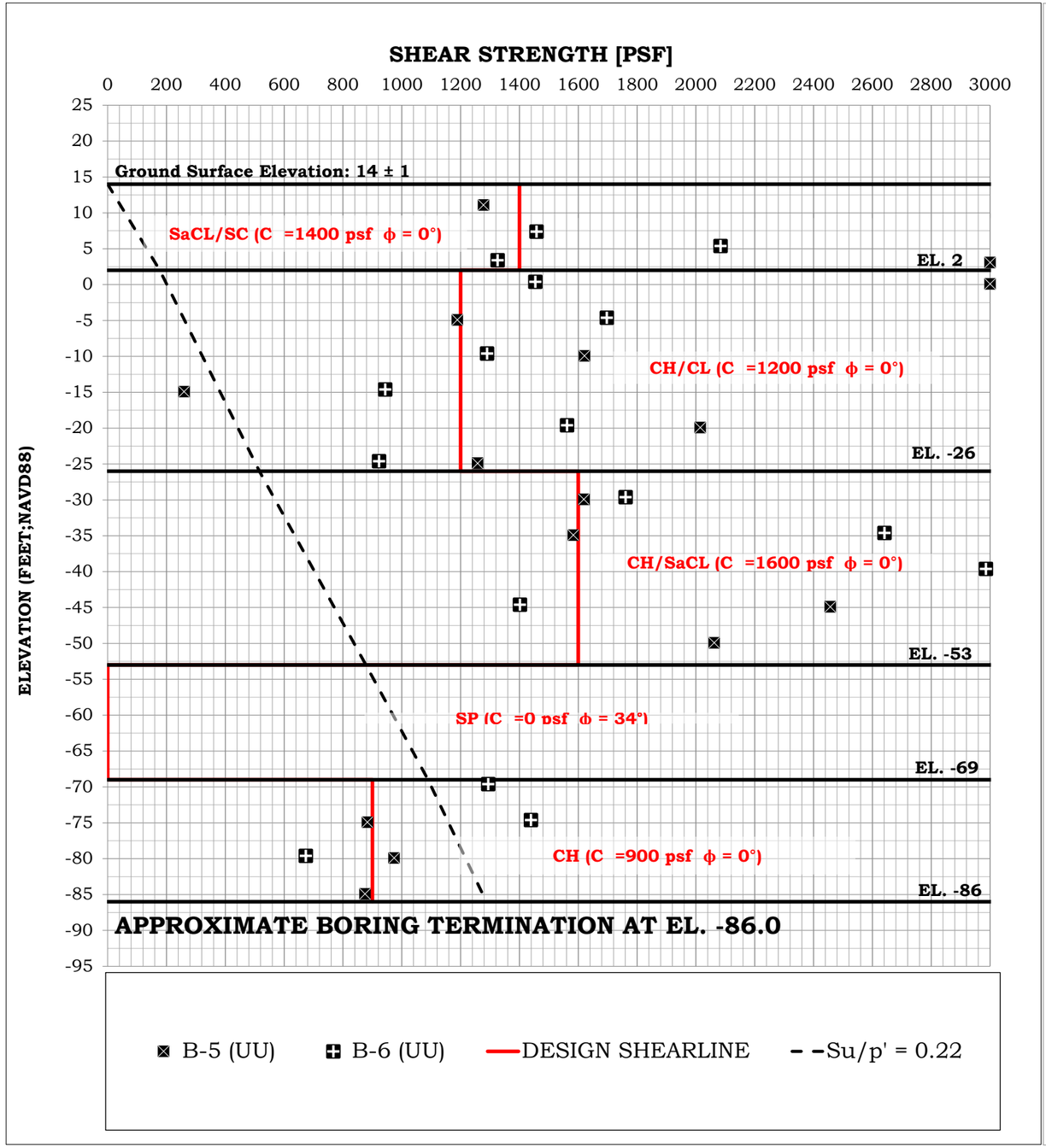


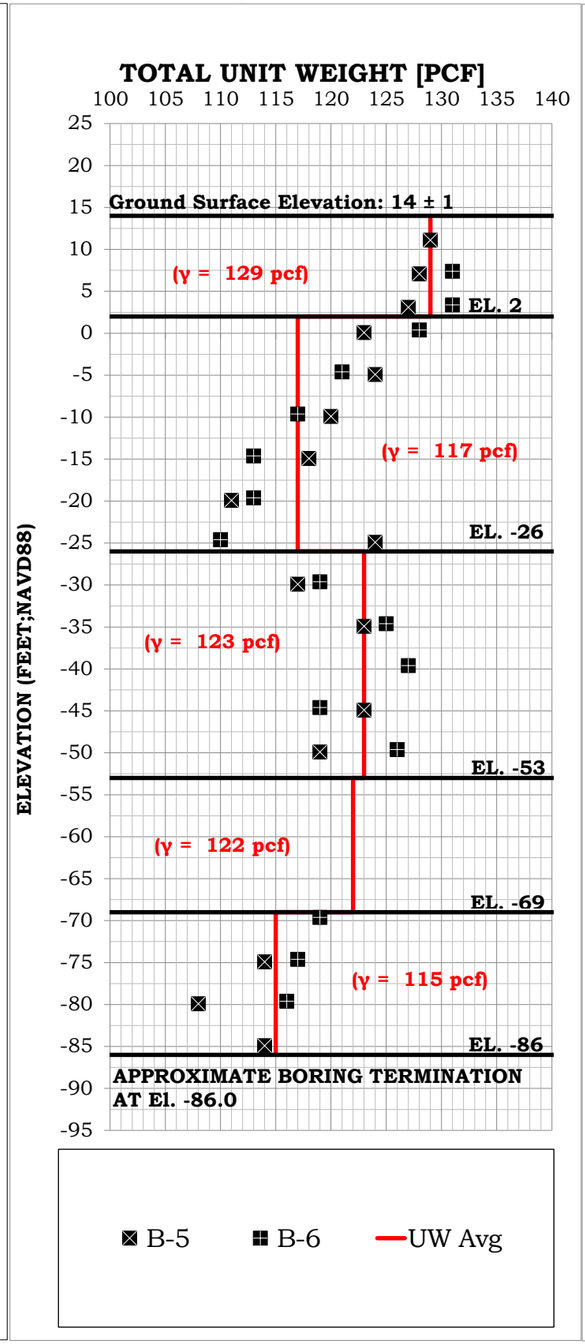


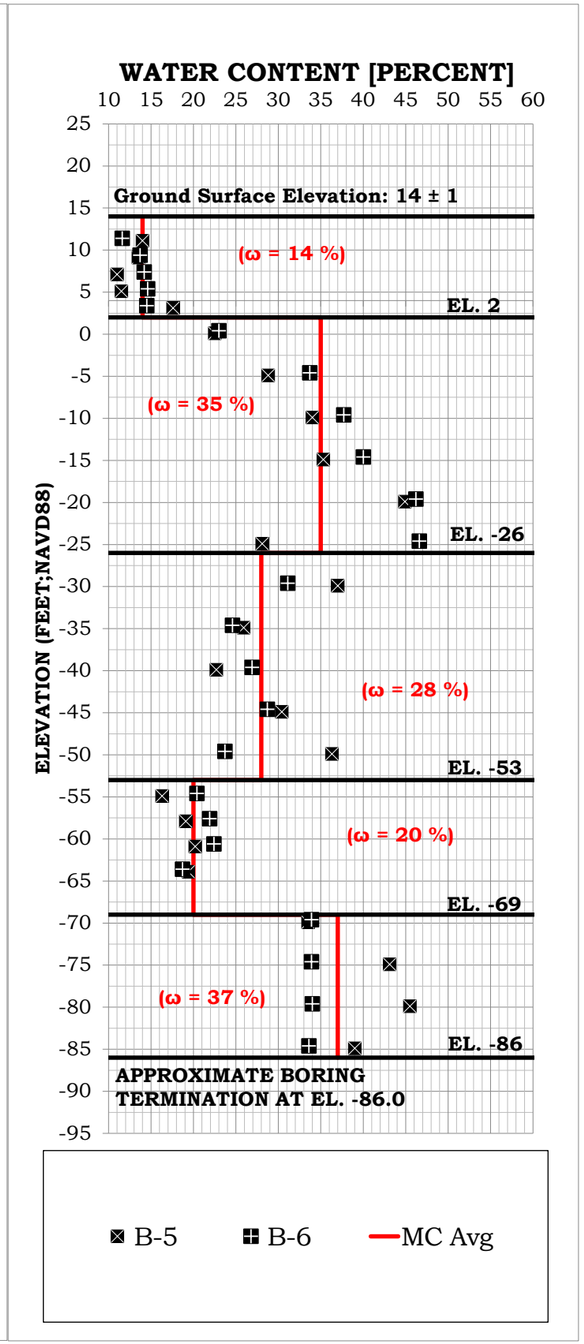


Gulf South File 24-057 **(Date: 11-06-2024)**	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	**St. Tammany Parish** **St. Tammany Trace Bridges** **St. Tammany Parish, LA**	**For** **St. Tammany Parish** **Covington, LA**	**Soil Design Parameters** **FIGURE NO. 2.2**

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 10 (Borings B-5 and B-6)

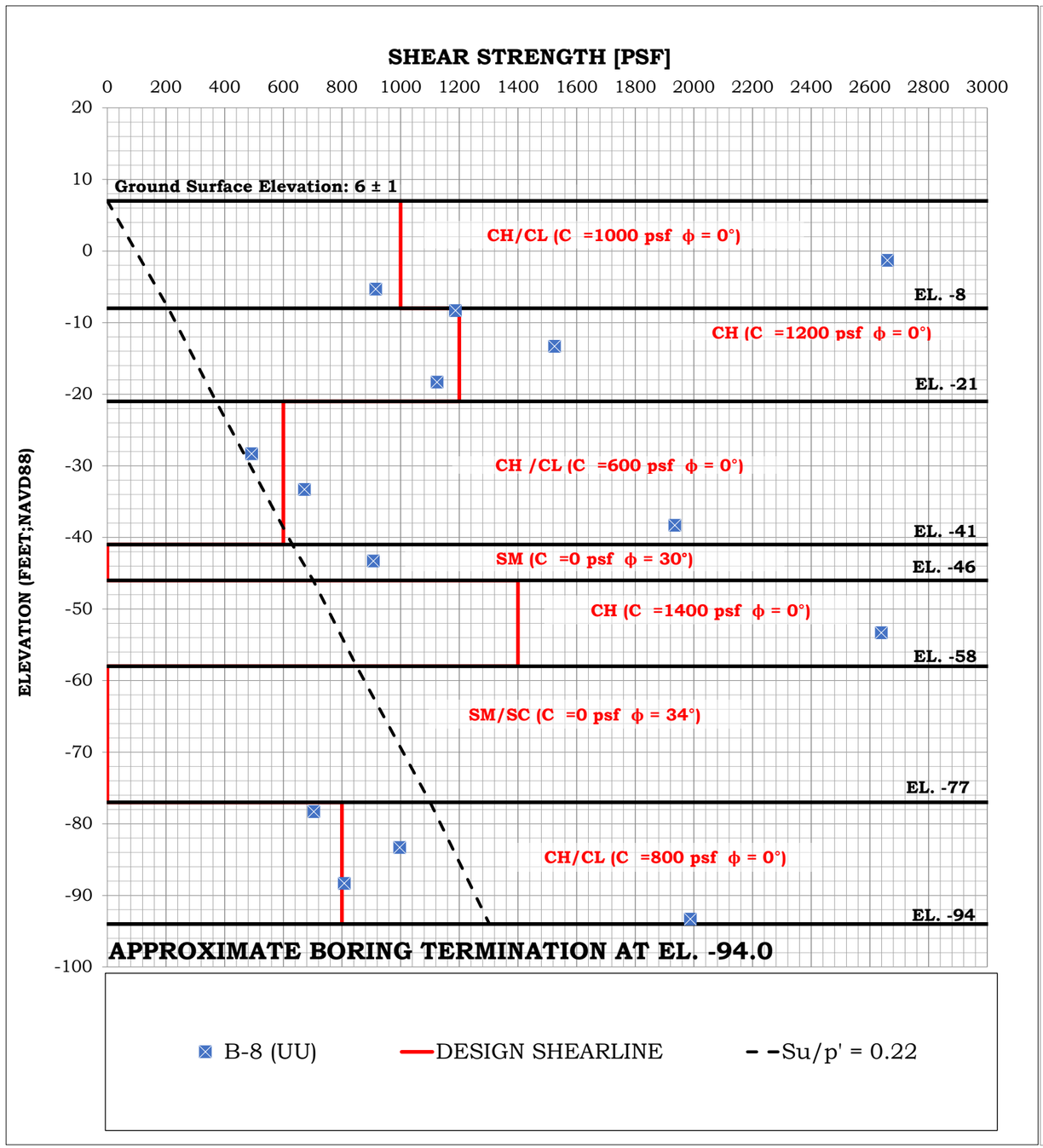


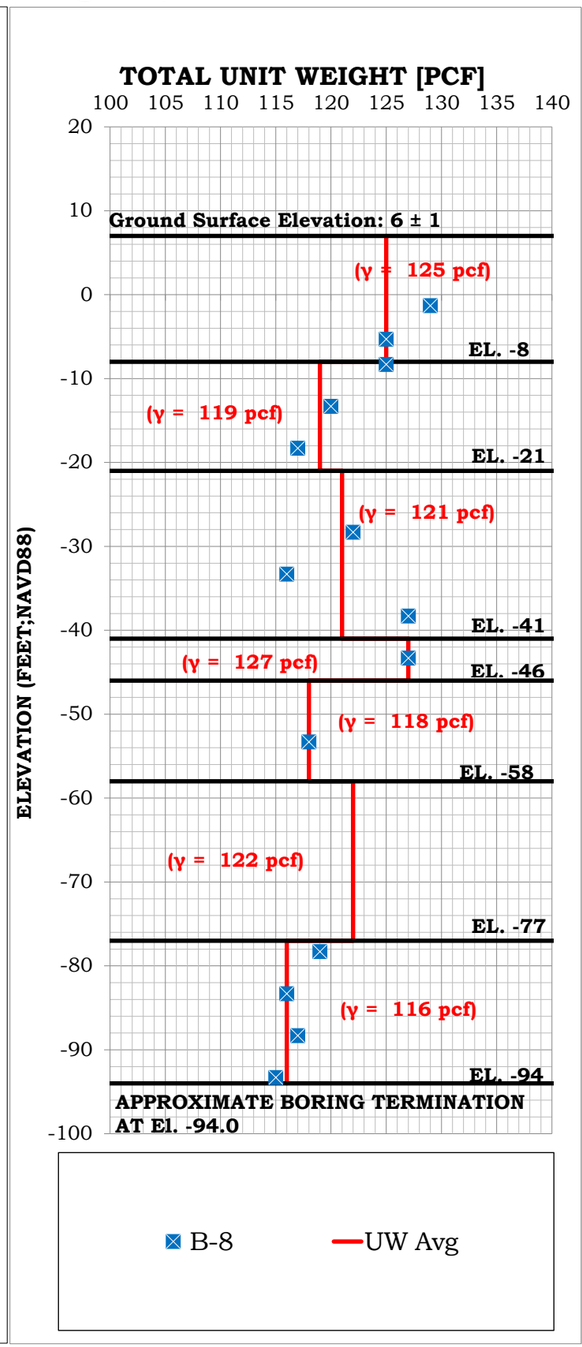


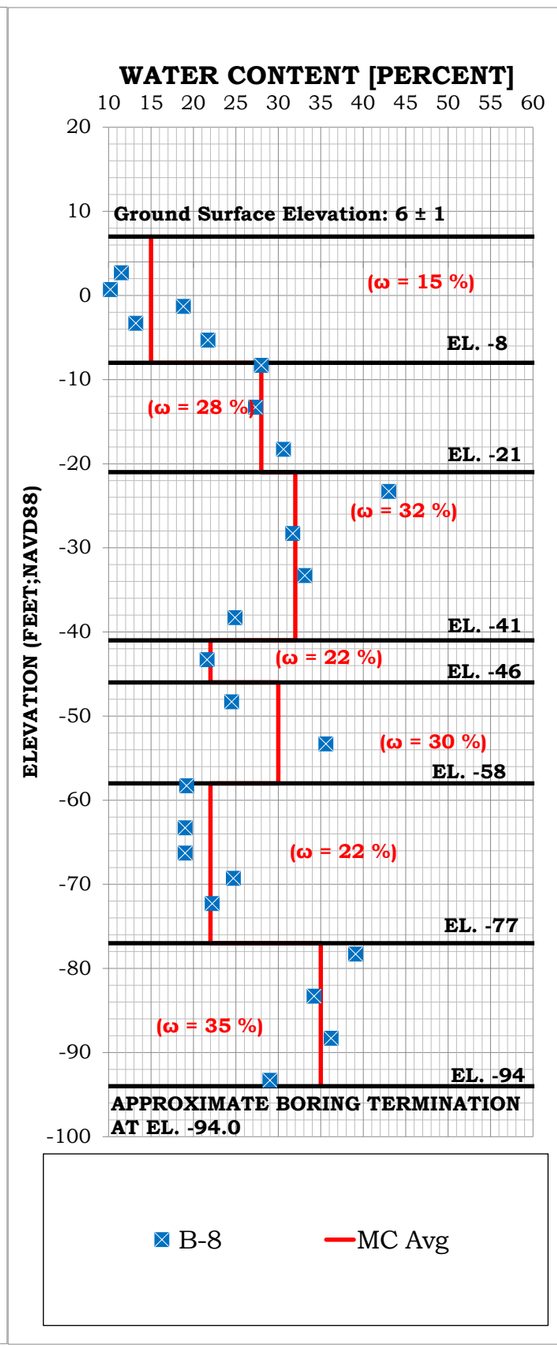


Gulf South File 24-057 **(Date: 11-06-2024)**	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	**St. Tammany Parish** **St. Tammany Trace Bridges** **St. Tammany Parish, LA**	**For** **St. Tammany Parish** **Covington, LA**	**Soil Design Parameters** **FIGURE NO. 2.3**

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 11 (Boring B-8)

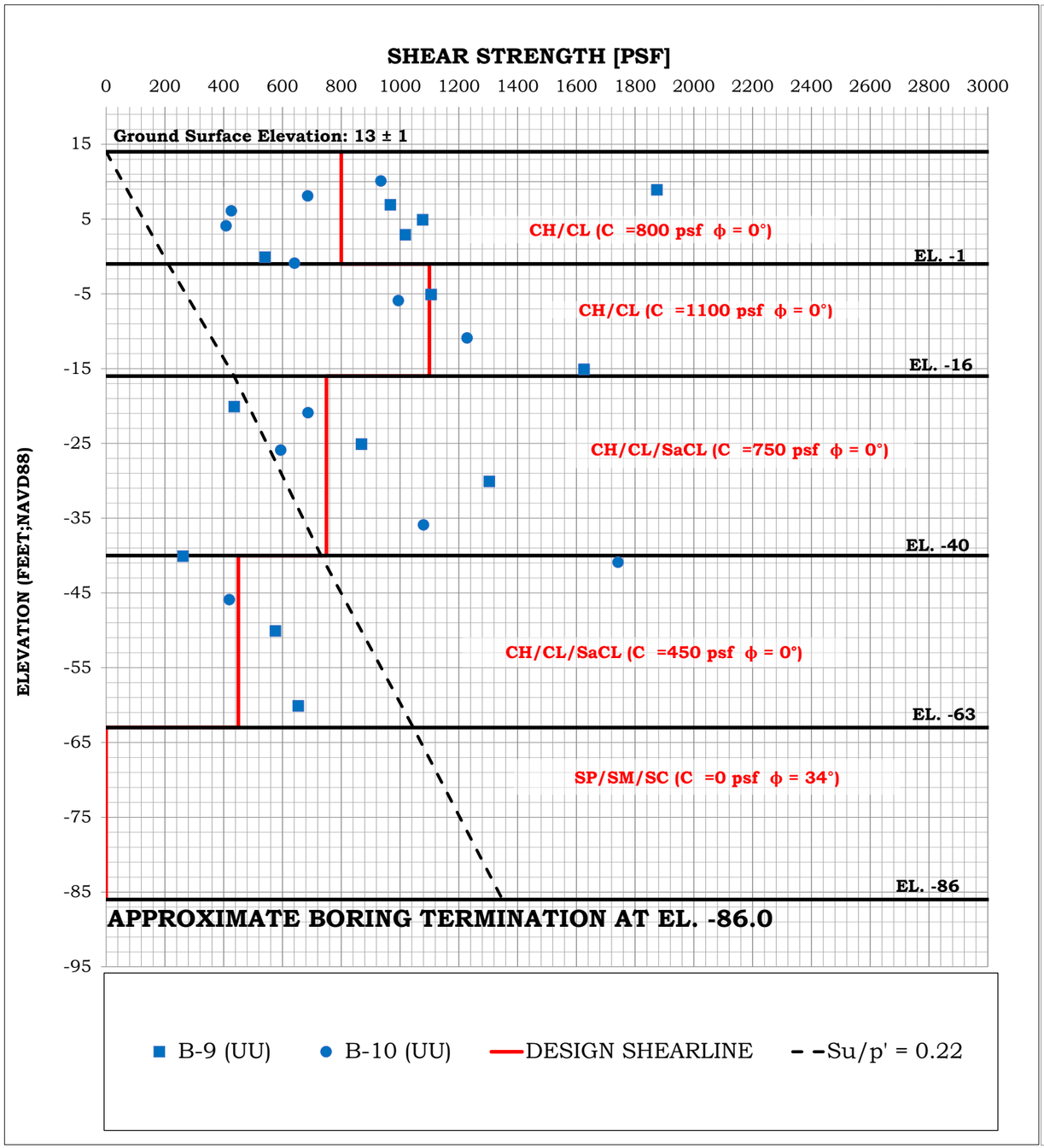


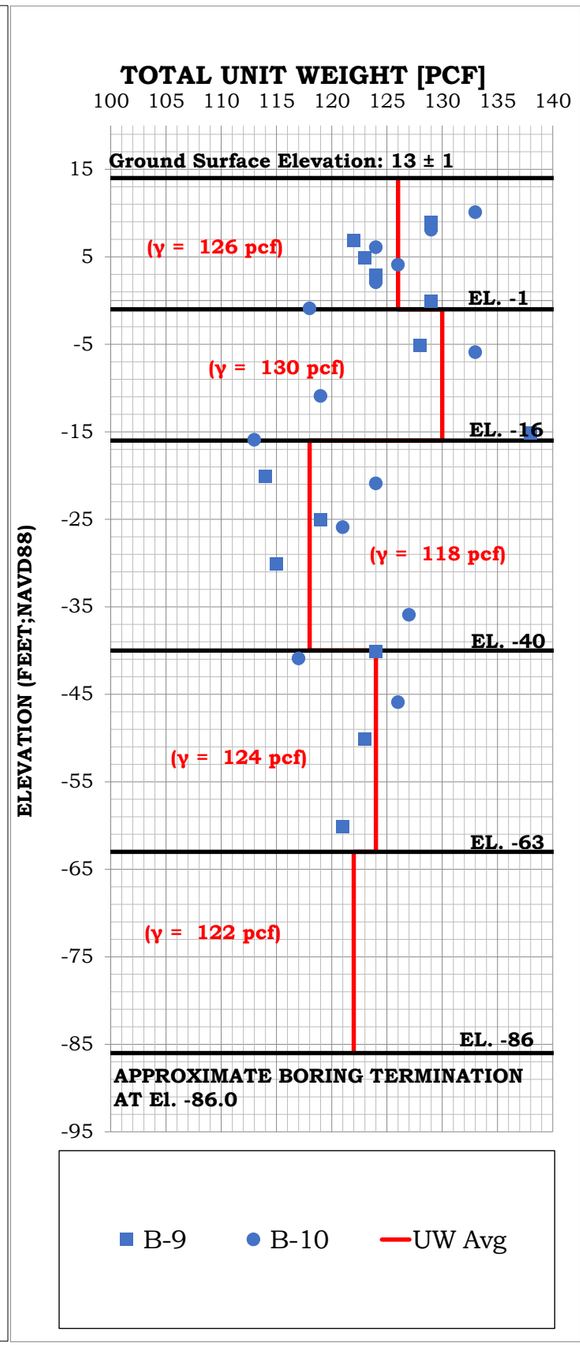


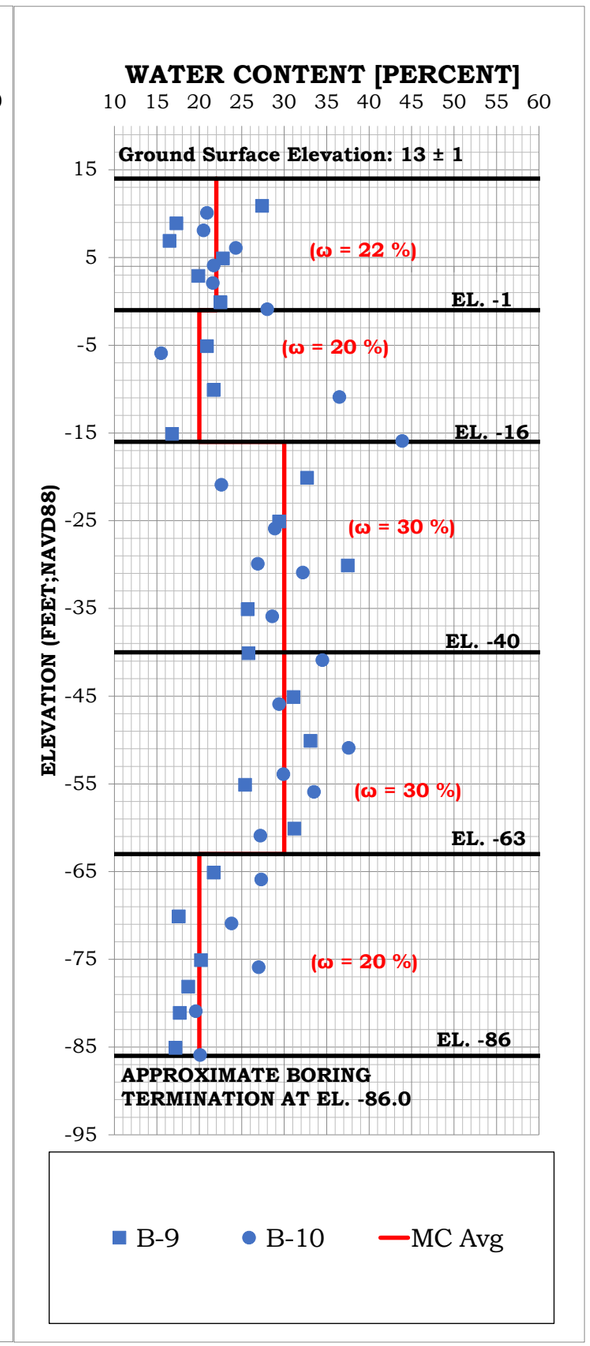


Gulf South File 24-057 **(Date: 11-06-2024)**	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	**St. Tammany Parish** **St. Tammany Trace Bridges** **St. Tammany Parish, LA**	**For** **St. Tammany Parish** **Covington, LA**	**Soil Design Parameters** **FIGURE NO. 2.4**

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 12 (Borings B-9 and B-10)

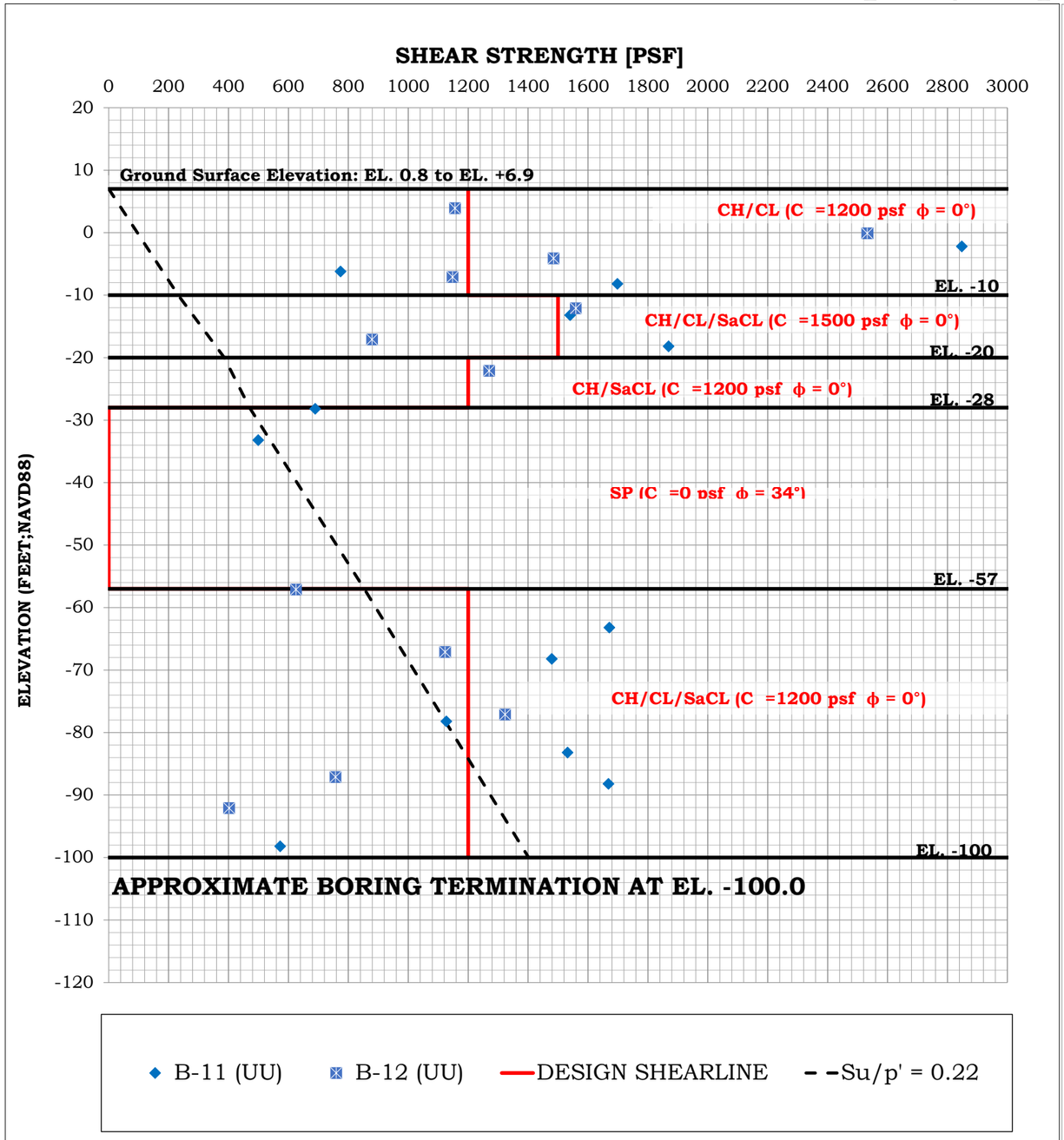


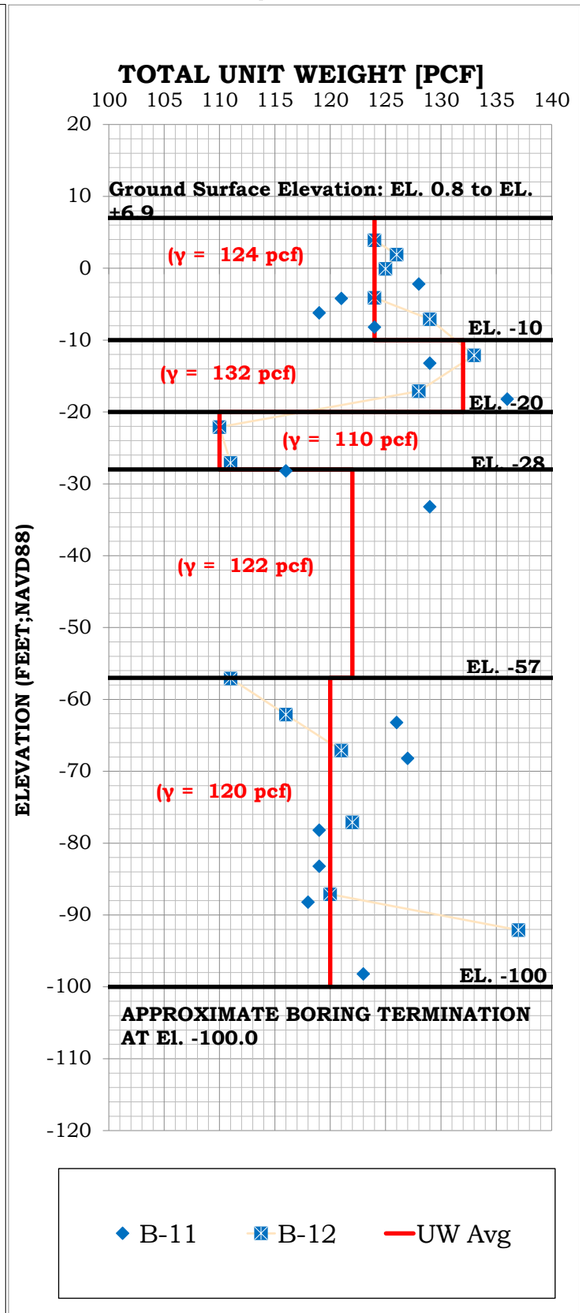


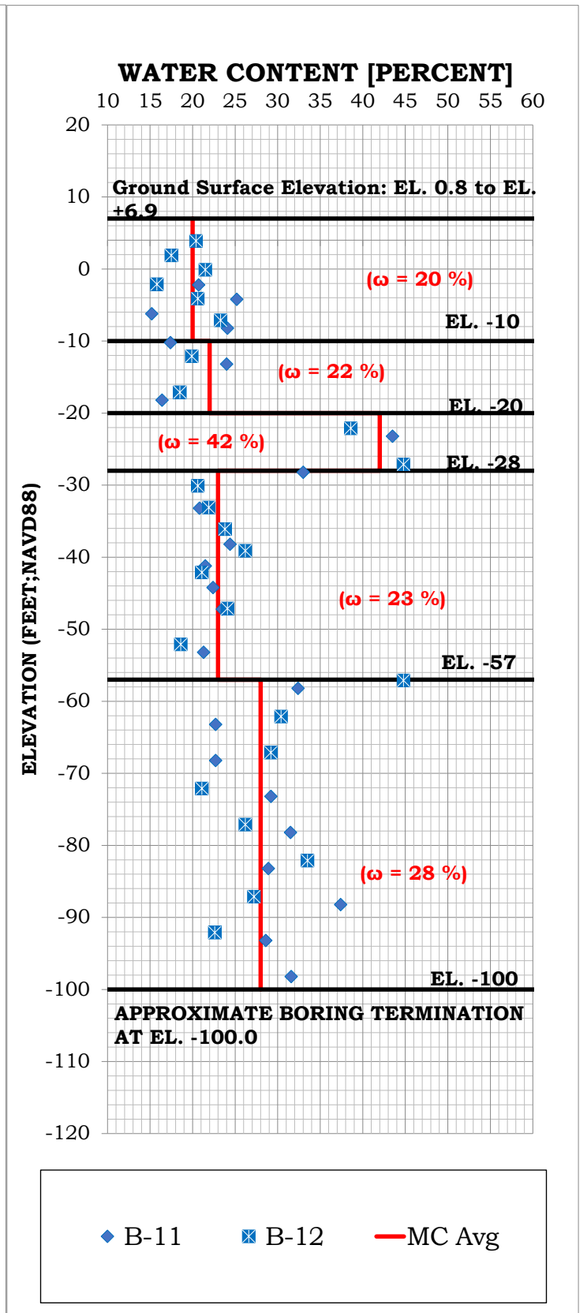


Gulf South File 24-057 (Date: 11-04-2024)	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	St. Tammany Parish St. Tammany Trace Bridge Rehabilitation St. Tammany Parish, LA	For St. Tammany Parish Covington, LA	Soil Design Parameters FIGURE NO. 2.5

DESIGN SHEARLINE FOR ST. TAMMANY TRACE BRIDGES
Bridge 13 (Borings B-11 and B-12)







Gulf South File 24-057 (Date: 11-06-2024)	GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	**St. Tammany Parish St. Tammany Trace Bridges St. Tammany Parish, LA**	**For St. Tammany Parish Covington, LA**	**Soil Design Parameters**
				FIGURE NO. 2.6

APPENDIX A

BORING LOGS AND CROSS SECTION REPORT

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301271/-89.904593

SOIL BORING: B-1

Date Started:	09/20/2024	Date Completed:	09/20/2024	Lat Lng:	30.301271, -89.904593
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~9.9'
		2.00				5.5							**ASPHALT**, 2.5-in. ASPHALT over 16-in. Sandy Clay Base (1.0)
		1.00	7-11-12 (23)			14.5					67.4		Stiff to Very Stiff, gray, **SANDY LEAN CLAY** (**CL**), with trace organics
5		2.00		1.83	5.4	18.6	120	17-14-3					
		1.00				12.5		15-11-4			57.9		(8.0)
		1.50		1.27	6.8	19.6	131	29-12-17					Stiff, **SILTY LEAN CLAY** (**CL**), with sand
10		2.00		1.479	7.4	18.9	130	33-10-23					(13.0)
			13-27-23 (50)			13.4					13		Very Dense, gray, **SILTY SAND** (**SM**)
15													(16.0)
			14-21-24 (45)			15.1							Dense, gray and tan, **POORLY GRADED SAND** (**SP**) -with gravel
20			8-10-19 (29)			17.4							-with trace shells
			11-16-21 (37)			15.6					2.8		
25													(26.0)
			1-2-2 (4)			47.7					73.1		Soft, gray, **SANDY LEAN CLAY** (**CL**)
30													(33.0)
		1.25		1.123	15.1	45.8	111	82-24-58					Stiff, gray, **FAT CLAY** (**CH**)
35													(38.0)
		0.75		0.502	16.8	43.6	115	53-14-39					Medium Stiff, gray, **FAT CLAY** (**CH**), with silt and sand seams
													(40.0)

Graphics Legend

- At Time of Drilling (ATD)
- Approx. 15 minutes after initial reading.
- Asphalt
- CL
- CL
- SM
- SP
- CH
- Auger - Auger Sample
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301271/-89.904593

SOIL BORING: B-1

Date Started:	09/20/2024	Date Completed:	09/20/2024	Lat Lng:	30.301271, -89.904593
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~9.9'
													Medium Stiff, gray, **FAT CLAY** (**CH**), with silt and sand seams — 43.0
45		0.50		0.472	18.4	31.1	125	30-10-20					Soft, gray, **SILTY LEAN CLAY** (**CL**), with sand — 48.0
50		0.75		0.669	20.1	40.5	119						Medium Stiff, gray, **FAT CLAY** (**CH**), with shells — 53.0
55		0.75		0.861	21.8	31.3	122	39-16-23					Medium Stiff, gray, **SILTY LEAN CLAY** (**CL**), with shells, trace sand — 58.0
60		1.50				32.1		69-19-50					Stiff to Very Stiff, blue-gray, **FAT CLAY** (**CH**)
65		2.50		1.807	25.1	33.6	119	74-22-52					
70		3.50		2.877	26.8	36.8	116	85-25-60					
75		3.00		2.691	32.8	39.0	117	68-21-47					— 76.0
	X		5-3-7 (10)			19.3					16.7		Loose to Medium Dense, gray, **SILTY SAND** (**SM**)

Graphics Legend

- CH
- CL
- SM
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301271/-89.904593

SOIL BORING: B-1

Date Started:	09/20/2024	Date Completed:	09/20/2024	Lat Lng:	30.301271, -89.904593
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck Tooling: Rotary Drill Surface Elevation: ~9.9'
													Loose to Medium Dense, gray, **SILTY SAND** (**SM**)
			2-1-7 (8)			23.4							
85			11-15-18 (33)			24.4							83.0 Medium Dense to Dense, gray, **SILTY SAND** (**SM**)
90			11-7-7 (14)			24.6					19.3		93.0
95		0.50		0.915	39.4	26.5	129				49.2		Loose to Medium Dense, blue-gray, **CLAYEY SAND** (**SC**), with clay layers
100		1.00				23.4					43.1		100.0 Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- SM
- SC
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301278/-89.9051111 SOIL BORING: B-2

Date Started:	09/23/2024	Date Completed:	09/23/2024	Lat Lng:	30.301278, -89.905111
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~7.5'
		N/A				5.9							**ASPHALT**, 2.5-in. ASPHALT over sandy clay base (1.0)
		2.50		2.383	4.8	14.3	129	18-9-9					Very Stiff, gray, **SANDY LEAN CLAY** (**CL**)
5		2.00		2.465	5.4	18.0	132	17-15-2					
		0.25				15.9		15-6-9					(8.0)
		1.00		1.11	6.8	24.6	128	48-17-31					Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**), with trace sand (10.0)
10			WOR			4.3			31	54	14		Very Loose, tan, **GRAVELLY SAND** (**SP**) (12.0)
													Dense to Very Dense, gray, **SILTY SAND** (**SM**)
			19-28-26 (54)			15.0					16.5		
15													
			13-21-19 (40)			18.4							
20			8-17-23 (40)			15.4							(22.0)
			7-3-9 (12)			16.3					7.2		Medium Dense, gray, **POORLY GRADED SAND** (**SP**) (26.0)
25													Medium Stiff, gray, **FAT CLAY** (**CH**), with sand, trace gravel
		0.50		0.553	13.4	42.7	113				81.6		
30													(33.0)
		1.00		1.166	15.1	37.6	117	57-19-38					Medium Stiff to Stiff , gray, **FAT CLAY** (**CH**), with sand pockets
35													
		0.50		0.676	16.8	35.1	118	88-26-62					

Graphics Legend

- At Time of Drilling (ATD)
- Asphalt
- CL
- CL
- SP
- SM
- SP
- CH
- Auger - Auger Sample
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301278/-89.9051111

SOIL BORING: B-2

Date Started:	09/23/2024	Date Completed:	09/23/2024	Lat Lng:	30.301278, -89.905111
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck Tooling: Rotary Drill Surface Elevation: ~7.5'
													Medium Stiff to Stiff , gray, **FAT CLAY** (**CH**), with sand pockets
45	ST	0.50				31.7		35-12-23					43.0 Gray, **SILTY LEAN CLAY** (**CL**), with sand
													48.0
50	ST	1.00		0.618	20.1	28.9	124						Medium Stiff, gray, **FAT CLAY** (**CH**), with sand
													53.0
55	ST	2.50				43.9		80-25-55					Stiff, blue-gray, **FAT CLAY** (**CH**), with shells
60	ST	0.75		1.337	23.4	35.6	119						
65	ST	2.00				47.3		94-24-70					
70	ST	2.50		1.867	26.8	43.5	113						
75	ST	3.00		1.637	32.8	44.3	115	94-26-68					
													77.0
	SPT		WOR			23.7					10.8		Very Loose, gray, **SILTY SAND** (**SM**)

Graphics Legend

- CH
- CL
- SM
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.301278/-89.9051111 **SOIL BORING: B-2**

Date Started:	09/23/2024	Date Completed:	09/23/2024	Lat Lng:	30.301278, -89.905111
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck Tooling: Rotary Drill Surface Elevation: ~7.5'
													Very Loose, gray, **SILTY SAND** (**SM**)
			3-4-6 (10)			20.8							81.0 Medium Dense to Dense, gray, **SILTY SAND** (**SM**)
85			7-10-11 (21)			15.7					27.6		
			11-20-14 (34)			24.7					20.8		
90													93.0
		1.00		2.133	39.4	24.4	130	27-17-10			55.8		Stiff to Very Stiff, gray, **SANDY LEAN CLAY** (**CL**)
95													
		2.00		1.618	41.1	25.0	127	24-14-10					100.0
100													Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- SM
- CL
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325519/-89.976844

SOIL BORING: B-3

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325519, -89.976844
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~15.8'
						5.3							**ASPHALT**, 3-in. ASPHALT over 16-in. Sandy Clay Base — 1.0
		1.00		0.862	3.9	16.9	128	29-9-20					Medium Stiff, tan and gray, **SANDY LEAN CLAY** (**CL**) — 4.0
5		0.50		1.009	4.6	22.7	124	46-17-29					Stiff, tan and gray, **SILTY LEAN CLAY** (**CL**) — 6.0
		1.00		0.271	5.3	19.5	122	31-13-18					Soft, tan and gray, **SILTY LEAN CLAY** (**CL**) — 8.0
		1.50				15.7		40-13-27					Stiff, tan and gray, **SILTY LEAN CLAY** (**CL**)
10		1.50		1.073	6.6	19.7	120	36-15-21					-with wood — 13.0
		2.00		1.883	7.6	29.4	123						Stiff, blue-gray, **FAT CLAY** (**CH**), with trace sand and silt
15													
		1.00		1.163	9.3	28.7	121						— 23.0
20													
		2.50		1.427	10.9	37.7	114						Stiff, gray, **FAT CLAY** (**CH**)
25													
		2.50				36.3		85-24-61					
30													
		2.00		1.53	14.3	52.5	113						
35													
		1.50		1.262	15.9	35.7	119	62-24-38					

Graphics Legend

- At Time of Drilling (ATD)
- Approx. 15 minutes after initial…
- Asphalt
- CL
- CL
- CH
- Auger - Auger Sample
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325519/-89.976844

SOIL BORING: B-3

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325519, -89.976844
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Rig Type: Truck
Tooling: Rotary Drill
Surface Elevation: ~15.8'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Stiff, gray, **FAT CLAY** (**CH**)
45		2.50		2.459	17.6	24.1	125						
													48.0
		1.00				29.9		36-16-20					Blue-gray, **SILTY LEAN CLAY** (**CL**), with sand
50													
													53.0
		2.50		2.955	20.9	20.4	126						Very Stiff, blue-gray, **FAT CLAY** (**CH**), with sand
55													
		2.00				27.5		53-18-35					
60													
		2.50		2.164	24.3	31.9	118	62-21-41					
65													
													67.0
			2-2-4 (6)			27.1					27.4		Loose to Medium Dense, gray, **SILTY SAND** (**SM**)
70													
			2-4-8 (12)			22.4							
													73.0
75			14-24-31 (55)			24.0							Very Dense, gray, **SILTY SAND** (**SM**)
			9-28-50 (78/12")			24.1					14.7		

Graphics Legend

- CH
- CL
- SM
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325519/-89.976844 **SOIL BORING: B-3**

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325519, -89.976844
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Rig Type: Truck
Tooling: Rotary Drill
Surface Elevation: ~15.8'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
			28-27-26 (53)			21.5					10.1	SM	Very Dense, gray, **SILTY SAND** (**SM**)
													83.0
			3-6-3 (9)			33.5		49-15-34				CL	Medium Stiff to Stiff , blue-gray, **SILTY LEAN CLAY** (**CL**)
85													
			8-8-7 (15)			38.4							
90													
			WOR			38.9							93.0
												CH	Very Soft, blue-gray, **FAT CLAY** (**CH**)
95													
			WOR			44.6		85-23-62					
100													100.0

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- SM
- CH
- CL
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325614/-89.977097

SOIL BORING: B-4

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325614, -89.977097
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Dillon Elmore	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~12.3'
		N/A				10.8							**ASPHALT**, 2-in. ASPHALT over Sand base — 2.0
		1.50		1.435	1.3	18.8	129	34-12-22					Medium Stiff to Stiff , brown, **SILTY LEAN CLAY** (**CL**), with sand
5		2.00		1.56	2	18.0	126	31-13-18					
		1.00		0.808	2.7	14.6	123	24-13-11					
		1.00		1.075	3.3	16.3	131	24-10-14					— 10.0
10		3.50		3.005	4	18.6	132	52-14-38					Very Stiff, gray and tan, **FAT CLAY** (**CH**), with sand
		2.50		2.22	5	28.9	124						
15													— 18.0
		1.50				25.7		33-18-15					Tan, **SILTY LEAN CLAY** (**CL**), with sand
20													— 23.0
		2.00		0.504	8.3	42.8	113						Medium Stiff, light gray and tan, **FAT CLAY** (**CH**), with silt, and trace calcium deposits
25													— 28.0
		2.00		1.261	10	38.0	114	85-24-61					Medium Stiff to Stiff , tan and gray, **FAT CLAY** (**CH**)
30													
		3.00				39.1		84-28-56					
35													
		1.50		1.164	13.3	45.5	110	101-34-67					

Graphics Legend

- Asphalt
- CL
- CH
- Auger - Auger Sample
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325614/-89.977097

SOIL BORING: B-4

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325614, -89.977097
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Dillon Elmore	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck; Tooling: Rotary Drill; Surface Elevation: ~12.3'
45	ST	1.50		0.987	15	48.8	112						Medium Stiff to Stiff , tan and gray, **FAT CLAY** (**CH**)
													48.0
50	ST	1.50		1.076	16.7	27.5	122	33-18-15					Medium Stiff to Stiff , blue-gray, **SANDY LEAN CLAY** (**CL**)
55	ST	0.50				18.0					54.1		
													58.0
60	ST	1.50		0.675	20	35.5	123	60-17-43					Medium Stiff, blue-gray, **FAT CLAY** (**CH**), with trace sand
													62.0
65	SPT		12-21-25 (46)			19.5					12.2		Dense, gray, **SILTY SAND** (**SM**)
													66.0
	SPT		8-12-23 (35)			25.0							Medium Dense to Dense, gray, **POORLY GRADED SAND** (**SP**)
70	SPT		10-9-15 (24)			39.1					5.3		
75	SPT		15-23-21 (44)			24.3							
													78.0
	SPT		31-50 (50/6")			24.0					16.8		Very Dense, gray, **SILTY SAND** (**SM**)

Graphics Legend

- CH
- CL
- SM
- SP
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.325614/-89.977097

SOIL BORING: B-4

Date Started:	09/19/2024	Date Completed:	09/19/2024	Lat Lng:	30.325614, -89.977097
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Dillon Elmore	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Truck Tooling: Rotary Drill Surface Elevation: ~12.3'
													Very Dense, gray, **SILTY SAND** (**SM**)
													83.0
85			WOH			32.3		42-16-26					Very Soft, gray, **SILTY LEAN CLAY** (**CL**)
													88.0
90		1.00		0.99	30	34.9	112	57-18-39					Medium Stiff to Stiff , gray, **FAT CLAY** (**CH**)
		1.00				36.5							
95													
		1.50		1.247	33.3	38.5	115	62-18-44					
100													100.0

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- SM
- CL
- CH
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329083/-89.985858

SOIL BORING: B-5

Date Started:	09/03/2024	Date Completed:	09/03/2024	Lat Lng:	30.329083, -89.985858
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.1'
		N/A				5.0							**ASPHALT**, 4-in. ASPHALT over Stone base 2.0
		0.25		1.278	9.1	14.0	129	21-6-15					Medium Stiff to Stiff , tan and gray, **SANDY LEAN CLAY** (**CL**)
5		0.50				13.5							
		1.00				11.0	128	35-9-26					
		2.00				11.5							10.0
10		2.00		3.395	11.8	17.6	127	54-14-40					Very Stiff, gray, **FAT CLAY** (**CH**), with sand 13.0
		3.00		3.003	12.8	22.5	123	41-19-22					Stiff to Very Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand
15													
		1.00		1.189	14.4	28.8	124	26-14-12					
20													23.0
		2.50		1.621	16.1	34.0	120	53-21-32					Stiff, tan and gray, **FAT CLAY** (**CH**), with silt seams
25													28.0
		3.00		0.26	17.8	35.3	118	77-25-52					Soft, gray and tan, **FAT CLAY** (**CH**)
30													33.0
		3.75		2.015	19.4	44.9	111	96-27-69					Very Stiff, gray and tan, **FAT CLAY** (**CH**)
35													38.0
		1.50		1.258	21.1	28.1	124	45-16-29					Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**), with sand

Graphics Legend

- At Time of Drilling (ATD)
- Approx. 15 minutes after initial…
- Asphalt
- CL
- CH
- CL
- Auger - Auger Sample
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329083/-89.985858

SOIL BORING: B-5

Date Started:	09/03/2024	Date Completed:	09/03/2024	Lat Lng:	30.329083, -89.985858
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.1' Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**), with sand
													43.0
45		2.50		1.619	22.8	37.0	117	69-21-48					Stiff to Very Stiff, blue-gray, **FAT CLAY** (**CH**)
50		2.25		1.583	24.4	25.9	123						
55		4.00				22.7		58-17-41					
60		2.00		2.457	27.8	30.4	123	78-27-51					
65		3.50		2.062	29.4	36.3	119	88-23-65					
													67.0
70			16-34-56 (90)			16.3					9.4		Very Dense, gray, **POORLY GRADED SAND** (**SP**)
			21-32-18 (50/9")			19.1							
75			28-38-12 (50/7.5")			20.2							
			29-50 (50/6")			19.4					9.7		

Graphics Legend

- CL
- CH
- SP
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329083/-89.985858 **SOIL BORING: B-5**

Date Started:	09/03/2024	Date Completed:	09/03/2024	Lat Lng:	30.329083, -89.985858
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.1'
													Very Dense, gray, **POORLY GRADED SAND** (**SP**)
													83.0
			WOR			33.5					81.9		Very Soft, **FAT CLAY** (**CH**), with sand
85													
													88.0
		1.50		0.883	37.8	43.1	114	68-20-48					Medium Stiff, gray, **FAT CLAY** (**CH**)
90													
		1.25		0.974	39.4	45.5	108						
95													
		0.50		0.875	41.1	39.0	114						
100													100.0

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- SP
- CH
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329244/-89.986269

SOIL BORING: B-6

Date Started:	09/13/2024	Date Completed:	09/13/2024	Lat Lng:	30.329244, -89.986269
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Blow Counts (N/Refusal)	Compressive Strength (tsf)	Confining Pressure (PSI)	Moisture Content (%)	Wet Density (PCF)	Atterberg Limits (LL-PL-PI)	% Gravel	% Sand	% Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.4'
						6.9					9.1		**FILL**, brown, **SILTY SAND** (**SM**)
		N/A				11.6					11.8		4.0
5		0.50				13.7		31-13-18					Brown, **CLAYEY SAND** (**SC**), with clay layers
		0.50		1.458	7.8	14.2	131				41.9		6.0 Stiff to Very Stiff, gray, **SANDY LEAN CLAY** (**CL**), with sand layers
		0.50				14.6							
10		0.50		2.084	9.2	14.5	131				42.3		
													13.0
15		0.50		1.326	10.2	23.0	128	44-13-31					Stiff, gray and tan, **SILTY LEAN CLAY** (**CL**), with sand
													18.0
20		2.50		1.454	11.8	33.7	121	58-21-37					Medium Stiff to Stiff , gray and tan, **FAT CLAY** (**CH**) -with silt and sand seams
25		3.00		1.697	13.5	37.7	117	72-25-47					
30		3.00		1.29	15.2	40.0	113	82-29-53					
35		1.00		0.944	16.8	46.2	113	82-28-54					
		2.00		1.562	18.5	46.6	110	93-33-60					

Graphics Legend

- At Time of Drilling (ATD)
- Aprox. 15 minutes after initial…
- SM
- SC
- CL
- CL
- CH
- Auger - Auger Sample
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329244/-89.986269

SOIL BORING: B-6

Date Started:	09/13/2024	Date Completed:	09/13/2024	Lat Lng:	30.329244, -89.986269
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.4'
													Medium Stiff to Stiff , gray and tan, **FAT CLAY** (**CH**)
45		1.50		0.923	20.2	31.1	119				83.4		
													48.0
50		2.00		1.761	21.8	24.6	125				56		Stiff, blue-gray, **SANDY LEAN CLAY** (**CL**)
													53.0
55		4.00		2.641	23.5	26.9	127	66-19-47					Very Stiff, blue-gray, **FAT CLAY** (**CH**)
60		4.00		2.986	25.2	28.7	119	72-26-46					
													63.0
65		1.00		1.402	26.8	23.7	126	34-14-20					Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**), with sand layers
													67.0
70			19-24-26 (50/9")			20.4					9.3		Very Dense, gray, **POORLY GRADED SAND** (**SP**)
			23-37-13 (50/7")			21.9							
75			21-33-17 (50/7")			22.4							
			30-50 (50/6")			18.7					6.9		

Graphics Legend

- CH
- CL
- CL
- SP
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.329244/-89.986269

SOIL BORING: B-6

Date Started:	09/13/2024	Date Completed:	09/13/2024	Lat Lng:	30.329244, -89.986269
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Kevin Daigle	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~14.4'
													Very Dense, gray, **POORLY GRADED SAND** (**SP**)
													83.0
		1.25		1.294	33.5	33.9	119	61-18-43					Medium Stiff to Stiff , gray, **FAT CLAY** (**CH**)
85													
		1.75		1.439	35.2	33.9	117	55-18-37					
90													
		1.75		0.674	36.8	34.0	116	62-21-41					-with trace sand
95													
		1.50				33.6		57-20-37					-with sand
100													100.0
													Soil boring completed at 100 feet below the ground surface.

Graphics Legend

SP

ST - Shelby Tube

CH

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.330906/-89.990419 SOIL BORING: B-8

Date Started:	08/26/2024	Date Completed:	08/26/2024	Lat Lng:	30.330906, -89.990419
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~5.7'
		N/A				7.9							Tan and gray, **SILTY LEAN CLAY** (**CL**), with sand
		N/A				11.5		30-13-17					
5		3.00				10.2							6.0
		3.00		2.66	2.7	18.8	129	56-17-39					Very Stiff, tan and gray, **FAT CLAY** (**CH**), with sand
		3.50				13.2		34-15-19					8.0
10		0.50		0.915	4	21.7	125						Medium Stiff, gray and tan, **SILTY LEAN CLAY** (**CL**), with sand
													13.0
		2.00		1.187	5	28.0	125	56-18-38					Stiff, blue-gray, **FAT CLAY** (**CH**)
15													
		1.50		1.525	6.7	27.3	120						-with trace sand
20													
		1.50		1.124	8.3	30.6	117	74-22-52					
25													
		2.00				43.0		94-28-66					
30													33.0
		1.00		0.492	11.7	31.7	122						Soft, tan and gray, **FAT CLAY** (**CH**), with sand
35													38.0
		0.50		0.672	13.3	33.1	116	51-21-30					Medium Stiff, gray, **FAT CLAY** (**CH**), with sand

Graphics Legend

CL

CH

Auger - Auger Sample

ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.330906/-89.990419 SOIL BORING: B-8

Date Started:	08/26/2024	Date Completed:	08/26/2024	Lat Lng:	30.330906, -89.990419
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~5.7'
													Medium Stiff, gray, **FAT CLAY** (**CH**), with sand
													43.0
45	ST	3.50		1.935	15	24.9	127	48-18-30					Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**)
													47.0
50	ST	0.50		0.907	16.7	21.6	127				16.6		Loose to Medium Dense, gray, **SILTY SAND** (**SM**)
													51.0
55	SPT		13-13-12 (25)			24.5		67-23-44					Very Stiff, blue-gray, **FAT CLAY** (**CH**)
60	ST	2.50		2.639	20	35.6	118	79-29-50					
													62.0
65	SPT		8-8-21 (29)			19.2					18		Medium Dense, gray, **SILTY SAND** (**SM**)
													68.0
70	SPT		22-50 (50/6")			19.0					13.5		Very Dense, gray, **SILTY SAND** (**SM**)
	SPT		21-38-12 (50/7")			19.0							
													73.0
75	SPT		21-12-17 (29)			24.7					35.5		Medium Dense, gray, **CLAYEY SAND** (**SC**)
													78.0
	SPT		24-27-24 (50/8")			22.2					11.4		Very Dense, gray, **SILTY SAND** (**SM**)

Graphics Legend

- CH
- CL
- SM
- SC
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.330906/-89.990419

SOIL BORING: B-8

Date Started:	08/26/2024	Date Completed:	08/26/2024	Lat Lng:	30.330906, -89.990419
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Ian Poche	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Very Dense, gray, **SILTY SAND** (**SM**) 83.0
85		0.50		0.704	28.3	39.1	119	53-15-38					Medium Stiff, gray, **FAT CLAY** (**CH**)
90		0.50		0.997	30	34.2	116	55-16-39					
95		0.50		0.808	31.7	36.2	117						98.0
100		1.50		1.988	33.3	29.0	115	49-19-30					Stiff, blue-gray, **SILTY LEAN CLAY** (**CL**) 100.0

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~5.7'

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

SM
CL
CH
ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3363429/-90.0041541 SOIL BORING: B-9

Date Started:	08/23/2024	Date Completed:	08/23/2024	Lat Lng:	30.336343, -90.004154
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Tyler Pregeant	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~13.9'
		N/A				6.5							**ASPHALT**, 3-in. ASPHALT over sand base 1.0
		0.75				27.4							**FILL**, brown, **POORLY GRADED SAND** (**SP**) 2.0
5		0.75		1.874	7.6	17.3	129	47-17-30					Medium Stiff to Stiff , gray, **SILTY LEAN CLAY** (**CL**), with sand
		0.75		0.967	8.3	16.5	122	30-11-19					
		0.50		1.077	8.9	22.8	123	49-16-33					
10		0.50		1.018	9.6	19.9	124	49-16-33					
	▽												13.0
15		0.25		0.541	10.6	22.5	129	36-15-21					Medium Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand 18.0
		2.25		1.106	12.3	20.9	128	30-12-18					Stiff, **SILTY LEAN CLAY** (**CL**), with sand
20													
		2.00				21.7		29-14-15					28.0
25													
		1.50		1.626	15.6	16.8	138						Stiff, gray, **SANDY LEAN CLAY** (**CL**), with silt
30													33.0
		0.25		0.436	17.3	32.7	114	71-28-43					Soft, blue-gray, **FAT CLAY** (**CH**), with trace sand
35													38.0
		1.00		0.869	18.9	29.4	119	46-15-31					Medium Stiff, gray, **FAT CLAY** (**CH**), with sand and wood

Graphics Legend

- ▽ At Time of Drilling (ATD)
- Asphalt
- SP
- CL
- CL
- CH
- Auger - Auger Sample
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3363429/-90.0041541

SOIL BORING: B-9

Date Started:	08/23/2024	Date Completed:	08/23/2024	Lat Lng:	30.336343, -90.004154
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Tyler Pregeant	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~13.9'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
45		1.00		1.304	20.6	37.5	115	67-26-41					Medium Stiff, gray, **FAT CLAY** (**CH**), with sand and wood
													48.0
50		2.00				25.7		39-21-18					Gray, **SILTY LEAN CLAY** (**CL**), with silt and sand layers
													53.0
55		0.50		0.262	23.9	25.8	124						Soft, gray, **SANDY LEAN CLAY** (**CL**)
													58.0
60		1.00				31.1		55-25-30					Gray, **FAT CLAY** (**CH**), with trace sand and silt
													63.0
65		0.50		0.576	27.3	33.1	123	37-22-15					Medium Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand
													68.0
70			7-7-15 (22)			25.4					53.2		Very Stiff, gray, **SANDY LEAN CLAY** (**CL**)
													73.0
75		0.25		0.654	25	31.2	121				90.9		Medium Stiff, gray, **SILT** (**ML**), with trace sand
													78.0
			7-13-14 (27)			21.7					37.9		Medium Dense, gray, **CLAYEY SAND** (**SC**)

Graphics Legend

- CH
- CL
- CL
- ML
- SC
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3363429/-90.0041541 **SOIL BORING: B-9**

Date Started:	08/23/2024	Date Completed:	08/23/2024	Lat Lng:	30.336343, -90.004154
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Tyler Pregeant	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~13.9'
													Medium Dense, gray, **CLAYEY SAND** (**SC**)
													83.0
85			13-23-29 (52)			17.6					14.9		Very Dense, gray, **SILTY SAND** (**SM**)
90			22-30-39 (69)			20.2							
			21-29-39 (68)			18.7							
95			19-28-50 (78/12")			17.7							
			17-29-32 (61)			17.2					12.6		
100													100.0
													Soil boring completed at 100 feet below the ground surface.

Graphics Legend

SC

SM

SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.33661/-90.00472

SOIL BORING: B-10

Date Started:	07/26/2024	Date Completed:	07/26/2024	Lat Lng:	30.33661, -90.00472
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	8.5'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Jake Higginbotham	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~13.1'
						8.0							**ASPHALT**, 4-in. ASPHALT over 16-in. Stone Base
													2.0
		1.75		0.935	6.9	20.9	133	38-12-26					Soft to Medium Stiff, tan and gray, **SILTY LEAN CLAY** (**CL**), with sand
5		0.25		0.686	7.6	20.5	129						
		0.25		0.426	8.3	24.3	124	41-13-28					
		0.50		0.408	8.9	21.7	126	40-13-27					
10		0.50				21.6	124	51-15-36					
													10.0
▽													Medium Stiff, gray and tan, **FAT CLAY** (**CH**), with sand
		0.50		0.641	10.6	28	118						
15													
													18.0
		1.75		0.994	12.3	15.5	133	29-12-17					Medium Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand
20													
													23.0
		0.50		1.228	13.9	36.5	119	64-20-44					Stiff, brown and tan, **FAT CLAY** (**CH**)
25													
		0.50				43.9	113	87-25-62					
30													
													33.0
		1.00		0.687	17.3	22.6	124	44-14-30					Medium Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand
35													
													38.0
		1.00		0.594	18.9	28.9	121				90.7		Medium Stiff, gray, **SILT** (**ML**)

Graphics Legend

- ▽ At Time of Drilling (ATD)
- Asphalt
- CL
- CH
- ML
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.33661/-90.00472 | SOIL BORING: B-10

Date Started:	07/26/2024	Date Completed:	07/26/2024	Lat Lng:	30.33661, -90.00472
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	8.5'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Jake Higginbotham	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~13.1'
													Medium Stiff, gray, **SILT** (**ML**)
		1.00				26.9							44.0
45		1.75				32.2		56-25-31					Stiff, gray, **FAT CLAY** (**CH**), with silt
		0.50		1.08	22.3	28.6	127						
50													
		3.00		1.742	23.9	34.5	117	64-22-42					
55													58.0
		0.25		0.419	25.6	29.4	126	34-16-18					Soft, gray, **SILTY LEAN CLAY** (**CL**)
60													63.0
			13-14-22 (36)			37.6					52.3		Very Stiff, **SANDY LEAN CLAY** (**CL**), with sand layers
65													66.0
			11-18-18 (36)			29.9					36		Medium Dense, **CLAYEY SAND** (**SC**)
			8-16-22 (38)			33.5					51.4		68.0
70													Very Stiff, gray, **SANDY LEAN CLAY** (**CL**), with sand layers
			6-16-25 (41)			27.2							73.0
75													Dense to Very Dense, gray, **POORLY GRADED SAND** (**SP**)
			19-50-x (50/6")			27.3					11.4		

Graphics Legend

- ML
- CH
- CL
- CL
- SC
- SP
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.33661/-90.00472 **SOIL BORING: B-10**

Date Started:	07/26/2024	Date Completed:	07/26/2024	Lat Lng:	30.33661, -90.00472
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	8.5'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Jake Higginbotham	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
85			17-50-x (50/6")			23.8							Dense to Very Dense, gray, **POORLY GRADED SAND** (**SP**)
90			27-50-x (50/6")			27.0							
95			26-50-x (50/6")			19.6					5.8		
100			25-50-x (50/6")			20.1					13.6		100.0

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~13.1'

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

SP

SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3500658/-90.0386832 **SOIL BORING: B-11**

Date Started:	07/25/2024	Date Completed:	07/25/2024	Lat Lng:	30.350066, -90.038683
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	12'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Tyler Pregeant	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~0.8'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
		N/A				7.6							**ASPHALT**, 7-in. ASPHALT over 14-in. Stone base 2.0
		1.25		2.848	6.9	20.7	128	67-17-50					Stiff to Very Stiff, gray and tan, **FAT CLAY** (**CH**), with sand and silt
5		2.00				25.2	121	56-16-40					6.0
		1.00		0.774	8.3	15.2	119	37-13-24					Medium Stiff to Stiff , gray and tan, **SILTY LEAN CLAY** (**CL**), with sand
		1.25		1.698	8.9	24.1	124						
10		0.50				17.4		49-15-34					
▽													
		1.50		1.54	10.6	24	129	49-15-34					
15													18.0
		2.75		1.869	12.3	16.4	136	28-12-16					Stiff, gray, **SANDY LEAN CLAY** (**CL**)
20													23.0
		1.00				43.5							Medium Stiff, gray, **FAT CLAY** (**CH**), with sand
25													
		0.50		0.689	15.6	33	116	66-18-48					
30													
		0.25		0.499	17.3	20.8	129						33.0
35													Soft to Medium Stiff, gray, **SANDY LEAN CLAY** (**CL**)
													37.0
	⊠		6-17-24 (41)			24.4					10.1		Dense to Very Dense, gray, **POORLY GRADED SAND** (**SP**)

Graphics Legend

- ▽ At Time of Drilling (ATD)
- Asphalt
- CH
- CL
- CL
- SP
- Auger - Auger Sample
- ST - Shelby Tube
- ⊠ SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3500658/-90.0386832 **SOIL BORING: B-11**

Date Started:	07/25/2024	Date Completed:	07/25/2024	Lat Lng:	30.350066, -90.038683
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	12'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Tyler Pregeant	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~0.8'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
45			7-18-50 (68/12")			21.5							Dense to Very Dense, gray, **POORLY GRADED SAND** (**SP**)
			12-34-50 (84/12")			22.4					13.3		
50			10-15-29 (44)			23.5							
55			12-40-37 (77)			21.3					4.3		
													58.0
60			WOR			32.4		N-62-14	6	33	61		Very Soft, gray, **SANDY LEAN CLAY** (**CL**)
													63.0
65		1.00		1.671	28.9	22.7	126	46-14-32					Stiff, gray, **SILTY LEAN CLAY** (**CL**), with sand
70		1.75		1.479	23.3	22.7	127	41-14-27					
75		1.50				29.2		46-21-25					
													78.0
		1.00		1.127	26.7	31.5	119	53-20-33					Stiff, gray, **FAT CLAY** (**CH**), with sand

Graphics Legend

- SP
- CL
- CL
- CH
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.3500658/-90.0386832 **SOIL BORING: B-11**

Date Started:	07/25/2024	Date Completed:	07/25/2024	Lat Lng:	30.350066, -90.038683
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Cave In Depth:	12'	Driller:	Ross White
Drilling Firm:	Gulf South Engineering and Testing	Hammer Drop:	30	Hammer Type:	Auto
Hammer Weight:	140	Logged By:	Tyler Pregeant	Method:	Mud Rotary
Hammer Efficiency:	85%	Depth:	100'		

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~0.8'
													Stiff, gray, **FAT CLAY** (**CH**), with sand
85		1.00		1.532	28.3	28.9	119						
		2.00		1.668	30	37.4	118	81-25-56					
90													
													92.0
			WOR			28.6					37.2		Very Loose, gray, **CLAYEY SAND** (**SC**)
95													96.0
		.050		0.572	33.3	31.6	123						Medium Stiff, gray, **SANDY LEAN CLAY** (**CL**)
100													100.0

Soil boring completed at 100 feet below the ground surface.

Graphics Legend

- CH
- SC
- CL
- ST - Shelby Tube
- SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.35039/-90.03947 **SOIL BORING: B-12**

Date Started:	07/24/2028	Date Completed:	07/24/2028	Lat Lng:	30.35039, -90.03947
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Jake Higginbotham	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Rig Type: Ardco K-1000
Tooling: Rotary Drill
Surface Elevation: ~6.9'

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
						6.1							**ASPHALT**, 4-inches ASPHALT over 16-in. Stone base 2.0
		2.00		1.156	8.2	20.4	124	58-15-43					Stiff to Very Stiff, dark gray, **FAT CLAY** (**CH**), with sand and silt
5		3.75				17.5	126	53-16-37					
		1.00		2.532	9.6	21.5	125	57-15-42					
		1.00				15.8							10.0
10		1.00		1.485	10.9	20.6	124	27-13-14					Stiff, gray and tan, **SILTY LEAN CLAY** (**CL**), with trace sand
		1.00		1.148	11.9	23.3	129	31-13-18					
15	▼												18.0
		1.00		1.559	13.6	19.9	133						Medium Stiff to Stiff , gray and tan, **FAT CLAY** (**CH**), with silt
20													
		0.25		0.879	15.2	18.5	128	54-18-36					
25													
		1.00		1.27	16.9	38.6	110	87-29-58					
30													32.0
	⊠		11-14-16 (30)			44.8	111	68-23-45			11.9		Medium Dense, gray, **POORLY GRADED SAND** (**SP**)
35													
	⊠		10-11-14 (25)			20.6							
	⊠		6-7-14			21.9					8.6		

Graphics Legend

- ▽ At Time of Drilling (ATD)
- ▼ Aprrox. after 15 minutes of the…
- Asphalt
- CH
- CL
- SP
- Auger - Auger Sample
- ST - Shelby Tube
- ⊠ SPT - Standard Penetration Test

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.35039/-90.03947 SOIL BORING: B-12

Date Started:	07/24/2028	Date Completed:	07/24/2028	Lat Lng:	30.35039, -90.03947
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Jake Higginbotham	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~6.9'
			6-7-14 (21)			21.9					8.6		Medium Dense, gray, **POORLY GRADED SAND** (**SP**)
			15-44-50 (94/12")			23.8							42.0 Very Dense, gray, **POORLY GRADED SAND** (**SP**)
45			6-16-34 (50)			26.2					12.8		
			12-35-42 (77)			21.1							
50													
			6-21-29 (50)			24.1			5	87	8		-with trace gravel
55													
			12-27-50 (77/12")			18.6					7.4		
60													62.0
		0.25		0.625	21.7	44.8	111	68-23-45					Medium Stiff to Stiff , gray, **FAT CLAY** (**CH**), with sand pockets
65													
		0.25				30.4	116	51-18-33					
70													
		0.75		1.123	25	29.2	121						
75													77.0
			14-17-14 (31)			21.1					22.3		Medium Dense, gray, **SILTY SAND** (**SM**)

Graphics Legend

- SP
- CH
- SM
- SPT - Standard Penetration Test
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants
15 Veterans Memorial Blvd,
Kenner, LA
Office: +1 (504) 305-4401

St. Tammany Trace Bridges

Lat/Lon: 30.35039/-90.03947 **SOIL BORING: B-12**

Date Started:	07/24/2028	Date Completed:	07/24/2028	Lat Lng:	30.35039, -90.03947
Location Accuracy:	Tablet GPS	Project No:	24-057	Client Name:	St. Tammany Parish
Boring Diameter:	4 in	Driller:	Ross White	Drilling Firm:	Gulf South Engineering and Testing
Hammer Drop:	30	Hammer Type:	Auto	Hammer Weight:	140
Logged By:	Jake Higginbotham	Method:	Mud Rotary	Hammer Efficiency:	85%
Depth:	100'				

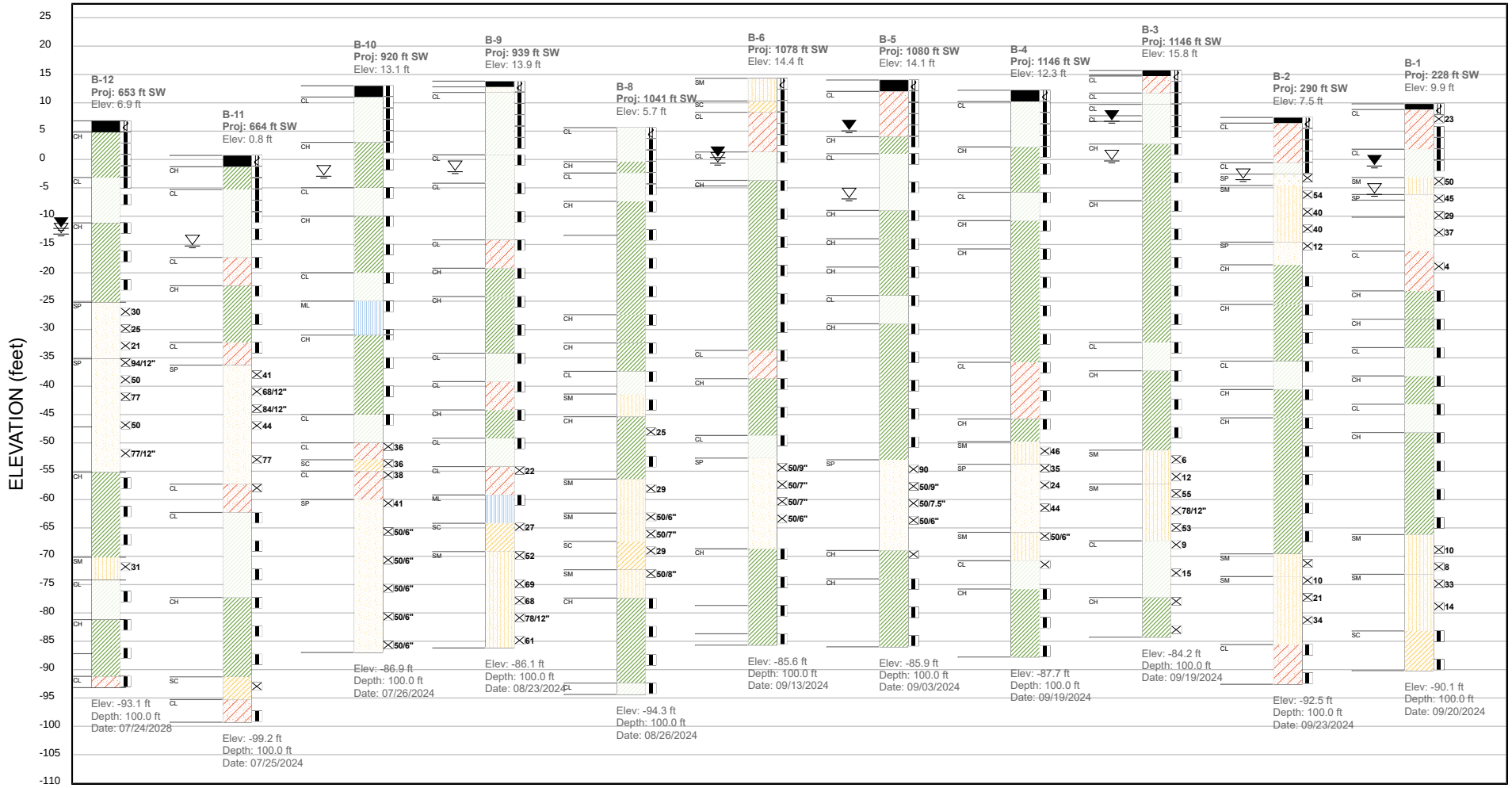
Depth (ft)	Sample Type	Lab: Pocket Penetrometer (tsf)	Lab: Blow Counts (N/Refusal)	Lab: Compressive Strength (tsf)	Lab: Confining Pressure (PSI)	Lab: Moisture Content (%)	Lab: Wet Density (PCF)	Lab: Atterberg Limits (LL-PL-PI)	Lab: % Gravel	Lab: % Sand	Lab: % Fines	Soil Graphic	Visual Classification and Remarks
													Rig Type: Ardco K-1000 Tooling: Rotary Drill Surface Elevation: ~6.9'
													Medium Dense, gray, **SILTY SAND** (**SM**) 81.0
85		0.75		1.323	28.3	26.2	122	31-17-14					Stiff, gray, **SILTY LEAN CLAY** (**CL**) 88.0
90		1.50				33.5		78-33-45					Medium Stiff to Stiff , **FAT CLAY** (**CH**)
95		1.00		0.757	31.7	27.2	120						-with sand 98.0
100		0.25		0.402	33.3	22.6	137	29-12-17					Soft, gray, **SANDY LEAN CLAY** (**CL**) 100.0
													Soil boring completed at 100 feet below the ground surface.

Graphics Legend

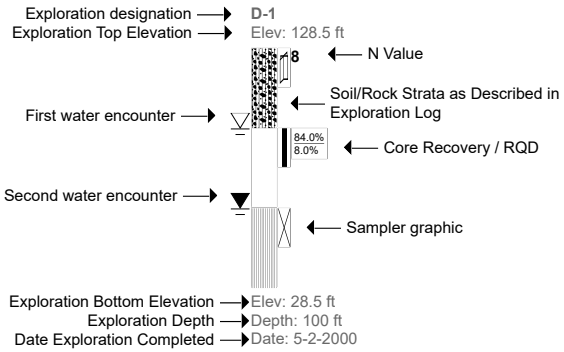
- SM
- CL
- CH
- CL
- ST - Shelby Tube

REMARKS

Borehole backfilled per LA DOTD/DEQ requirements upon completion.



EXPLORATION LOG LEGEND



LEGEND KEY

- Asphalt
- CH
- CL
- SP
- SM
- CL
- SC
- ML
- SP

ST. TAMMANY PARISH
ST. TAMMANY TRACE BRIDGES
ST. TAMMANY PARISH, LA

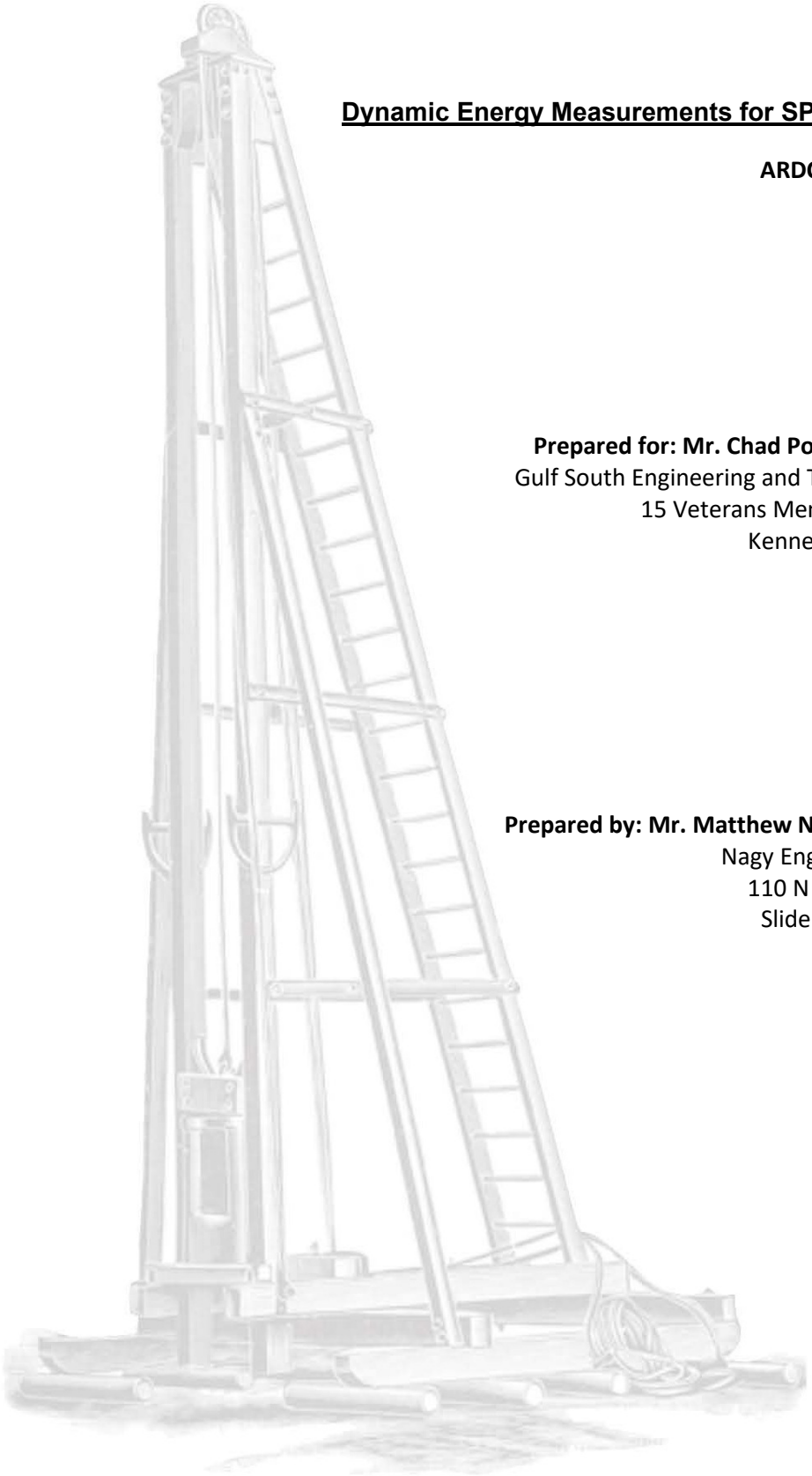
CROSS SECTIONS REPORT

GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

APPENDIX B

HAMMER CALIBRATION REPORTS

Nagy Engineers, Inc.



Dynamic Energy Measurements for SPT Hammer

ARDCO Truck Rig

Prepared for: Mr. Chad Poche, P.E. of
Gulf South Engineering and Testing, Inc.
15 Veterans Memorial Blvd.
Kenner, LA 70062

Prepared by: Mr. Matthew Nagy, P.E. of
Nagy Engineers, Inc.
110 N Queens Dr.
Slidell, LA 70458

September 24, 2024

Mr. Chad Poche, P.E.
Gulf South Engineering and Testing, Inc.
15 Veterans Memorial Blvd.
Kenner, LA 70062

Re: SPT Hammer Calibration using Dynamic Energy Measurements
ARDCO Truck Rig
Nagy Engineers Job No. 241034-1

Dear Mr. Poche:

This report summarizes the results from SPT Energy Measurement Testing performed at a site near Lacombe, Louisiana. The testing was conducted on September 19, 2024, to calibrate an automatic SPT hammer. The hammer reportedly had a 140 lbs drop weight and a 2.5 ft drop height. Appendix A gives a summary of the field dynamic test data and results while Appendix B contains the dynamic testing equipment calibration sheets. An overall summary of the test results is presented in Table 1.

OBJECTIVES

The objective of the testing was to perform SPT Energy Measurements according to ASTM D4633-16. These objectives were met using our Pile Driving Analyzer®, Model 8G – SPT Software, which acquired the SPT hammer transfer energies using an instrumented NWJ rod section and two piezoresistive accelerometers.

TESTING AND EQUIPMENT

Drilling and SPT Hammer Equipment

SPT energy measurements were collected for an automatic SPT hammer. This hammer was mounted on an ARDCO Truck Rig. The serial number for the rig was not provided. Energy records were collected at various increments at one boring location between the depths of 74.0 ft and 89.5 ft. The drilling method was mud rotary. Appendix A contains photos of the rig that was tested.

Instrumentation

A Model 8G Pile Driving Analyzer® (PDA) data acquisition system was used to collect and process the dynamic measurements of force and velocity. The sampling frequency was set to 50 kHz. A two-foot-long section of NWJ rod subsection was instrumented with one full bridge foil resistance strain gage and two piezoresistive accelerometers mounted at the midpoint location of the instrumented subsection. Strain

and acceleration signals were conditioned, digitized, stored, and processed using the PDA. Selected output from the PDA for each recorded impact included the maximum calculated rod top force (FMX), maximum rod top velocity (VMX), maximum average compressive stress (CSX), maximum energy transfer (EFV and EMX), energy transfer ratio (ETR) and the hammer operating rate (BPM).

MEASUREMENTS AND CALCULATIONS

FV Method (EFV = EMX)

Energy transfer to the instrumented SPT rod location, EMX, was computed by the PDA using force, F(t), and velocity, v(t), records as follows:

$$EMX = \int_a^b F(t) \cdot v(t) dt$$

The time "a" corresponds to the start of the record when the energy transfer begins, and "b" is the time at which energy transferred to the rod reaches a maximum value. The EFV Method is currently recognized in ASTM D4633-16, is equivalent to the EMX Method, and is the theoretical correct result. Both EMX and EFV methods were reported in Appendix A. No other energy calculation methods were reported.

RESULTS

Upon return to the office, the records collected by the PDA were checked for consistency and accuracy. For example, records from very weak startup and/or final impacts were not included in the results.

Appendix A contains a representative plot of force and normalized velocity versus time and tabular data for the hammer blows that corresponded to the N-Value at each dynamically monitored sampling depth. The PDA results include the EFV (transferred energy by the EFV method, as recommended by ASTM D4633-16), EMX (transferred energy by the equivalent EMX method), ETR (energy transfer ratio), BPM (hammer operating rate), FMX (maximum rod top force), CSX (maximum compressive stress), and VMX (maximum rod top velocity).

Table 1 summarizes the average transfer energy values calculated by the EFV method. The records averaged consist only of the hammer blows at each dynamically monitored sampling depth that correspond to the N-Values (i.e., the blows in the initial 6 inches of split spoon driving were not considered as part of the average). The “energy transfer ratio” (ETR) is defined as the ratio of maximum transferred energy EFV divided by the theoretical hammer potential energy of 350 ft-lbs. The average hammer operating rate is reported in blows per minute (BPM).

CONCLUSIONS

ARDCO Truck Rig – SPT Auto Hammer

The average maximum energy transfer (EFV) to the instrumented NWJ rod section using the Auto SPT Hammer was 296 ft-lbs which is 85% of the 350 ft-lbs potential energy of the hammer. The standard deviation of the transfer efficiency was 2% over the five samples that were collected. The average hammer operation rate during the time of testing was 37.0 blows/min.

We appreciate this opportunity to be of assistance to you on this project, please contact our office if you have any questions regarding this report, or if we may be of further service.

Very truly yours,
Nagy Engineers, Inc.

Matthew Nagy, P.E. LA # 36793

Enclosed: Appendices A and B

TABLE 1: Summary of SPT Energy Measurements
ARDCO Truck Rig

Rod Length Below Gages *LE*	Depth Below Top of Ground	Reported SPT Blow Counts	Average Transfer Force *FMX*	Average Compressive Stress *CSX*	Average Hammer Blow Rate *BPM*	Average Energy Transfer *EFV*	Average Transfer Efficiency *ETR*
ft	ft	blows/6"	kips	ksi	blows/min	ft-lbs	%
Boring B-3							
80.0	74.0 to 75.5	18, 24, 36	48	33.5	41.0	294	84%
84.0	77.0 to 78.5	8, 25, 41	55	38.0	41.6	306	87%
86.0	80.0 to 81.5	25, 27, 26	53	36.8	36.3	296	85%
89.0	83.0 to 84.5	3, 5, 3	51	35.2	32.4	296	85%
93.0	88.0 to 89.5	7, 8, 7	50	34.9	33.6	289	83%
		Overall Average			**37.0**	**296**	**85%**
		Standard Deviation			**4.2**	**6**	**2%**

Notes

LE - Length from the bottom of the spoon to the PDA gage location.
FMX - Maximum Force Meaused at PDA gage locationn.
CSX - Maximum Average Compressive Stress at PDA gage location.
BPM - Hammer operation rate (blows/minute)
EFV - Computed, from $\int Fv\,dt$, maximum energy transferred to PDA gage location.
ETR - Computed, from EFV/PE, maximum energy transfer efficiency

Appendix A

Results from SPT Dynamic Energy Measurements

Gulf South Engineering and Testing, Inc. – SPT Rig Calibration

ARDCO Truck Rig

Mud Rotary Drilling Method

Gulf South Engineering and Testing – ARDCO Truck Rig

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

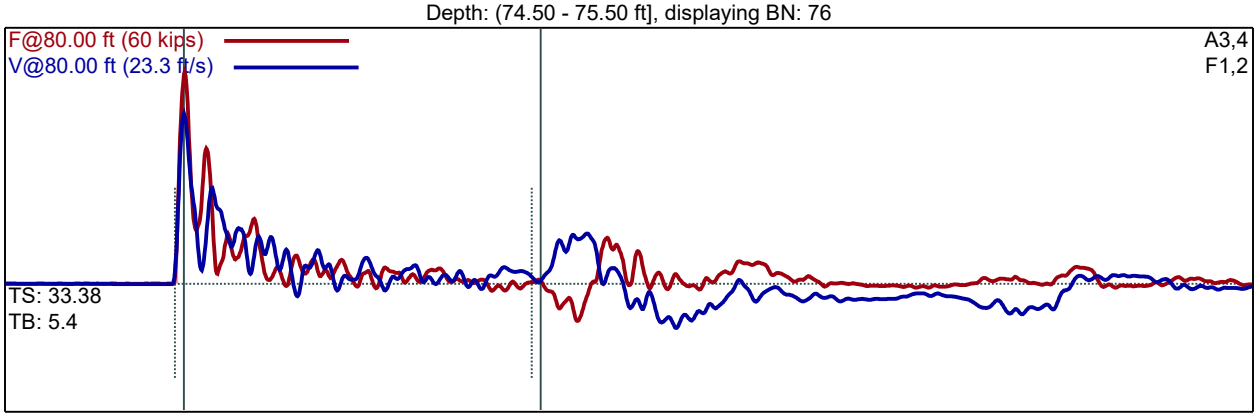
Ardco Truck Rig
MJN
B-3

74.0 to 75.5 ft
Interval start: 9/19/2024

AR: 1.44 in^2
LE: 80.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (74.50 - 75.50 ft], displaying BN: 76



F1 : [413NWJ1] 209.259 PDICAL (1) FF6
F2 : [413NWJ2] 211.669 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
19	24	74.52	32.4	32.9	283	283	80.9	39.7	47	14.3
20	24	74.54	32.7	33.2	285	285	81.3	39.7	47	14.4
21	24	74.56	32.6	33.1	283	283	81.0	39.9	47	14.3
22	24	74.58	32.8	33.4	287	287	82.1	39.7	47	14.7
23	24	74.60	32.3	32.9	281	281	80.3	39.1	47	14.3
24	24	74.63	32.8	33.3	287	287	82.1	38.8	47	14.6
25	24	74.65	32.4	33.0	283	283	80.8	38.7	47	14.4
26	24	74.67	32.7	33.3	286	286	81.8	38.9	47	14.5
27	24	74.69	33.9	34.5	296	296	84.6	39.0	49	15.1
28	24	74.71	32.9	33.4	289	289	82.5	38.9	47	14.7
29	24	74.73	32.8	33.4	289	289	82.4	38.9	47	14.5
30	24	74.75	32.9	33.4	289	289	82.7	39.1	47	14.6
31	24	74.77	33.5	34.0	295	295	84.2	39.3	48	14.9
32	24	74.79	34.3	34.9	302	302	86.3	39.6	49	15.3
33	24	74.81	33.2	33.7	291	291	83.2	39.5	48	14.8
34	24	74.83	32.8	33.2	291	291	83.3	39.2	47	14.7
35	24	74.85	32.9	33.5	292	292	83.5	39.3	47	14.8
36	24	74.88	33.1	33.6	292	292	83.4	39.6	48	14.8
37	24	74.90	33.7	34.2	296	296	84.5	39.6	49	15.1
38	24	74.92	32.5	32.9	287	287	82.1	39.3	47	14.5
39	24	74.94	32.4	32.8	287	287	82.0	39.7	47	14.4
40	24	74.96	32.6	33.0	289	289	82.6	39.7	47	14.6
41	24	74.98	32.8	33.3	289	289	82.6	40.0	47	14.7
42	24	75.00	33.4	33.9	294	294	83.9	40.6	48	15.0
43	36	75.01	33.3	33.8	291	291	83.1	40.7	48	14.9
44	36	75.03	33.2	33.7	290	290	83.0	40.5	48	14.8
45	36	75.04	33.6	34.1	297	297	84.9	40.8	48	15.1

46	36	75.06	34.0	34.5	293	293	83.9	40.7	49	15.2
47	36	75.07	32.8	33.3	293	293	83.7	40.5	47	14.7
48	36	75.08	33.5	34.1	293	293	83.7	40.5	48	15.0
49	36	75.10	34.0	34.5	297	297	85.0	40.8	49	15.3
50	36	75.11	34.2	34.8	299	299	85.4	40.7	49	15.3
51	36	75.13	33.7	34.3	293	293	83.7	40.7	49	15.2
52	36	75.14	34.2	34.8	299	299	85.5	40.9	49	15.4
53	36	75.15	34.2	34.8	301	301	86.1	41.2	49	15.4
54	36	75.17	34.3	34.8	300	300	85.8	41.3	49	15.4
55	36	75.18	34.3	34.9	303	303	86.5	41.5	49	15.4
56	36	75.19	34.4	35.0	303	303	86.6	41.6	50	15.5
57	36	75.21	34.4	35.0	303	303	86.5	41.3	49	15.5
58	36	75.22	33.9	34.4	295	295	84.2	41.6	49	15.2
59	36	75.24	34.1	34.6	298	298	85.2	41.7	49	15.3
60	36	75.25	34.2	34.8	298	298	85.2	41.4	49	15.4
61	36	75.26	33.5	34.0	296	296	84.5	41.4	48	15.0
62	36	75.28	34.0	34.6	295	295	84.2	42.0	49	15.2
63	36	75.29	33.9	34.5	295	295	84.3	41.9	49	15.2
64	36	75.31	34.4	35.0	300	300	85.8	42.0	50	15.4
65	36	75.32	33.7	34.2	295	295	84.4	42.4	48	15.0
66	36	75.33	33.5	34.0	294	294	83.9	42.5	48	15.0
67	36	75.35	33.6	34.0	296	296	84.6	42.8	48	14.9
68	36	75.36	33.5	34.1	296	296	84.5	43.0	48	14.9
69	36	75.38	33.2	33.7	294	294	84.1	43.0	48	14.7
70	36	75.39	33.7	34.3	298	298	85.2	43.2	49	15.0
71	36	75.40	33.8	34.4	298	298	85.0	43.7	49	15.1
72	36	75.42	33.9	34.4	298	298	85.2	43.9	49	15.2
73	36	75.43	34.1	34.7	300	300	85.8	43.8	49	15.3
74	36	75.44	33.8	34.3	299	299	85.5	43.8	49	15.2
75	36	75.46	34.2	34.8	301	301	86.0	44.0	49	15.4
76	36	75.47	34.4	35.0	303	303	86.5	43.9	50	15.6
77	36	75.49	34.3	34.8	300	300	85.7	43.8	49	15.4
78	36	75.50	34.6	35.2	302	302	86.2	44.0	50	15.4
		Average	33.5	34.1	294	294	84.1	41.0	48	15.0
		Std Dev	0.6	0.7	6	6	1.6	1.6	1	0.4

N-value: 60

Sample Interval Time: 86.45 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

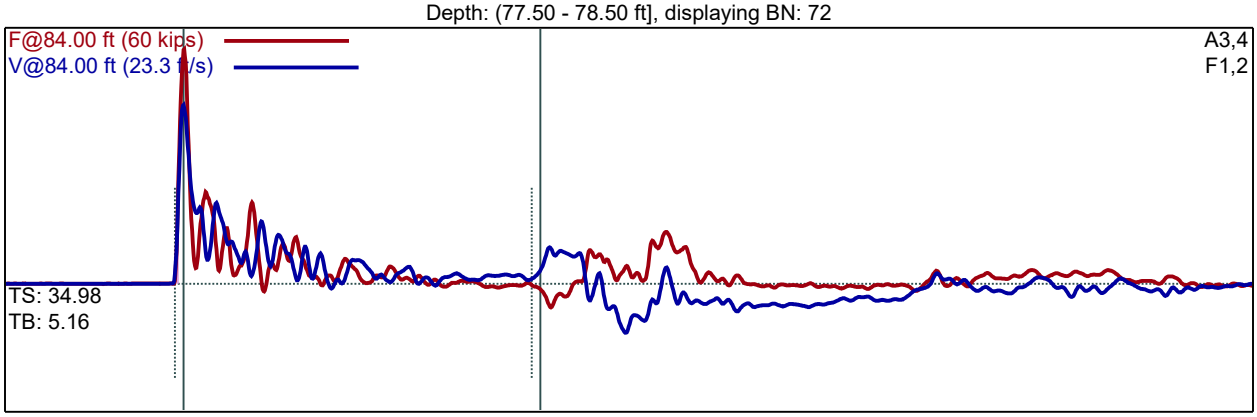
Ardco Truck Rig
MJN
B-3

77.0 to 78.5 ft
Interval start: 9/19/2024

AR: 1.44 in^2
LE: 84.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (77.50 - 78.50 ft], displaying BN: 72



F1 : [413NWJ1] 209.259 PDICAL (1) FF6
F2 : [413NWJ2] 211.669 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
9	25	77.52	38.1	38.5	292	292	83.5	41.9	55	16.1
10	25	77.54	37.9	38.2	293	293	83.8	42.1	55	16.0
11	25	77.56	37.8	38.1	303	303	86.7	41.9	54	16.0
12	25	77.58	38.1	38.4	299	299	85.3	41.9	55	16.1
13	25	77.60	38.1	38.3	300	300	85.6	42.0	55	16.1
14	25	77.62	38.1	38.3	303	303	86.7	41.9	55	16.1
15	25	77.64	38.3	38.4	305	305	87.2	41.8	55	16.0
16	25	77.66	38.3	38.4	304	304	86.9	41.9	55	16.1
17	25	77.68	38.1	38.2	308	308	87.9	41.9	55	16.0
18	25	77.70	38.0	38.1	307	307	87.7	41.7	55	16.0
19	25	77.72	37.7	37.9	307	307	87.9	42.0	54	15.8
20	25	77.74	38.1	38.2	304	304	87.0	41.9	55	16.0
21	25	77.76	38.2	38.2	305	305	87.1	41.7	55	16.0
22	25	77.78	38.1	38.1	308	308	88.1	41.7	55	16.0
23	25	77.80	37.9	38.0	308	308	87.9	42.0	55	15.9
24	25	77.82	38.1	38.2	310	310	88.5	42.0	55	16.0
25	25	77.84	38.2	38.2	305	305	87.2	41.8	55	16.0
26	25	77.86	37.9	38.1	308	308	88.1	41.8	55	15.9
27	25	77.88	38.2	38.3	307	307	87.7	41.9	55	16.0
28	25	77.90	38.4	38.5	306	306	87.3	41.7	55	16.1
29	25	77.92	38.3	38.3	304	304	86.9	41.8	55	16.1
30	25	77.94	37.9	38.0	304	304	86.9	42.0	55	15.9
31	25	77.96	38.5	38.5	308	308	87.9	41.7	55	16.2
32	25	77.98	38.4	38.4	308	308	88.0	41.8	55	16.2
33	25	78.00	38.3	38.4	309	309	88.2	42.0	55	16.2
34	41	78.01	38.4	38.4	303	303	86.7	41.7	55	16.2
35	41	78.02	38.3	38.5	304	304	86.8	41.7	55	16.2

36	41	78.04	38.4	38.5	305	305	87.1	41.9	55	16.2
37	41	78.05	38.5	38.6	306	306	87.5	41.9	55	16.2
38	41	78.06	38.1	38.4	312	312	89.1	41.7	55	16.2
39	41	78.07	38.6	38.9	309	309	88.4	41.8	56	16.4
40	41	78.09	38.4	38.5	306	306	87.5	41.9	55	16.3
41	41	78.10	38.2	38.4	306	306	87.4	41.8	55	16.3
42	41	78.11	38.5	38.5	309	309	88.3	42.0	55	16.3
43	41	78.12	38.4	38.5	306	306	87.5	41.9	55	16.3
44	41	78.13	38.3	38.4	305	305	87.2	41.9	55	16.1
45	41	78.15	37.9	37.9	310	310	88.5	42.0	55	16.0
46	41	78.16	37.7	37.8	311	311	88.9	41.9	54	16.0
47	41	78.17	37.7	37.8	311	311	88.8	41.8	54	16.0
48	41	78.18	37.9	38.1	312	312	89.3	41.6	55	16.1
49	41	78.20	38.4	38.5	308	308	88.1	41.8	55	16.2
50	41	78.21	37.9	38.0	311	311	88.8	41.7	55	16.1
51	41	78.22	37.9	37.9	310	310	88.6	41.1	55	16.0
52	41	78.23	38.0	38.1	313	313	89.3	41.6	55	16.0
53	41	78.24	37.9	38.0	308	308	88.1	41.8	55	16.0
54	41	78.26	37.9	37.9	309	309	88.4	41.4	55	16.1
55	41	78.27	37.1	37.2	304	304	86.8	41.5	53	15.8
56	41	78.28	37.0	37.1	304	304	86.8	41.6	53	15.8
57	41	78.29	36.5	36.7	302	302	86.2	41.4	53	15.6
58	41	78.30	37.2	37.2	304	304	87.0	41.7	53	15.8
59	41	78.32	37.5	37.5	310	310	88.5	41.8	54	16.0
60	41	78.33	36.6	36.6	303	303	86.6	41.4	53	15.6
61	41	78.34	37.1	37.2	305	305	87.1	41.4	53	15.8
62	41	78.35	37.2	37.3	302	302	86.3	41.7	54	15.8
63	41	78.37	37.7	37.8	301	301	86.0	38.5	54	16.1
64	41	78.38	37.5	37.5	299	299	85.4	38.0	54	16.0
65	41	78.39	38.0	38.0	306	306	87.3	39.6	55	16.2
66	41	78.40	38.2	38.3	304	304	86.8	41.5	55	16.3
67	41	78.41	38.5	38.5	306	306	87.4	41.1	55	16.4
68	41	78.43	38.2	38.2	309	309	88.3	41.6	55	16.3
69	41	78.44	37.8	37.8	301	301	85.9	41.7	54	16.1
70	41	78.45	38.0	38.0	304	304	86.9	41.3	55	16.2
71	41	78.46	37.6	37.6	302	302	86.3	41.6	54	16.0
72	41	78.48	38.2	38.2	309	309	88.2	41.6	55	16.3
73	41	78.49	37.7	37.9	303	303	86.7	41.3	54	16.1
74	41	78.50	37.8	37.8	307	307	87.9	41.5	54	16.3
		Average	38.0	38.1	306	306	87.3	41.6	55	16.1
		Std Dev	0.4	0.4	4	4	1.1	0.7	1	0.2

N-value: 66

Sample Interval Time: 93.80 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

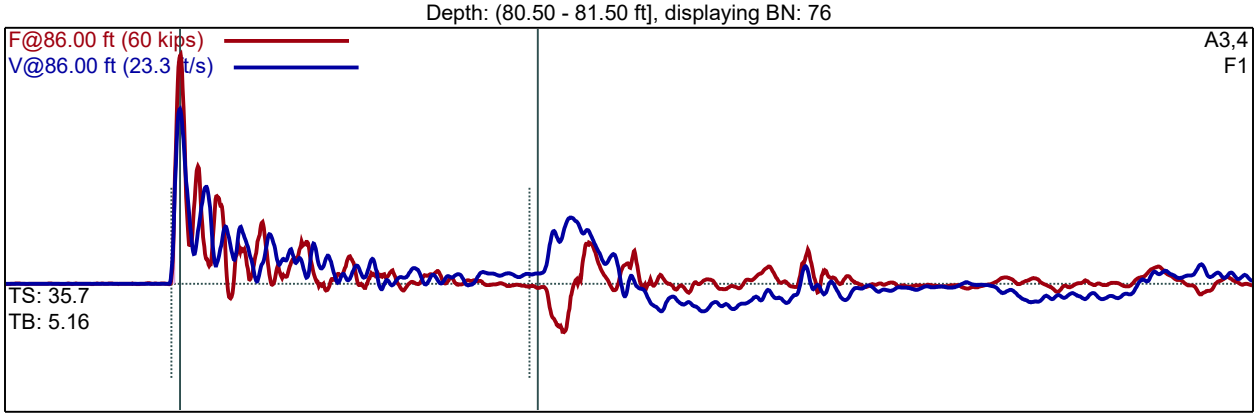
Ardco Truck Rig
MJN
B-3

80.0 to 81.5 ft
Interval start: 9/19/2024

AR: 1.44 in^2
LE: 86.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (80.50 - 81.50 ft], displaying BN: 76



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
26	27	80.52	36.8	36.8	297	297	85.0	36.3	53	15.2
27	27	80.54	36.6	36.6	300	300	85.7	36.5	53	15.7
28	27	80.56	37.0	37.0	296	296	84.6	36.4	53	15.3
29	27	80.57	36.5	36.5	299	299	85.5	36.3	53	15.7
30	27	80.59	36.8	36.8	297	297	84.8	36.5	53	15.5
31	27	80.61	36.6	36.6	298	298	85.2	36.3	53	15.7
32	27	80.63	37.4	37.4	299	299	85.4	36.0	54	15.6
33	27	80.65	36.5	36.5	296	296	84.5	36.5	53	15.4
34	27	80.67	36.6	36.6	297	297	84.9	36.5	53	15.8
35	27	80.69	37.2	37.2	297	297	85.0	36.1	54	15.6
36	27	80.70	36.6	36.6	295	295	84.3	36.3	53	15.6
37	27	80.72	36.5	36.5	297	297	84.8	36.5	53	15.7
38	27	80.74	36.5	36.5	294	294	84.0	36.2	52	15.8
39	27	80.76	36.0	36.0	298	298	85.2	36.2	52	15.8
40	27	80.78	36.4	36.4	294	294	83.9	36.4	52	15.8
41	27	80.80	36.3	36.3	292	292	83.5	36.1	52	15.8
42	27	80.81	36.9	36.9	296	296	84.5	36.2	53	15.7
43	27	80.83	36.5	36.5	293	293	83.6	36.5	53	15.8
44	27	80.85	36.7	36.7	297	297	84.8	36.3	53	15.8
45	27	80.87	37.1	37.1	295	295	84.2	36.0	53	15.7
46	27	80.89	36.7	36.7	294	294	83.9	36.5	53	15.8
47	27	80.91	36.8	36.8	299	299	85.3	36.5	53	15.8
48	27	80.93	36.7	36.7	292	292	83.6	36.0	53	15.7
49	27	80.94	36.4	36.4	294	294	84.0	36.3	52	15.8
50	27	80.96	35.9	35.9	296	296	84.7	36.4	52	15.8
51	27	80.98	37.0	37.0	296	296	84.6	36.3	53	15.8
52	27	81.00	36.0	36.0	294	294	84.0	36.4	52	15.7

53	26	81.02	36.8	36.8	293	293	83.8	36.6	53	15.7
54	26	81.04	36.6	36.6	295	295	84.4	36.3	53	15.8
55	26	81.06	36.9	36.9	294	294	84.1	36.3	53	15.7
56	26	81.08	37.7	37.7	294	294	84.0	36.5	54	15.7
57	26	81.10	37.5	37.5	296	296	84.5	36.3	54	15.6
58	26	81.12	37.0	37.0	298	298	85.2	36.2	53	15.8
59	26	81.13	37.1	37.1	296	296	84.5	36.4	53	15.8
60	26	81.15	36.9	36.9	299	299	85.3	36.4	53	15.8
61	26	81.17	37.2	37.2	294	294	84.1	36.1	53	15.6
62	26	81.19	37.2	37.2	298	298	85.1	36.4	54	15.7
63	26	81.21	36.5	36.5	301	301	85.9	36.4	53	15.8
64	26	81.23	36.5	36.5	296	296	84.6	36.3	53	15.8
65	26	81.25	36.6	36.6	285	285	81.5	36.3	53	15.5
66	26	81.27	37.1	37.1	294	294	84.0	36.5	53	15.8
67	26	81.29	37.1	37.1	292	292	83.4	36.0	53	15.6
68	26	81.31	36.5	36.5	290	290	83.0	36.1	53	15.8
69	26	81.33	36.6	36.6	288	288	82.4	36.5	53	15.5
70	26	81.35	36.1	36.1	294	294	83.9	36.4	52	15.8
71	26	81.37	36.8	36.8	295	295	84.3	36.1	53	15.5
72	26	81.38	37.1	37.1	295	295	84.3	36.6	53	15.8
73	26	81.40	37.2	37.2	295	295	84.2	36.4	54	15.8
74	26	81.42	37.1	37.1	302	302	86.2	36.3	53	15.8
75	26	81.44	37.1	37.1	300	300	85.6	36.4	53	15.9
76	26	81.46	37.3	37.3	303	303	86.6	36.7	54	16.0
77	26	81.48	37.9	37.9	303	303	86.6	36.6	55	15.9
78	26	81.50	37.5	37.5	304	304	86.9	36.5	54	15.9
		Average	36.8	36.8	296	296	84.6	36.3	53	15.7
		Std Dev	0.4	0.4	3	3	1.0	0.2	1	0.1

N-value: 53

Sample Interval Time: 85.88 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

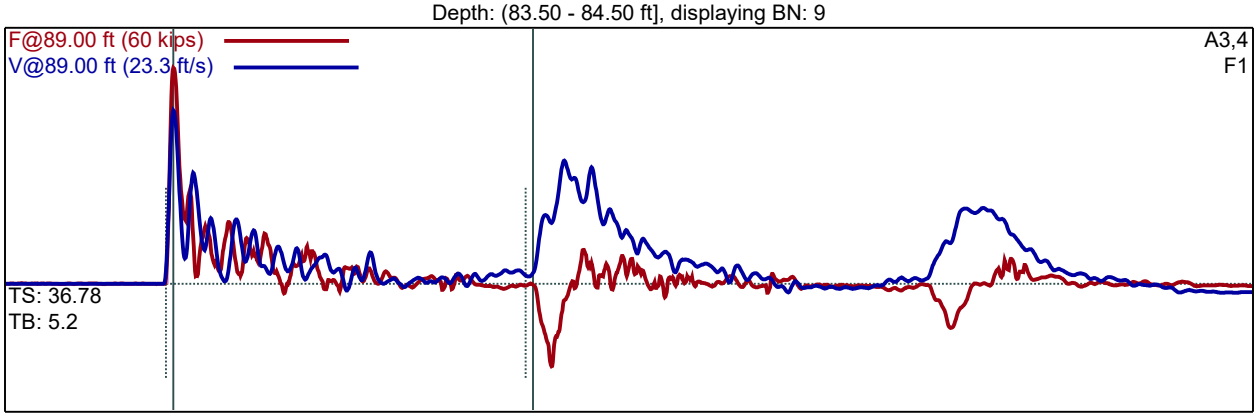
Ardco Truck Rig
MJN
B-3

83.0 to 84.5 ft
Interval start: 9/19/2024

AR: 1.44 in^2
LE: 89.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (83.50 - 84.50 ft], displaying BN: 9



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
4	5	83.60	34.6	34.6	296	296	84.5	35.7	50	15.3
5	5	83.70	34.5	34.5	293	293	83.7	30.7	50	15.3
6	5	83.80	35.8	35.8	298	298	85.2	35.5	52	16.0
7	5	83.90	36.1	36.1	303	303	86.7	34.5	52	15.9
8	5	84.00	33.2	33.2	287	287	82.1	35.2	48	14.6
9	3	84.17	35.1	35.1	288	288	82.4	32.5	51	15.8
10	3	84.33	36.4	36.4	302	302	86.2	25.0	52	16.2
11	3	84.50	36.1	36.1	301	301	86.1	29.7	52	16.5
		Average	35.2	35.2	296	296	84.6	32.4	51	15.7
		Std Dev	1.0	1.0	6	6	1.6	3.5	1	0.6

N-value: 8

Sample Interval Time: 13.34 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

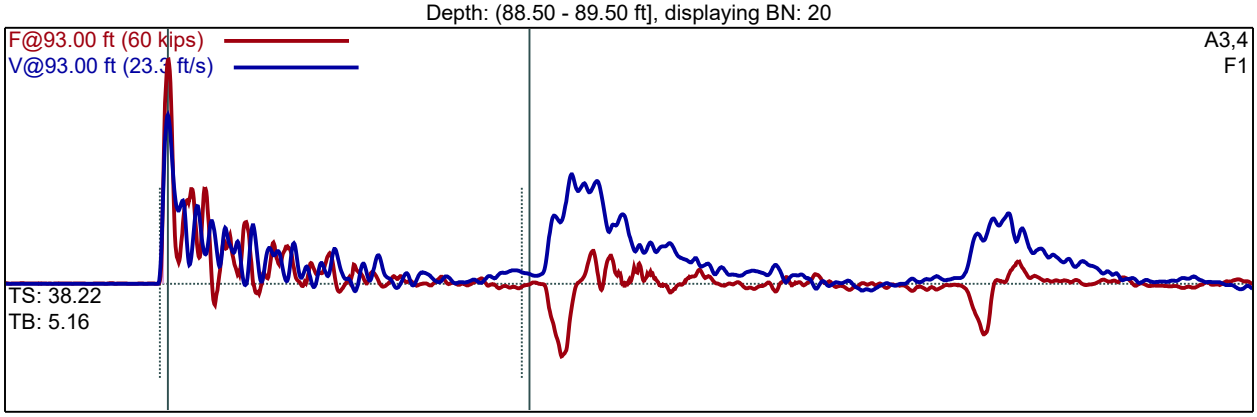
Ardco Truck Rig
MJN
B-3

88.0 to 89.5 ft
Interval start: 9/19/2024

AR: 1.44 in^2
LE: 93.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (88.50 - 89.50 ft], displaying BN: 20



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
8	8	88.56	35.4	35.4	285	285	81.5	35.1	51	15.1
9	8	88.63	35.6	35.6	294	294	84.0	35.0	51	15.2
10	8	88.69	36.0	36.0	298	298	85.2	35.2	52	15.3
11	8	88.75	36.0	36.0	296	296	84.6	35.2	52	15.4
12	8	88.81	35.8	35.8	297	297	84.8	35.0	52	15.5
13	8	88.88	35.1	35.1	291	291	83.2	35.2	51	15.2
14	8	88.94	35.6	35.6	294	294	83.9	35.2	51	15.3
15	8	89.00	36.5	36.5	293	293	83.6	33.2	52	15.4
16	7	89.07	36.2	36.2	295	295	84.2	30.8	52	15.4
17	7	89.14	36.4	36.4	297	297	84.9	32.6	52	15.3
18	7	89.21	37.1	37.1	302	302	86.2	32.1	53	15.5
19	7	89.29	37.2	37.2	303	303	86.6	32.3	53	15.6
20	7	89.36	36.4	36.4	293	293	83.7	32.8	52	15.4
21	7	89.43	27.4	27.4	242	242	69.1	32.4	39	11.7
22	7	89.50	27.4	27.4	256	256	73.3	31.4	39	12.5
		Average	34.9	34.9	289	289	82.6	33.6	50	14.9
		Std Dev	3.0	3.0	16	16	4.7	1.6	4	1.1

N-value: 15

Sample Interval Time: 25.17 seconds.

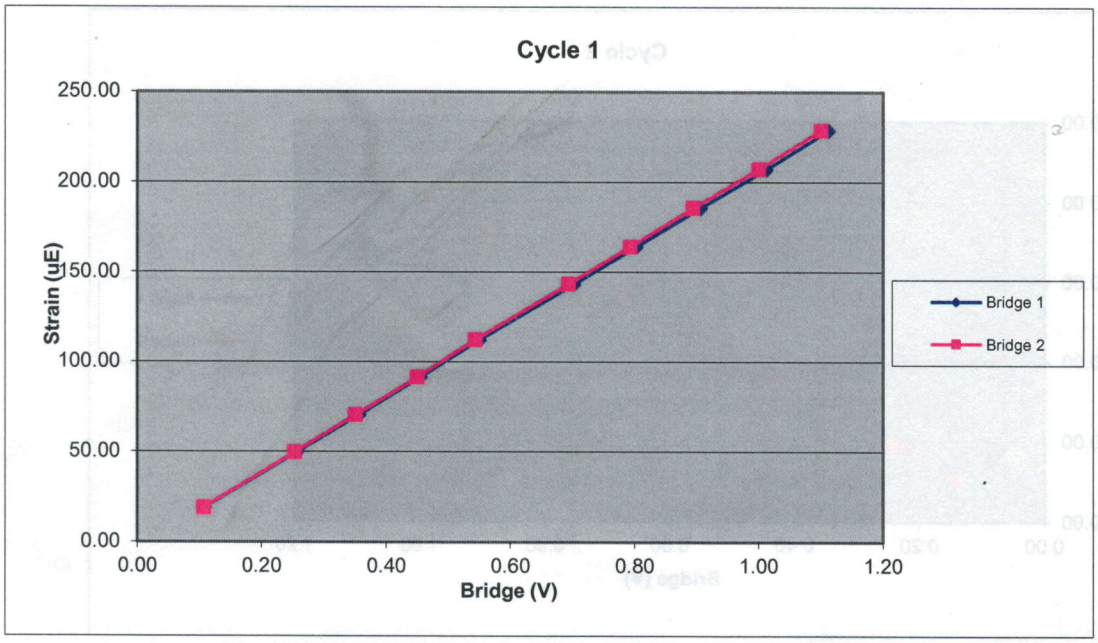
Appendix B

Dynamic Measurement Equipment Calibration Sheets

413NWJ		Cycle 1		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	978.08	19.00	0.11	0.11
3	2295.77	49.44	0.26	0.25
4	3209.12	70.12	0.36	0.35
5	4098.60	91.21	0.46	0.45
6	4945.28	112.04	0.55	0.54
7	6325.45	143.26	0.70	0.69
8	7223.50	164.09	0.80	0.79
9	8144.85	185.77	0.91	0.89
10	9106.65	207.17	1.01	1.00
11	10016.69	228.54	1.11	1.10

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9002.45**	**Force Calibration (lb/V)**	**9112.46**
Offset	-7.05	Offset	-5.50
Correlation	0.999999	Correlation	0.999998
Strain Calibration (µE/V)	**208.99**	**Strain Calibration (µE/V)**	**211.54**
Offset	-3.90	Offset	-3.86
Correlation	0.999982	Correlation	0.999979

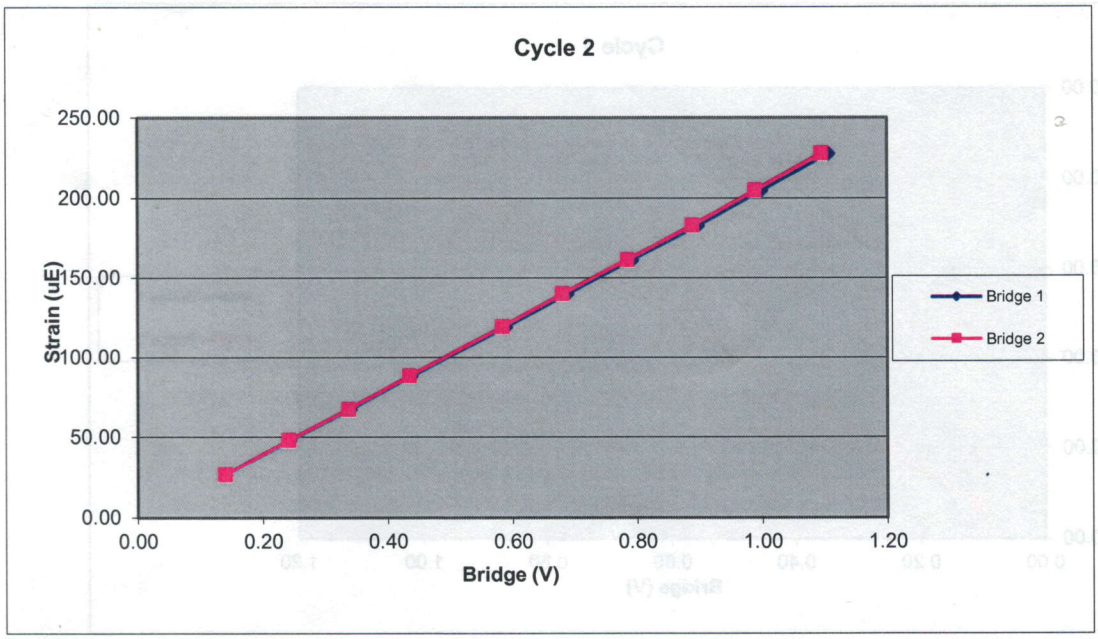
Force Strain Calibration	
EA (Kips)	**43074.67**
Offset	161.09
Correlation	0.999978



413NWJ		Cycle 2		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	1280.45	26.46	0.14	0.14
3	2205.21	47.72	0.24	0.24
4	3074.02	67.15	0.34	0.34
5	3959.11	88.20	0.44	0.43
6	5325.05	119.05	0.59	0.58
7	6210.43	139.67	0.69	0.68
8	7150.00	161.14	0.79	0.78
9	8104.59	182.61	0.90	0.89
10	9016.39	204.48	1.00	0.99
11	9987.74	227.34	1.11	1.09

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9016.47**	**Force Calibration (lb/V)**	**9120.13**
Offset	**8.96**	Offset	**3.63**
Correlation	**0.999999**	Correlation	**0.999999**
Strain Calibration (µE/V)	**207.59**	**Strain Calibration (µE/V)**	**209.97**
Offset	**-3.06**	Offset	**-3.18**
Correlation	**0.999982**	Correlation	**0.999982**

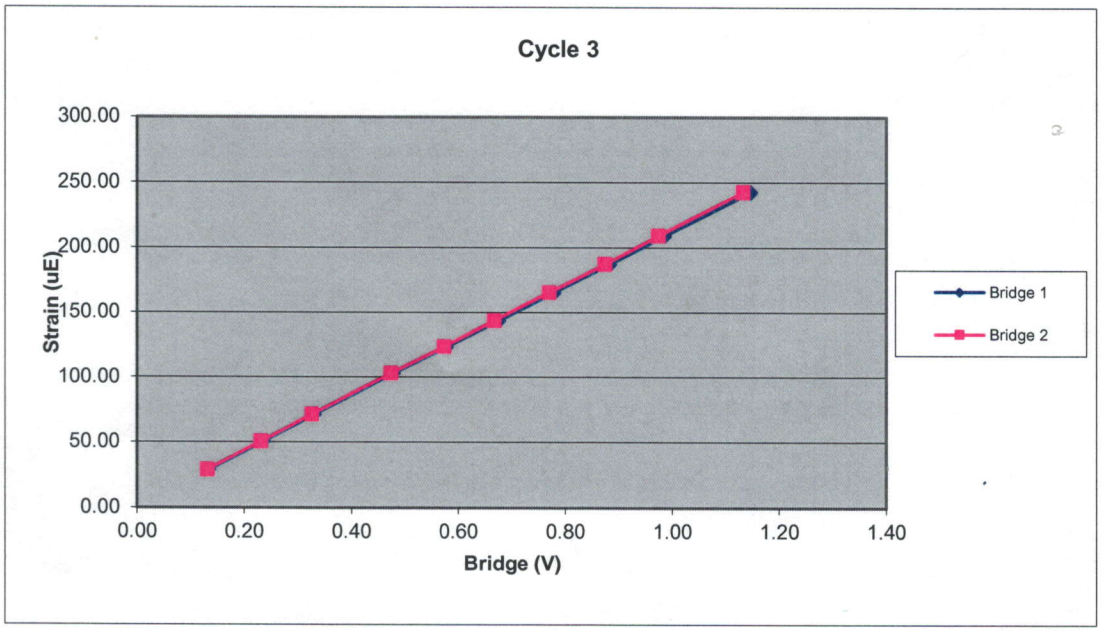
Force Strain Calibration	
EA (Kips)	**43433.57**
Offset	**142.08**
Correlation	**0.999983**



413NWJ		Cycle 3		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	1213.49	28.74	0.13	0.13
3	2121.87	50.32	0.24	0.23
4	2992.63	71.05	0.33	0.33
5	4327.18	102.75	0.48	0.47
6	5230.40	123.37	0.58	0.57
7	6109.44	143.61	0.68	0.67
8	7037.91	165.46	0.78	0.77
9	7992.30	187.14	0.88	0.87
10	8905.65	209.16	0.99	0.97
11	10367.61	242.78	1.15	1.13

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9044.32**	**Force Calibration (lb/V)**	**9142.48**
Offset	**-3.88**	Offset	**3.21**
Correlation	**0.999999**	Correlation	**0.999997**
Strain Calibration (µE/V)	**211.21**	**Strain Calibration (µE/V)**	**213.51**
Offset	**0.87**	Offset	**1.04**
Correlation	**0.999985**	Correlation	**0.999990**

Force Strain Calibration	
EA (Kips)	**42819.64**
Offset	**-41.18**
Correlation	**0.999985**



Bridge Excitation (V) 5
Shunt Resitor (ohm) 60.4k

Calibration Factors	413NWJ		
Bridge 1 (µE/V)	209.26	Bridge 2 (µE/V)	211.67
EA Factor (Kips)	43109.29	Area (in^2)	1.44

Calibrated by: Sean Bonney
Calibrated Date: 12/18/2023

Pile Dynamics Inc
30725 Aurora Rd
Solon, OH 44139

Traceable to N.I.S.T.

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on

AUG 1 6 2024

Serial No:	K14104	**Temperature:**	24.6 °C
Model:	PR	**Humidity:**	42%
Calibrated on:	Channel 4 on 8G 5161 LE		

Ref Acc 1:	78270! 971 g's/volt	**Cal on:**	11Jan2024
Ref Acc 2:	78268! 986 g's/volt	**Cal on:**	11Jan2024

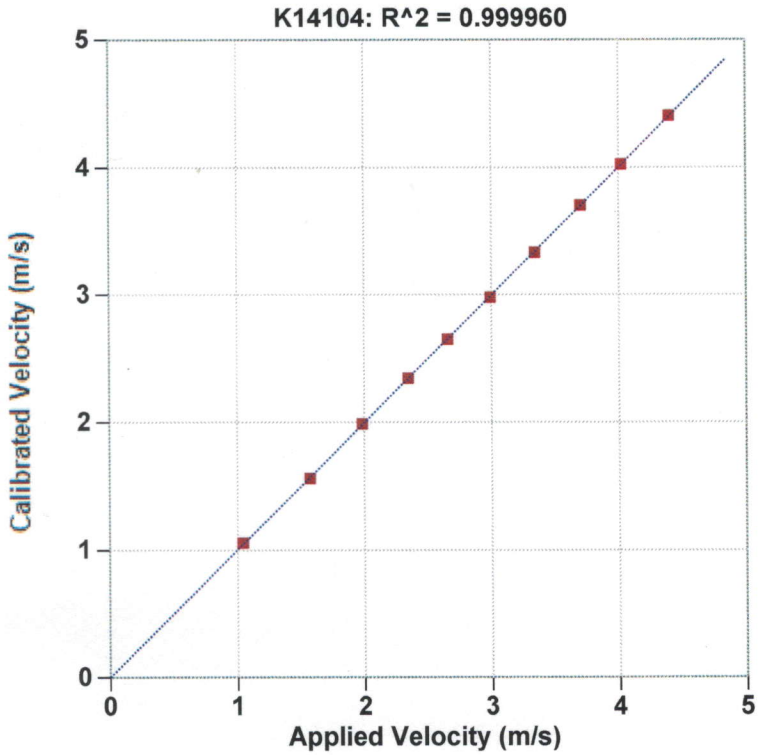
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

324.0 mv/5000g
(64.8 µv/g)
R^2: 0.999960 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity	S/N K14104 Velocity
m/s	m/s
1.047	1.058
1.573	1.567
1.986	1.991
2.349	2.345
2.657	2.653
2.994	2.984
3.343	3.336
3.704	3.708
4.024	4.030
4.401	4.407

Maximum Acceleration: 936 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on
AUG 16 2024

Serial No:	K14107	**Temperature:**	24.6 °C
Model:	PR	**Humidity:**	43%
Calibrated on:	Channel 4 on 8G 5161 LE		

Ref Acc 1:	78270! 971 g's/volt	**Cal on:**	11Jan2024
Ref Acc 2:	78268! 986 g's/volt	**Cal on:**	11Jan2024

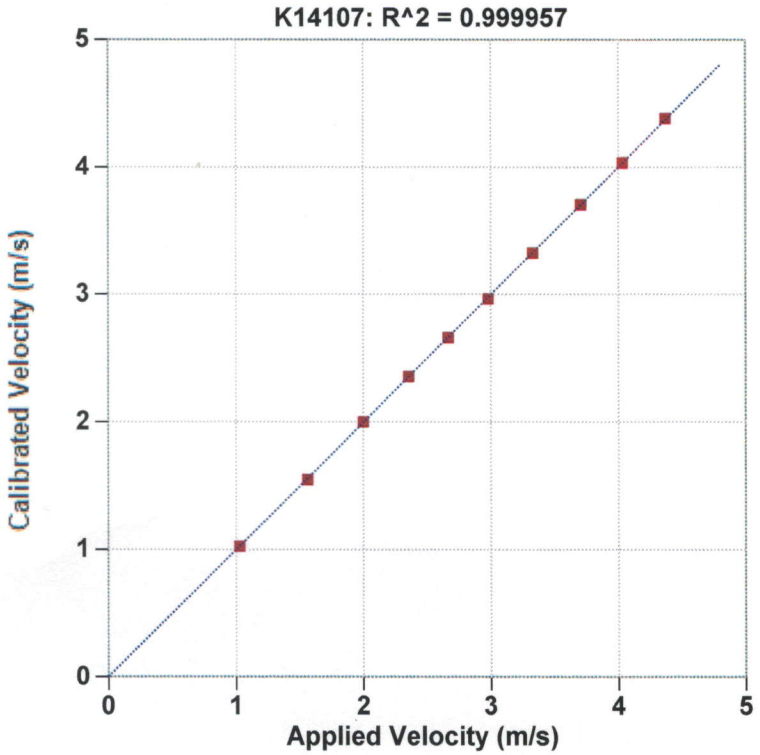
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

353.0 mv/5000g
(70.6 µv/g)
R^2: 0.999957 [Chip programmed]

Operator: William Johnson

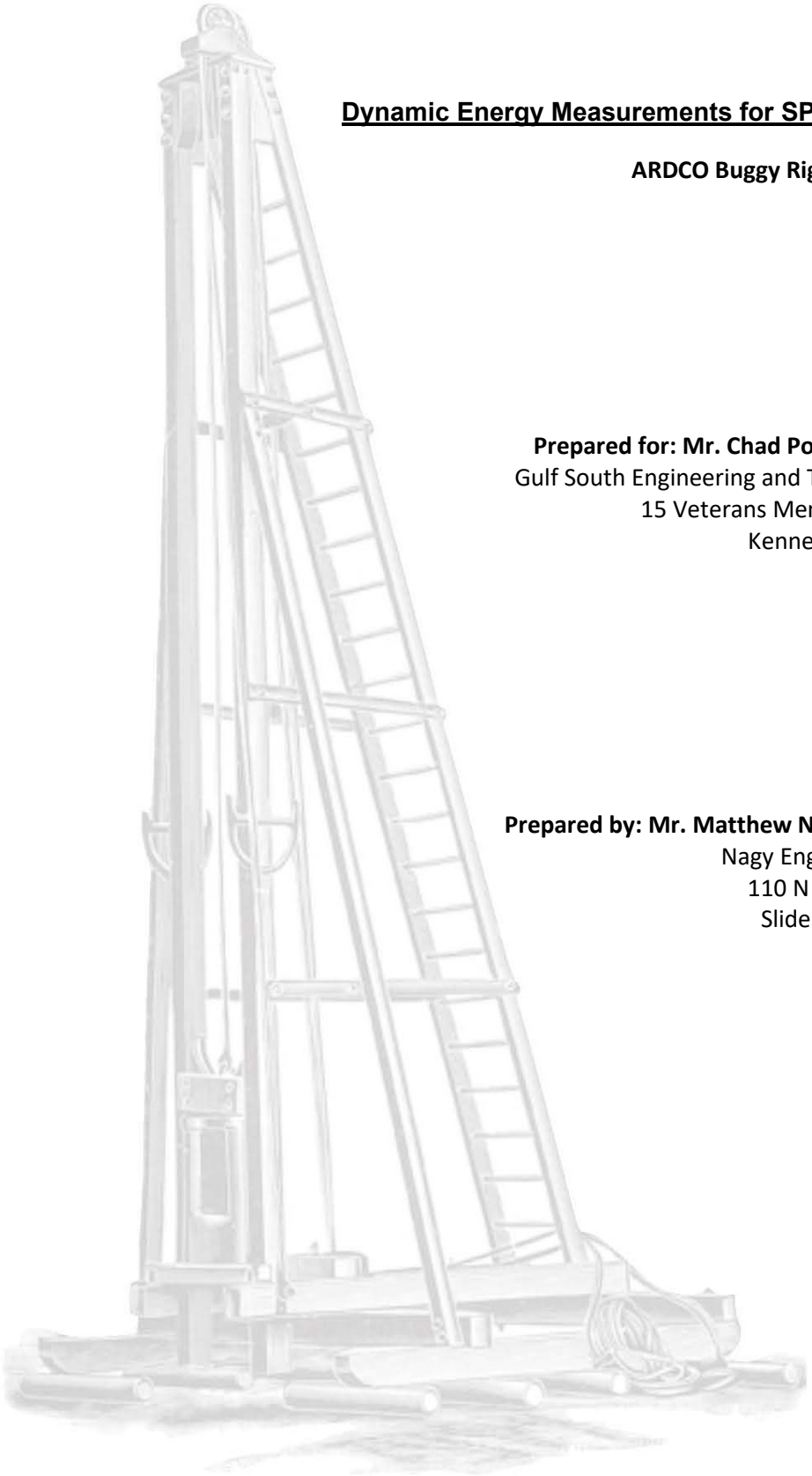
Signed



Reference Velocity	S/N K14107 Velocity
m/s	m/s
1.030	1.030
1.563	1.553
2.001	2.003
2.357	2.356
2.667	2.664
2.981	2.968
3.331	3.328
3.707	3.710
4.037	4.039
4.373	4.386

Maximum Acceleration: 925 g's

Nagy Engineers, Inc.



Dynamic Energy Measurements for SPT Hammer

ARDCO Buggy Rig (SN: AD28)

Prepared for: Mr. Chad Poche, P.E. of
Gulf South Engineering and Testing, Inc.
15 Veterans Memorial Blvd.
Kenner, LA 70062

Prepared by: Mr. Matthew Nagy, P.E. of
Nagy Engineers, Inc.
110 N Queens Dr.
Slidell, LA 70458

September 24, 2024

Mr. Chad Poche, P.E.
Gulf South Engineering and Testing, Inc.
15 Veterans Memorial Blvd.
Kenner, LA 70062

Re: SPT Hammer Calibration using Dynamic Energy Measurements
ARDCO Buggy Rig (S/N AD28)
Nagy Engineers Job No. 241035-1

Dear Mr. Poche:

This report summarizes the results from SPT Energy Measurement Testing performed at a site near Lacombe, Louisiana. The testing was conducted on September 20, 2024, to calibrate an automatic SPT hammer. The hammer reportedly had a 140 lbs drop weight and a 2.5 ft drop height. Appendix A gives a summary of the field dynamic test data and results while Appendix B contains the dynamic testing equipment calibration sheets. An overall summary of the test results is presented in Table 1.

OBJECTIVES

The objective of the testing was to perform SPT Energy Measurements according to ASTM D4633-16. These objectives were met using our Pile Driving Analyzer®, Model 8G – SPT Software, which acquired the SPT hammer transfer energies using an instrumented NWJ rod section and two piezoresistive accelerometers.

TESTING AND EQUIPMENT

Drilling and SPT Hammer Equipment

SPT energy measurements were collected for an automatic SPT hammer. This hammer was mounted on an ARDCO Buggy style drill rig. The serial number provided for the rig was AD28 and it can be found welded on the buggy frame. Energy records were collected at various increments at one boring location between the depths of 66.0 ft and 79.5 ft. The drilling method was mud rotary. Appendix A contains photos of the rig that was tested.

Instrumentation

A Model 8G Pile Driving Analyzer® (PDA) data acquisition system was used to collect and process the dynamic measurements of force and velocity. The sampling frequency was set to 50 kHz. A two-foot-long section of NWJ rod subsection was instrumented with one full bridge foil resistance strain gage and two

piezoresistive accelerometers mounted at the midpoint location of the instrumented subsection. Strain and acceleration signals were conditioned, digitized, stored, and processed using the PDA. Selected output from the PDA for each recorded impact included the maximum calculated rod top force (FMX), maximum rod top velocity (VMX), maximum average compressive stress (CSX), maximum energy transfer (EFV and EMX), energy transfer ratio (ETR) and the hammer operating rate (BPM).

MEASUREMENTS AND CALCULATIONS

FV Method (EFV = EMX)

Energy transfer to the instrumented SPT rod location, EMX, was computed by the PDA using force, F(t), and velocity, v(t), records as follows:

$$EMX = \int_a^b F(t) \cdot v(t) dt$$

The time "a" corresponds to the start of the record when the energy transfer begins, and "b" is the time at which energy transferred to the rod reaches a maximum value. The EFV Method is currently recognized in ASTM D4633-16, is equivalent to the EMX Method, and is the theoretical correct result. Both EMX and EFV methods were reported in Appendix A. No other energy calculation methods were reported.

RESULTS

Upon return to the office, the records collected by the PDA were checked for consistency and accuracy. For example, records from very weak startup and/or final impacts were not included in the results.

Appendix A contains a representative plot of force and normalized velocity versus time and tabular data for the hammer blows that corresponded to the N-Value at each dynamically monitored sampling depth. The PDA results include the EFV (transferred energy by the EFV method, as recommended by ASTM D4633-16), EMX (transferred energy by the equivalent EMX method), ETR (energy transfer ratio), BPM (hammer operating rate), FMX (maximum rod top force), CSX (maximum compressive stress), and VMX (maximum rod top velocity).

Table 1 summarizes the average transfer energy values calculated by the EFV method. The records averaged consist only of the hammer blows at each dynamically monitored sampling depth that correspond to the N-Values (i.e., the blows in the initial 6 inches of split spoon driving were not considered as part of the average). The “energy transfer ratio” (ETR) is defined as the ratio of maximum transferred energy EFV divided by the theoretical hammer potential energy of 350 ft-lbs. The average

hammer operating rate is reported in blows per minute (BPM).

CONCLUSIONS

ARDCO Buggy Rig (S/N AD28) – SPT Auto Hammer

The average maximum energy transfer (EFV) to the instrumented NWJ rod section using the Auto SPT Hammer was 302 ft-lbs which is 86% of the 350 ft-lbs potential energy of the hammer. The standard deviation of the transfer efficiency was 3% over the four samples that were collected. The average hammer operation rate during the time of testing was 38.7 blows/min.

We appreciate this opportunity to be of assistance to you on this project, please contact our office if you have any questions regarding this report, or if we may be of further service.

Very truly yours,
Nagy Engineers, Inc.

Matthew Nagy, P.E. LA # 36793

Enclosed: Appendices A and B

TABLE 1: Summary of SPT Energy Measurements
ARDCO Buggy Rig (S/N AD28)

Rod Length Below Gages *LE*	Depth Below Top of Ground	Reported SPT Blow Counts	Average Transfer Force *FMX*	Average Compressive Stress *CSX*	Average Hammer Blow Rate *BPM*	Average Energy Transfer *EFV*	Average Transfer Efficiency *ETR*
ft	ft	blows/6"	kips	ksi	blows/min	ft-lbs	%
Boring B-4							
70.0	66.0 to 67.5	8, 12, 23	49	34.2	38.3	305	87%
73.0	69.0 to 70.5	10, 9, 15	49	34.1	40.9	313	89%
77.0	73.0 to 74.5	15, 23, 21	51	35.5	35.8	300	86%
82.0	78.0 to 79.5	16, 29, 36	46	32.2	39.7	288	82%
		Overall Average			**38.7**	**302**	**86%**
		Standard Deviation			**2.2**	**10**	**3%**

Notes

LE - Length from the bottom of the spoon to the PDA gage location.
FMX - Maximum Force Meaused at PDA gage locationn.
CSX - Maximum Average Compressive Stress at PDA gage location.
BPM - Hammer operation rate (blows/minute)
EFV - Computed, from $\int Fv\,dt$, maximum energy transferred to PDA gage location.
ETR - Computed, from EFV/PE, maximum energy transfer efficiency

Appendix A

Results from SPT Dynamic Energy Measurements

Gulf South Engineering and Testing, Inc. – SPT Rig Calibration

ARDCO Buggy Rig (SN: AD28)

Mud Rotary Drilling Method

Gulf South Engineering and Testing – ARDCO Buggy Rig (SN: AD28)

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

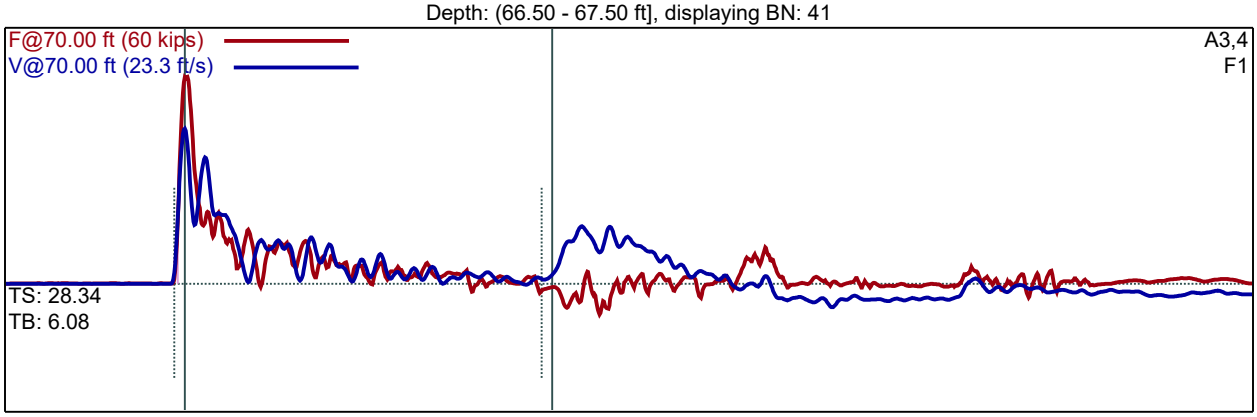
Ardco Buggy Rig
MJN
B-4

66.0 to 67.5 ft
Interval start: 9/20/2024

AR: 1.44 in^2
LE: 70.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (66.50 - 67.50 ft], displaying BN: 41



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
9	12	66.54	33.4	33.4	304	304	86.9	39.1	48	14.1
10	12	66.58	34.7	34.7	311	311	88.9	38.8	50	13.9
11	12	66.63	34.3	34.3	310	310	88.6	38.9	49	14.1
12	12	66.67	35.0	35.0	306	306	87.4	38.9	50	14.0
13	12	66.71	34.2	34.2	307	307	87.6	38.9	49	13.9
14	12	66.75	34.7	34.7	303	303	86.5	38.8	50	14.0
15	12	66.79	34.4	34.4	297	297	84.9	38.8	50	13.8
16	12	66.83	34.0	34.0	300	300	85.7	38.9	49	13.6
17	12	66.88	32.8	32.8	304	304	86.8	38.7	47	13.5
18	12	66.92	34.4	34.4	301	301	86.0	38.9	50	13.8
19	12	66.96	33.5	33.5	306	306	87.3	38.6	48	13.7
20	12	67.00	33.8	33.8	298	298	85.1	38.8	49	13.7
21	23	67.02	33.9	33.9	302	302	86.2	38.7	49	13.6
22	23	67.04	31.5	31.5	302	302	86.3	38.4	45	13.3
23	23	67.07	33.4	33.4	301	301	86.1	38.6	48	13.5
24	23	67.09	34.5	34.5	300	300	85.7	38.6	50	13.8
25	23	67.11	33.5	33.5	304	304	86.9	38.5	48	13.7
26	23	67.13	34.6	34.6	304	304	86.9	38.6	50	14.0
27	23	67.15	34.0	34.0	307	307	87.6	38.2	49	13.9
28	23	67.17	35.3	35.3	304	304	86.7	38.1	51	14.0
29	23	67.20	33.6	33.6	297	297	85.0	38.0	48	13.6
30	23	67.22	34.5	34.5	302	302	86.4	38.0	50	14.0
31	23	67.24	34.2	34.2	303	303	86.6	37.8	49	14.0
32	23	67.26	34.7	34.7	312	312	89.1	37.7	50	14.4
33	23	67.28	34.9	34.9	308	308	88.0	37.7	50	14.2
34	23	67.30	35.3	35.3	309	309	88.4	37.7	51	14.2
35	23	67.33	35.5	35.5	308	308	88.0	37.6	51	14.1

36	23	67.35	34.3	34.3	303	303	86.5	37.6	49	14.1
37	23	67.37	35.4	35.4	320	320	91.3	37.7	51	14.4
38	23	67.39	35.3	35.3	316	316	90.2	37.6	51	14.4
39	23	67.41	35.1	35.1	305	305	87.3	37.7	51	14.2
40	23	67.43	33.4	33.4	304	304	87.0	37.6	48	14.0
41	23	67.46	33.7	33.7	308	308	88.1	37.7	49	14.1
42	23	67.48	33.5	33.5	303	303	86.7	37.6	48	13.9
43	23	67.50	33.6	33.6	307	307	87.7	37.7	48	14.0
		Average	34.2	34.2	305	305	87.2	38.3	49	13.9
		Std Dev	0.8	0.8	5	5	1.4	0.5	1	0.3

N-value: 35

Sample Interval Time: 53.33 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

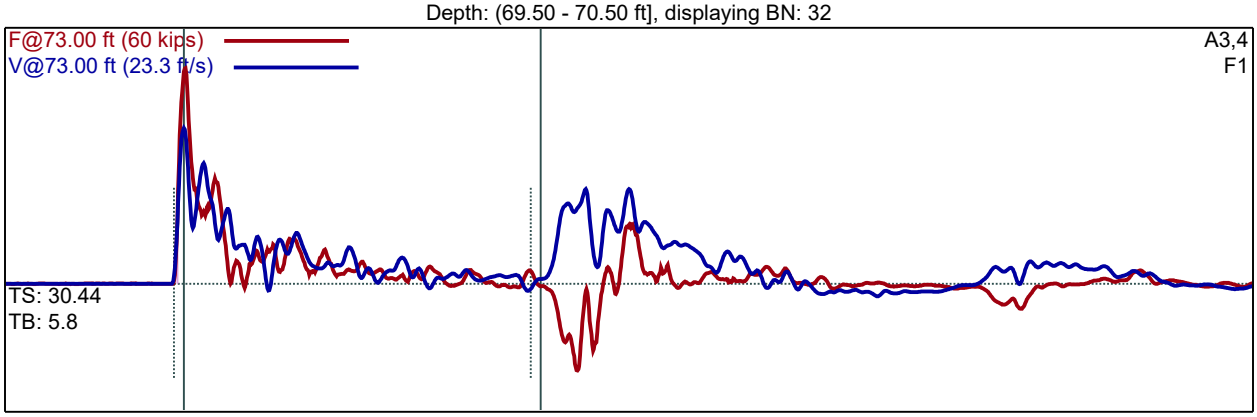
Ardco Buggy Rig
MJN
B-4

69.0 to 70.5 ft
Interval start: 9/20/2024

AR: 1.44 in^2
LE: 73.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (69.50 - 70.50 ft], displaying BN: 32



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
11	9	69.56	33.6	33.6	309	309	88.2	41.1	48	14.4
12	9	69.61	32.8	32.8	309	309	88.3	40.9	47	14.3
13	9	69.67	33.3	33.3	308	308	88.1	40.9	48	14.5
14	9	69.72	33.3	33.3	314	314	89.6	40.8	48	14.3
15	9	69.78	33.3	33.3	308	308	88.1	41.0	48	14.4
16	9	69.83	33.0	33.0	307	307	87.6	41.1	48	14.1
17	9	69.89	33.0	33.0	304	304	86.8	41.3	48	14.1
18	9	69.94	33.1	33.1	304	304	86.9	41.1	48	14.2
19	9	70.00	34.3	34.3	315	315	89.9	41.2	49	14.5
20	15	70.03	33.8	33.8	305	305	87.1	41.2	49	14.3
21	15	70.07	33.9	33.9	312	312	89.1	40.9	49	14.5
22	15	70.10	34.7	34.7	321	321	91.6	41.0	50	14.5
23	15	70.13	34.5	34.5	317	317	90.4	41.1	50	14.5
24	15	70.17	34.4	34.4	306	306	87.5	40.6	49	14.4
25	15	70.20	33.3	33.3	310	310	88.4	40.6	48	14.2
26	15	70.23	33.4	33.4	313	313	89.4	40.6	48	14.1
27	15	70.27	34.8	34.8	319	319	91.3	40.4	50	14.4
28	15	70.30	34.7	34.7	318	318	90.8	40.7	50	14.4
29	15	70.33	35.9	35.9	317	317	90.5	40.8	52	14.6
30	15	70.37	35.2	35.2	317	317	90.6	40.9	51	14.5
31	15	70.40	34.7	34.7	313	313	89.4	41.0	50	14.3
32	15	70.43	35.1	35.1	319	319	91.1	40.8	51	14.2
33	15	70.47	34.4	34.4	319	319	91.0	41.0	50	14.1
34	15	70.50	35.6	35.6	319	319	91.3	41.0	51	14.3

Average	34.1	34.1	313	313	89.3	40.9	49	14.3
Std Dev	0.9	0.9	5	5	1.5	0.2	1	0.1

N-value: 24

Sample Interval Time: 33.74 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

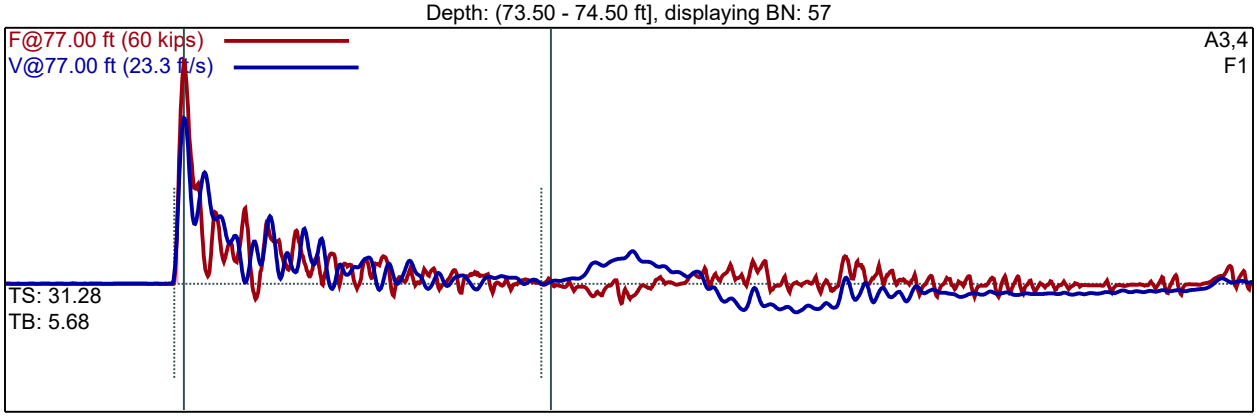
Ardco Buggy Rig
MJN
B-4

73.0 to 74.5 ft
Interval start: 9/20/2024

AR: 1.44 in^2
LE: 77.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (73.50 - 74.50 ft], displaying BN: 57



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
16	23	73.52	35.8	35.8	306	306	87.6	39.2	51	15.1
17	23	73.54	36.6	36.6	310	310	88.6	38.8	53	15.2
18	23	73.57	36.4	36.4	307	307	87.7	38.8	52	15.1
19	23	73.59	35.2	35.2	307	307	87.6	38.7	51	15.1
20	23	73.61	36.5	36.5	306	306	87.3	38.5	53	15.4
21	23	73.63	36.5	36.5	301	301	86.0	38.2	53	15.2
22	23	73.65	35.9	35.9	300	300	85.6	37.3	52	15.0
23	23	73.67	35.8	35.8	299	299	85.5	37.0	51	15.0
24	23	73.70	36.5	36.5	298	298	85.2	36.8	53	15.1
25	23	73.72	36.3	36.3	302	302	86.2	36.3	52	15.4
26	23	73.74	35.4	35.4	301	301	85.9	36.3	51	14.9
27	23	73.76	35.0	35.0	303	303	86.6	36.7	50	15.1
28	23	73.78	36.6	36.6	312	312	89.2	37.9	53	15.4
29	23	73.80	36.4	36.4	326	326	93.3	42.2	52	15.3
30	23	73.83	35.9	35.9	312	312	89.1	51.2	52	15.0
31	23	73.85	35.6	35.6	301	301	86.1	22.4	51	14.9
32	23	73.87	34.3	34.3	293	293	83.7	34.1	49	14.7
33	23	73.89	35.3	35.3	298	298	85.2	37.2	51	15.0
34	23	73.91	34.7	34.7	300	300	85.8	36.8	50	14.8
35	23	73.93	34.5	34.5	291	291	83.1	36.1	50	14.7
36	23	73.96	34.8	34.8	293	293	83.6	35.6	50	14.7
37	23	73.98	35.1	35.1	299	299	85.3	35.3	51	14.7
38	23	74.00	35.0	35.0	302	302	86.3	35.4	50	14.8
39	21	74.02	34.7	34.7	291	291	83.1	35.5	50	14.5
40	21	74.05	34.3	34.3	292	292	83.4	35.4	49	14.6
41	21	74.07	34.6	34.6	291	291	83.3	35.4	50	14.8
42	21	74.10	35.6	35.6	303	303	86.4	35.4	51	15.1

43	21	74.12	35.2	35.2	293	293	83.8	35.1	51	14.9
44	21	74.14	35.7	35.7	297	297	84.8	35.2	51	14.9
45	21	74.17	35.1	35.1	294	294	84.1	35.0	51	14.8
46	21	74.19	35.1	35.1	298	298	85.2	34.4	51	14.9
47	21	74.21	36.1	36.1	295	295	84.4	33.4	52	14.9
48	21	74.24	35.6	35.6	296	296	84.5	33.4	51	15.0
49	21	74.26	34.9	34.9	289	289	82.6	33.8	50	15.0
50	21	74.29	35.6	35.6	294	294	84.1	33.7	51	15.0
51	21	74.31	36.0	36.0	303	303	86.5	33.8	52	15.2
52	21	74.33	35.6	35.6	301	301	86.1	33.5	51	14.9
53	21	74.36	34.9	34.9	292	292	83.4	33.8	50	14.9
54	21	74.38	35.7	35.7	300	300	85.7	33.9	51	15.1
55	21	74.40	35.1	35.1	294	294	83.9	33.8	51	15.0
56	21	74.43	34.9	34.9	299	299	85.3	33.7	50	15.2
57	21	74.45	36.1	36.1	303	303	86.7	33.5	52	15.1
58	21	74.48	36.1	36.1	306	306	87.3	33.6	52	15.1
59	21	74.50	34.1	34.1	294	294	83.9	34.0	49	14.9
		Average	35.5	35.5	300	300	85.7	35.8	51	15.0
		Std Dev	0.7	0.7	7	7	2.0	3.7	1	0.2

N-value: 44

Sample Interval Time: 72.98 seconds.

Nagy Engineers, Inc.
SPT Analyzer Results

PDA-S Ver. 2022.35.2 - Printed: 9/22/2024

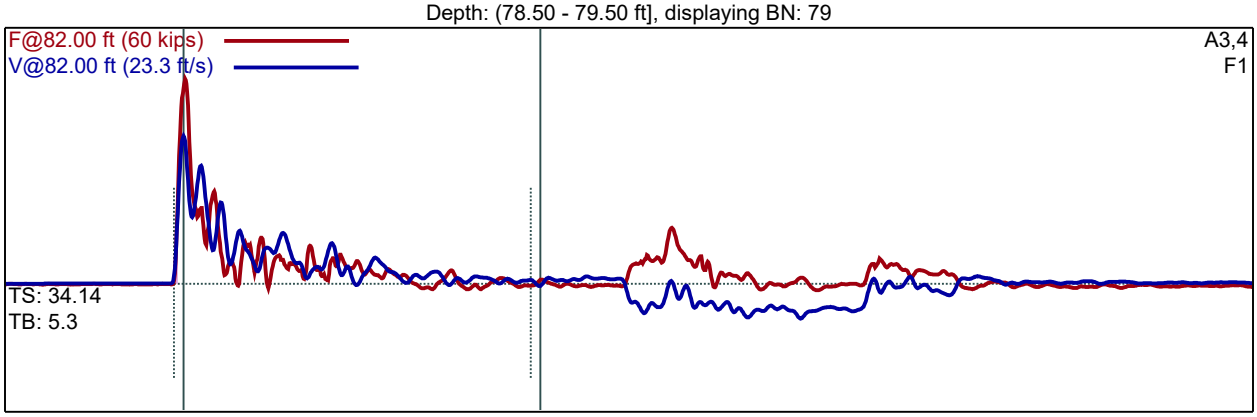
Ardco Buggy Rig
MJN
B-4

78.0 to 79.5 ft
Interval start: 9/20/2024

AR: 1.44 in^2
LE: 82.00 ft
WS: 16807.9 ft/s

SP: 0.492 k/ft3
EM: 30000 ksi

Depth: (78.50 - 79.50 ft], displaying BN: 79



F1 : [413NWJ1] 209.259 PDICAL (1) FF6

A3 (PR): [K14104] 324.04 mv/6.4v/5000g (1) VF6
A4 (PR): [K14107] 352.953 mv/6.4v/5000g (1) VF6

CSX: Compression Stress Maximum
CSI: Compression Stress Maximum - Individual Sensor
EMX: Maximum Energy
EFV: Maximum Energy

ETR: Energy Transfer Ratio - Rated
BPM: Blows/Minute
FMX: Maximum Force
VMX: Maximum Velocity

BL#	BC /6"	LP ft	CSX ksi	CSI ksi	EMX ft-lb	EFV ft-lb	ETR %	BPM bpm	FMX kips	VMX ft/s
17	29	78.52	30.0	30.0	276	276	78.7	39.4	43	12.7
18	29	78.53	29.8	29.8	278	278	79.6	39.4	43	12.7
19	29	78.55	29.1	29.1	277	277	79.1	39.6	42	12.4
20	29	78.57	27.7	27.7	275	275	78.5	39.4	40	12.0
21	29	78.59	30.6	30.6	284	284	81.1	39.6	44	12.8
22	29	78.60	30.4	30.4	281	281	80.4	39.4	44	12.8
23	29	78.62	28.9	28.9	275	275	78.7	39.7	42	12.2
24	29	78.64	29.7	29.7	281	281	80.3	39.9	43	12.5
25	29	78.66	29.3	29.3	281	281	80.4	39.7	42	12.4
26	29	78.67	29.9	29.9	285	285	81.4	39.9	43	12.7
27	29	78.69	30.4	30.4	279	279	79.6	39.6	44	12.5
28	29	78.71	30.3	30.3	285	285	81.3	40.1	44	12.8
29	29	78.72	32.6	32.6	289	289	82.7	39.8	47	13.2
30	29	78.74	30.8	30.8	285	285	81.4	39.6	44	12.7
31	29	78.76	30.8	30.8	280	280	80.0	39.6	44	12.8
32	29	78.78	31.0	31.0	281	281	80.4	39.4	45	12.8
33	29	78.79	31.3	31.3	280	280	80.1	39.4	45	12.7
34	29	78.81	32.4	32.4	286	286	81.7	39.5	47	13.2
35	29	78.83	32.0	32.0	287	287	81.9	39.7	46	13.2
36	29	78.84	30.9	30.9	281	281	80.3	39.2	45	12.7
37	29	78.86	31.2	31.2	284	284	81.3	40.0	45	12.9
38	29	78.88	33.0	33.0	289	289	82.5	40.1	48	13.5
39	29	78.90	31.8	31.8	287	287	82.1	40.0	46	13.0
40	29	78.91	31.5	31.5	286	286	81.6	40.0	45	12.9
41	29	78.93	32.5	32.5	285	285	81.5	40.1	47	13.0
42	29	78.95	33.3	33.3	292	292	83.4	39.9	48	13.4
43	29	78.97	33.7	33.7	297	297	84.9	39.7	49	13.6

44	29	78.98	32.6	32.6	287	287	82.0	40.0	47	13.1
45	29	79.00	33.2	33.2	291	291	83.0	39.9	48	13.6
46	36	79.01	32.8	32.8	280	280	79.9	39.7	47	13.1
47	36	79.03	32.5	32.5	284	284	81.3	39.8	47	13.0
48	36	79.04	32.4	32.4	283	283	81.0	40.0	47	13.1
49	36	79.06	33.4	33.4	290	290	82.9	40.0	48	13.4
50	36	79.07	33.4	33.4	285	285	81.3	39.5	48	13.2
51	36	79.08	33.0	33.0	287	287	82.1	39.6	48	13.3
52	36	79.10	33.0	33.0	285	285	81.3	39.5	48	13.3
53	36	79.11	32.8	32.8	285	285	81.3	39.3	47	13.2
54	36	79.13	33.1	33.1	291	291	83.1	39.3	48	13.3
55	36	79.14	31.8	31.8	283	283	80.8	39.6	46	12.9
56	36	79.15	33.1	33.1	285	285	81.4	39.6	48	13.2
57	36	79.17	32.9	32.9	288	288	82.4	40.1	47	13.5
58	36	79.18	33.5	33.5	294	294	83.9	39.8	48	13.6
59	36	79.19	33.6	33.6	291	291	83.1	40.0	48	13.7
60	36	79.21	34.2	34.2	301	301	85.9	40.0	49	13.7
61	36	79.22	33.2	33.2	293	293	83.8	39.6	48	13.4
62	36	79.24	32.4	32.4	289	289	82.4	39.9	47	13.1
63	36	79.25	33.3	33.3	292	292	83.4	39.6	48	13.5
64	36	79.26	33.8	33.8	297	297	84.8	39.7	49	13.8
65	36	79.28	33.4	33.4	292	292	83.5	40.1	48	13.5
66	36	79.29	33.1	33.1	290	290	83.0	39.8	48	13.3
67	36	79.31	32.0	32.0	292	292	83.5	39.8	46	13.3
68	36	79.32	33.2	33.2	293	293	83.6	40.0	48	13.4
69	36	79.33	32.6	32.6	292	292	83.3	39.7	47	13.4
70	36	79.35	33.4	33.4	295	295	84.2	40.1	48	13.5
71	36	79.36	33.1	33.1	296	296	84.7	40.0	48	13.7
72	36	79.38	33.5	33.5	294	294	84.1	40.1	48	13.7
73	36	79.39	33.4	33.4	296	296	84.6	39.7	48	13.5
74	36	79.40	33.6	33.6	297	297	84.7	40.0	48	13.6
75	36	79.42	33.8	33.8	298	298	85.3	40.0	49	13.8
76	36	79.43	34.0	34.0	291	291	83.2	39.6	49	13.4
77	36	79.44	33.7	33.7	298	298	85.2	39.9	49	13.6
78	36	79.46	33.0	33.0	299	299	85.5	39.4	48	13.4
79	36	79.47	33.3	33.3	293	293	83.7	39.7	48	13.5
80	36	79.49	33.4	33.4	294	294	83.9	39.7	48	13.4
81	36	79.50	33.8	33.8	293	293	83.7	39.8	49	13.4
		Average	32.2	32.2	288	288	82.2	39.7	46	13.2
		Std Dev	1.5	1.5	6	6	1.8	0.2	2	0.4

N-value: 65

Sample Interval Time: 96.61 seconds.

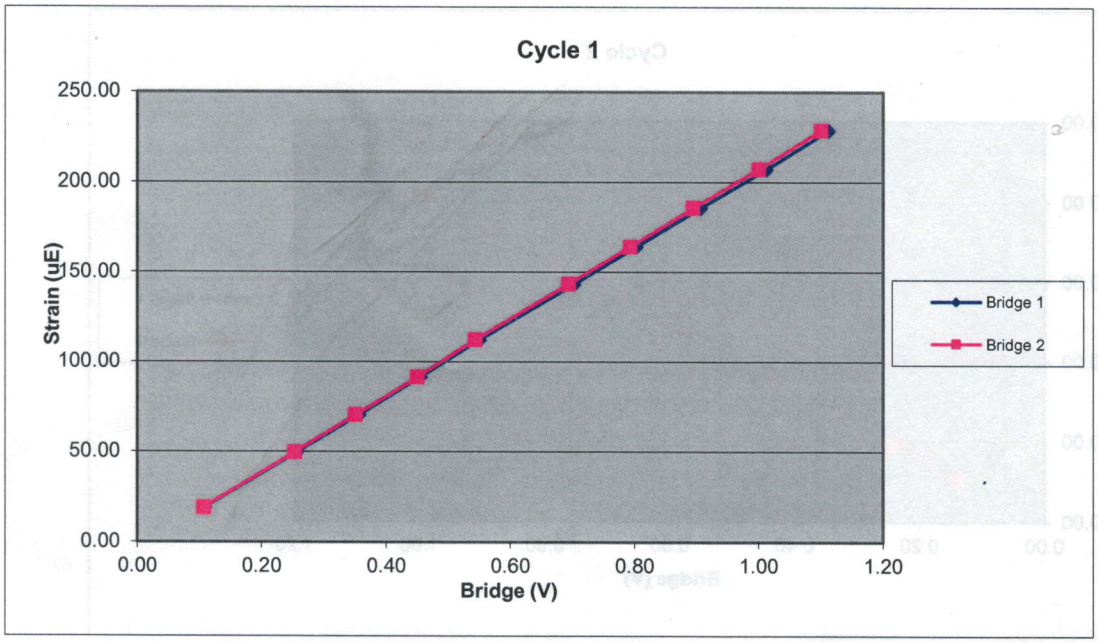
Appendix B

Dynamic Measurement Equipment Calibration Sheets

413NWJ		Cycle 1		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	978.08	19.00	0.11	0.11
3	2295.77	49.44	0.26	0.25
4	3209.12	70.12	0.36	0.35
5	4098.60	91.21	0.46	0.45
6	4945.28	112.04	0.55	0.54
7	6325.45	143.26	0.70	0.69
8	7223.50	164.09	0.80	0.79
9	8144.85	185.77	0.91	0.89
10	9106.65	207.17	1.01	1.00
11	10016.69	228.54	1.11	1.10

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9002.45**	**Force Calibration (lb/V)**	**9112.46**
Offset	-7.05	Offset	-5.50
Correlation	0.999999	Correlation	0.999998
Strain Calibration (µE/V)	**208.99**	**Strain Calibration (µE/V)**	**211.54**
Offset	-3.90	Offset	-3.86
Correlation	0.999982	Correlation	0.999979

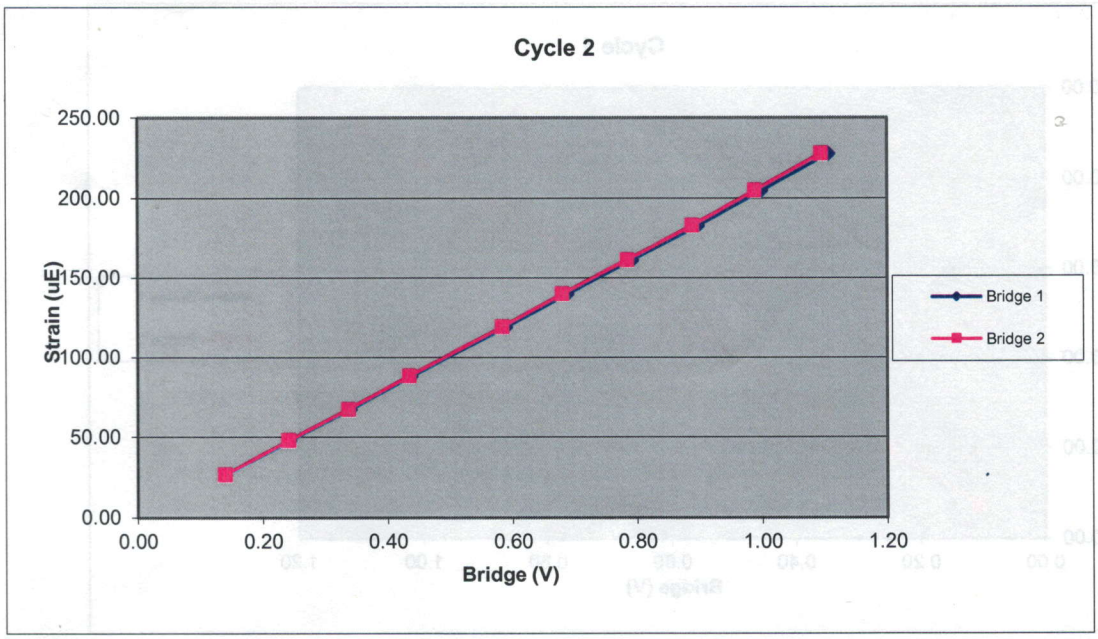
Force Strain Calibration	
EA (Kips)	**43074.67**
Offset	161.09
Correlation	0.999978



413NWJ		Cycle 2		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	1280.45	26.46	0.14	0.14
3	2205.21	47.72	0.24	0.24
4	3074.02	67.15	0.34	0.34
5	3959.11	88.20	0.44	0.43
6	5325.05	119.05	0.59	0.58
7	6210.43	139.67	0.69	0.68
8	7150.00	161.14	0.79	0.78
9	8104.59	182.61	0.90	0.89
10	9016.39	204.48	1.00	0.99
11	9987.74	227.34	1.11	1.09

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9016.47**	**Force Calibration (lb/V)**	**9120.13**
Offset	**8.96**	Offset	**3.63**
Correlation	**0.999999**	Correlation	**0.999999**
Strain Calibration (µE/V)	**207.59**	**Strain Calibration (µE/V)**	**209.97**
Offset	**-3.06**	Offset	**-3.18**
Correlation	**0.999982**	Correlation	**0.999982**

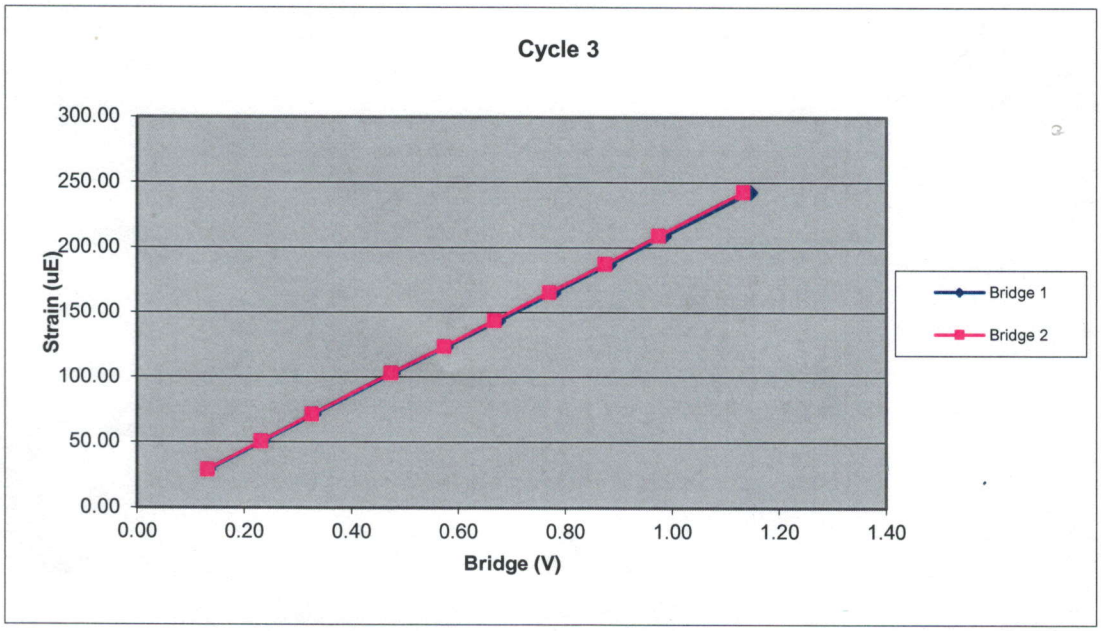
Force Strain Calibration	
EA (Kips)	**43433.57**
Offset	**142.08**
Correlation	**0.999983**



413NWJ		Cycle 3		
Sample	**Force (lb)**	**Strain (µE)**	**Bridge 1 (V)**	**Bridge 2 (V)**
1	0.00	0.00	0.00	0.00
2	1213.49	28.74	0.13	0.13
3	2121.87	50.32	0.24	0.23
4	2992.63	71.05	0.33	0.33
5	4327.18	102.75	0.48	0.47
6	5230.40	123.37	0.58	0.57
7	6109.44	143.61	0.68	0.67
8	7037.91	165.46	0.78	0.77
9	7992.30	187.14	0.88	0.87
10	8905.65	209.16	0.99	0.97
11	10367.61	242.78	1.15	1.13

Bridge 1		**Bridge 2**	
Force Calibration (lb/V)	**9044.32**	**Force Calibration (lb/V)**	**9142.48**
Offset	**-3.88**	Offset	**3.21**
Correlation	**0.999999**	Correlation	**0.999997**
Strain Calibration (µE/V)	**211.21**	**Strain Calibration (µE/V)**	**213.51**
Offset	**0.87**	Offset	**1.04**
Correlation	**0.999985**	Correlation	**0.999990**

Force Strain Calibration	
EA (Kips)	**42819.64**
Offset	**-41.18**
Correlation	**0.999985**



Bridge Excitation (V) 5
Shunt Resitor (ohm) 60.4k

Calibration Factors	413NWJ		
Bridge 1 (µE/V)	209.26	Bridge 2 (µE/V)	211.67
EA Factor (Kips)	43109.29	Area (in^2)	1.44

Calibrated by: Sean Bonney
Calibrated Date: 12/18/2023

Pile Dynamics Inc
30725 Aurora Rd
Solon, OH 44139

Traceable to N.I.S.T.

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on

AUG 1 6 2024

Serial No:	K14104	**Temperature:**	24.6 °C
Model:	PR	**Humidity:**	42%
Calibrated on:	Channel 4 on 8G 5161 LE		

Ref Acc 1:	78270! 971 g's/volt	**Cal on:**	11Jan2024
Ref Acc 2:	78268! 986 g's/volt	**Cal on:**	11Jan2024

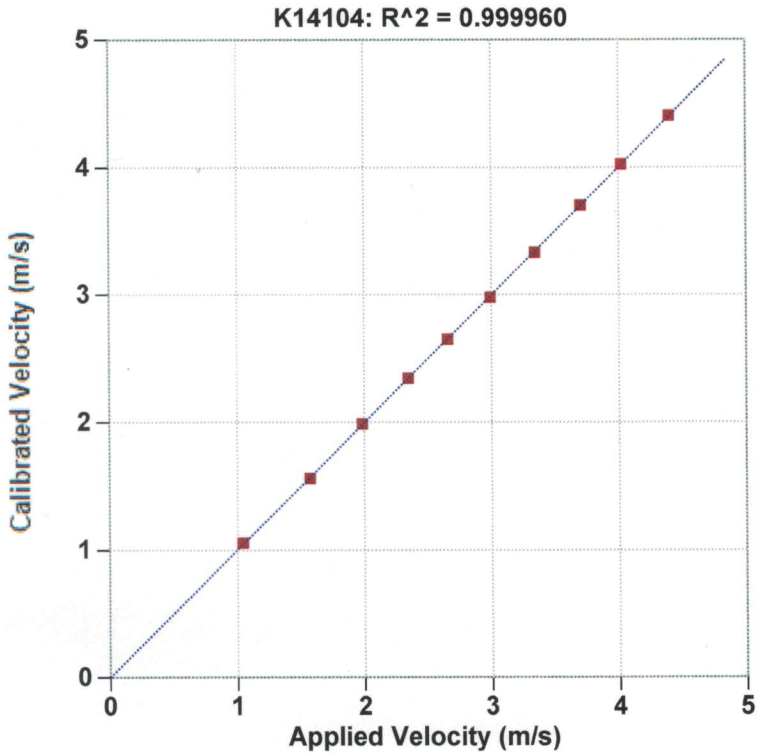
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

324.0 mv/5000g
(64.8 µv/g)
R^2: 0.999960 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity	S/N K14104 Velocity
m/s	m/s
1.047	1.058
1.573	1.567
1.986	1.991
2.349	2.345
2.657	2.653
2.994	2.984
3.343	3.336
3.704	3.708
4.024	4.030
4.401	4.407

Maximum Acceleration: 936 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on
AUG 16 2024

Serial No:	K14107	**Temperature:**	24.6 °C
Model:	PR	**Humidity:**	43%
Calibrated on:	Channel 4 on 8G 5161 LE		

Ref Acc 1:	78270! 971 g's/volt	**Cal on:**	11Jan2024
Ref Acc 2:	78268! 986 g's/volt	**Cal on:**	11Jan2024

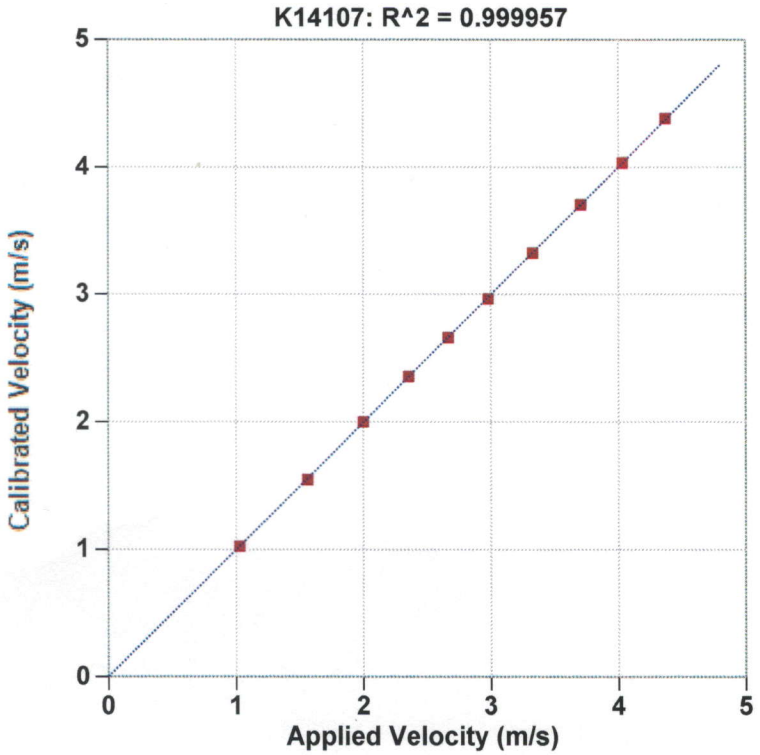
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

353.0 mv/5000g
(70.6 µv/g)
R^2: 0.999957 [Chip programmed]

Operator: William Johnson

Signed



Reference Velocity	S/N K14107 Velocity
m/s	m/s
1.030	1.030
1.563	1.553
2.001	2.003
2.357	2.356
2.667	2.664
2.981	2.968
3.331	3.328
3.707	3.710
4.037	4.039
4.373	4.386

Maximum Acceleration: 925 g's

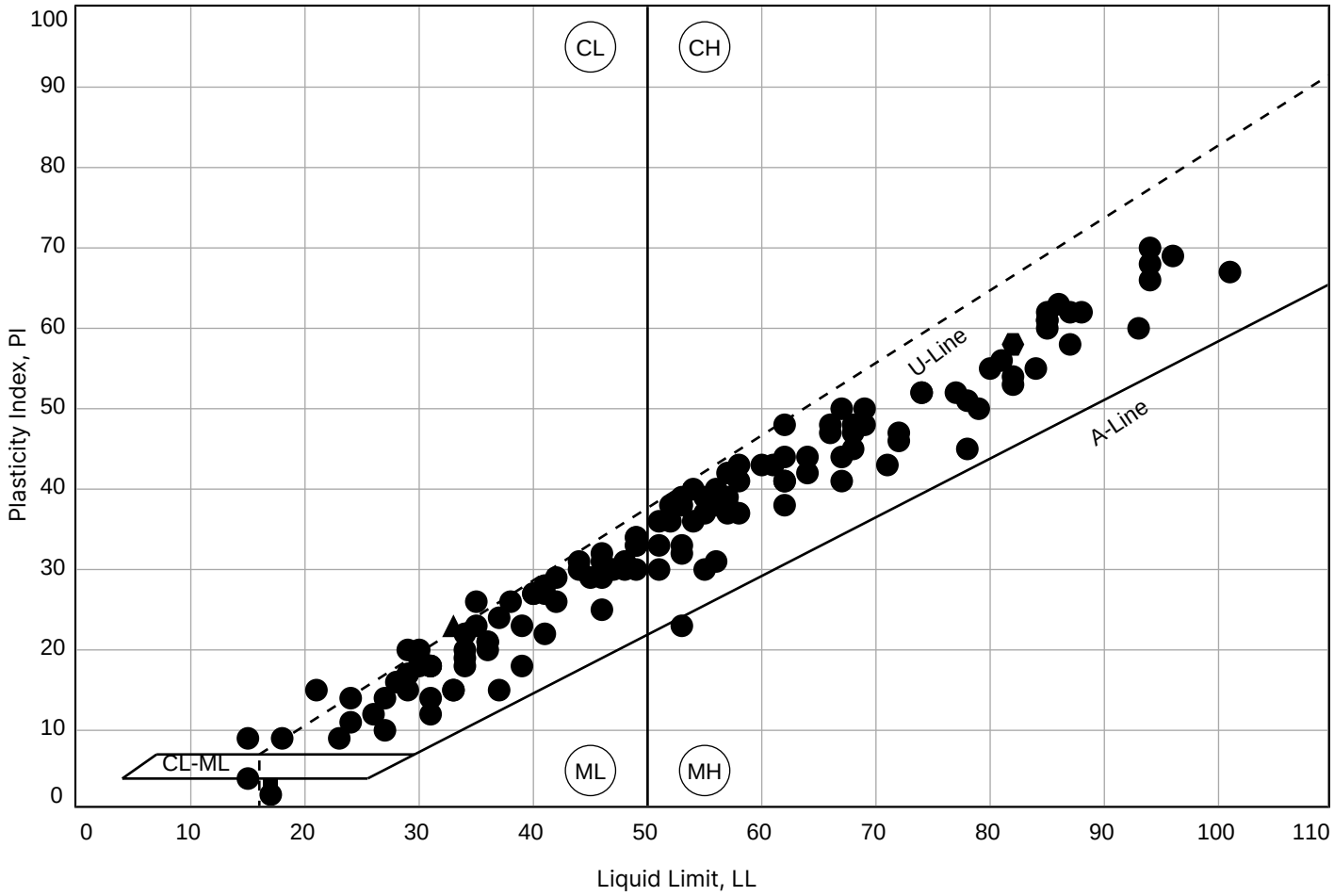
APPENDIX C

LABORATORY TESTS RESULTS

GULF SOUTH ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

ATTERBERG LIMITS TEST RESULTS

PROJECT St. Tammany Trace Bridges
CLIENT St. Tammany Parish
PROJECT NO. 24-057
LOCATION Tammany Trace Bike Trail, St. Tammany Parish, LA



EXPLORATION	SAMPLE NUMBER	DEPTH	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) GROUP NAME	USCS SYMBOL	LL	PL	PI	FINES (%)	NAT MC (%)	TEST BY/RVW	TEST STD	TEST NOTE
B-1	3	4	Sandy Clay	CL	17	14	3		18.6		D4318	
B-1	4	6	Sandy Clay	CL	15	11	4	58	12.5		D4318	
B-1	5	8	Silty Clay	CL	29	12	17		19.6		D4318	
B-1	6	10	Silty Clay	CL	33	10	23		18.9		D4318	
B-1	12	33	Fat Clay	CH	82	24	58		45.8		D4318	
B-1	13	38	Fat Clay	CH	53	14	39		43.6		D4318	
B-1	14	43	Silty Clay	CL	30	10	20		31.1		D4318	
B-1	16	53	Silty Clay	CL	39	16	23		31.3		D4318	
B-1	17	58	Fat Clay	CH	69	19	50		32.1		D4318	
B-1	18	63	Fat Clay	CH	74	22	52		33.6		D4318	
B-1	19	68	Fat Clay	CH	85	25	60		36.8		D4318	
B-1	20	73	Fat Clay	CH	68	21	47		39		D4318	
B-2	2	2	Silty Clay	CL	18	9	9		14.3		D4318	
B-2	3	4	Silty Clay	CL	17	15	2		18		D4318	
B-2	4	6	Silty Clay	CL	15	6	9		15.9		D4318	
B-2	5	8	Silty Clay	CL	48	17	31		24.6		D4318	
B-2	12	33	Fat Clay	CH	57	19	38		37.6		D4318	
B-2	13	38	Fat Clay	CH	88	26	62		35.1		D4318	
B-2	14	43	Silty Clay	CL	35	12	23		31.7		D4318	
B-2	16	53	Fat Clay	CH	80	25	55		43.9		D4318	
B-2	18	63	Fat Clay	CH	94	24	70		47.3		D4318	
B-2	20	73	Fat Clay	CH	94	26	68		44.3		D4318	
B-2	25	93	Sandy Clay	CL	27	17	10	56	24.4		D4318	
B-2	26	98	Silty Clay	CL	23	14	9		25		D4318	
B-3	2	2	Silty Clay	CL	29	9	20		16.9		D4318	

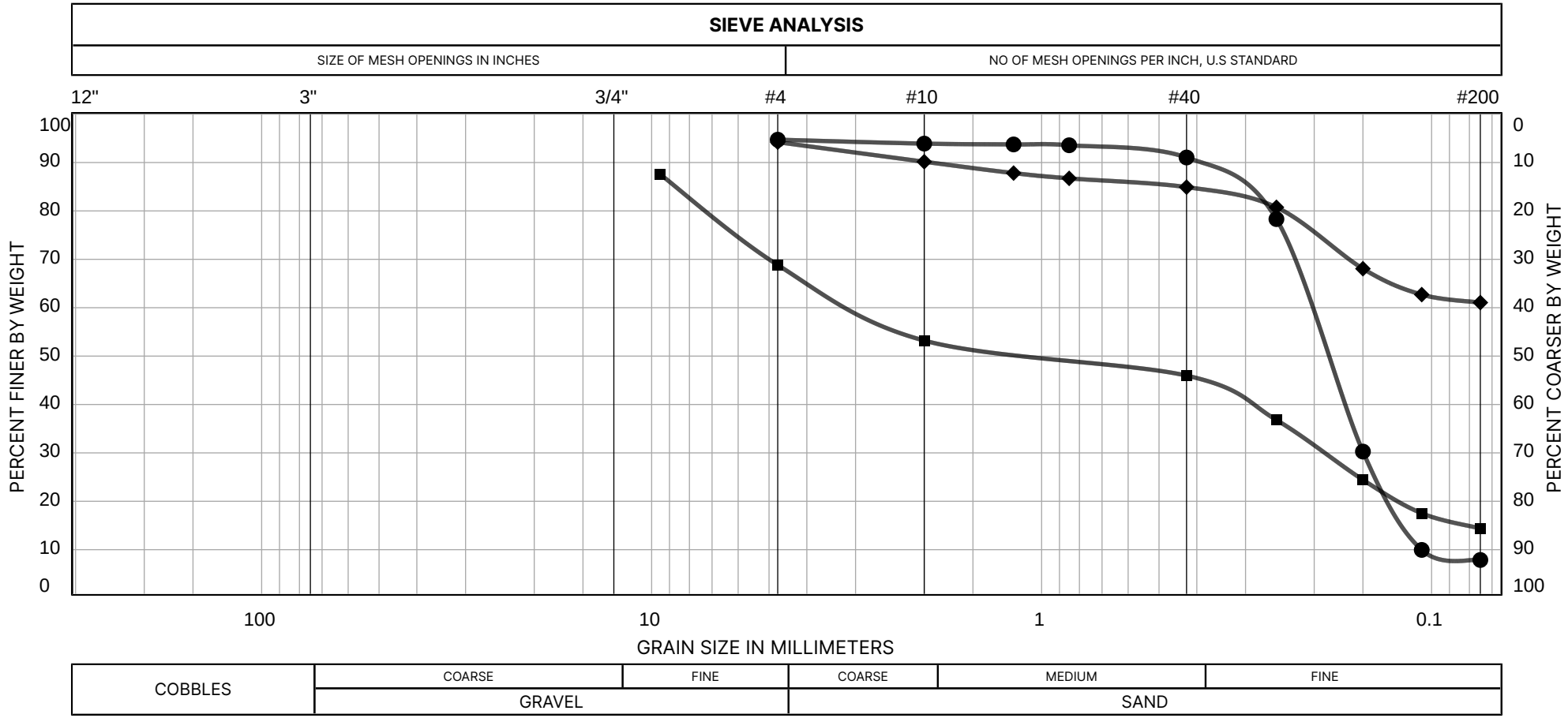
EXPLORATION	SAMPLE NUMBER	DEPTH	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) GROUP NAME	USCS SYMBOL	LL	PL	PI	FINES (%)	NAT MC (%)	TEST BY/RVW	TEST STD	TEST NOTE
B-3	3	4	Silty Clay	CL	46	17	29		22.7		D4318	
B-3	4	6	Silty Clay	CL	31	13	18		19.5		D4318	
B-3	5	8	Silty Clay	CL	40	13	27		15.7		D4318	
B-3	6	10	Silty Clay	CL	36	15	21		19.7		D4318	
B-3	10	28	Fat Clay	CH	85	24	61		36.3		D4318	
B-3	12	38	Fat Clay	CH	62	24	38		35.7		D4318	
B-3	14	48	Silty Clay	CL	36	16	20		29.9		D4318	
B-3	16	58	Fat Clay	CH	53	30	23		27.5		D4318	
B-3	17	63	Fat Clay	CH	62	21	41		31.9		D4318	
B-3	23	83	Silty Clay	CL	49	15	34		33.5		D4318	
B-3	26	98	Fat Clay	CH	85	23	62		44.6		D4318	
B-4	2	2	Silty Clay	CL	34	12	22		18.8		D4318	
B-4	3	4	Silty Clay	CL	31	13	18		18		D4318	
B-4	4	6	Silty Clay	CL	24	13	11		14.6		D4318	
B-4	5	8	Silty Clay	CL	24	10	14		16.3		D4318	
B-4	6	10	Fat Clay	CH	52	14	38		18.6		D4318	
B-4	8	18	Silty Clay	CL	33	18	15		25.7		D4318	
B-4	10	28	Fat Clay	CH	85	24	61		38		D4318	
B-4	11	33	Fat Clay	CH	84	29	55		39.1		D4318	
B-4	12	38	Fat Clay	CH	101	34	67		45.5		D4318	
B-4	14	48	Silty Clay	CL	33	18	15		27.5		D4318	
B-4	16	58	Fat Clay	CH	60	17	43		35.5		D4318	
B-4	22	83	Silty Clay	CL	42	16	26		32.3		D4318	
B-4	23	88	Fat Clay	CH	57	18	39		34.9		D4318	
B-4	25	98	Fat Clay	CH	62	18	44		38.5		D4318	
B-5	2	2	Silty Clay	CL	21	6	15		14		D4318	
B-5	4	6	Silty Clay	CL	35	9	26		11		D4318	
B-5	6	10	Fat Clay	CH	54	14	40		17.6		D4318	
B-5	7	13	Silty Clay	CL	41	19	22		22.5		D4318	
B-5	8	18	Silty Clay	CL	26	14	12		28.8		D4318	
B-5	9	23	Fat Clay	CH	53	21	32		34		D4318	
B-5	10	28	Fat Clay	CH	77	25	52		35.3		D4318	
B-5	11	33	Fat Clay	CH	96	27	69		44.9		D4318	
B-5	12	38	Silty Clay	CL	45	16	29		28.1		D4318	
B-5	13	43	Fat Clay	CH	69	21	48		37		D4318	
B-5	15	53	Fat Clay	CH	58	17	41		22.7		D4318	
B-5	16	58	Fat Clay	CH	78	27	51		30.4		D4318	
B-5	17	63	Fat Clay	CH	86	23	63		36.3		D4318	
B-5	23	88	Fat Clay	CH	68	20	48		43.1		D4318	
B-6	7	13	Silty Clay	CL	44	13	31		23		D4318	
B-6	8	18	Fat Clay	CH	58	21	37		33.7		D4318	
B-6	9	23	Fat Clay	CH	72	25	47		37.7		D4318	
B-6	10	28	Fat Clay	CH	82	29	53		40		D4318	
B-6	11	33	Fat Clay	CH	82	28	54		46.2		D4318	
B-6	12	38	Fat Clay	CH	93	33	60		46.6		D4318	
B-6	15	53	Fat Clay	CH	66	19	47		26.9		D4318	
B-6	16	58	Fat Clay	CH	72	26	46		28.7		D4318	
B-6	17	63	Silty Clay	CL	34	14	20		23.7		D4318	
B-6	22	83	Fat Clay	CH	61	18	43		33.9		D4318	
B-6	23	88	Fat Clay	CH	55	18	37		33.9		D4318	
B-6	24	93	Fat Clay	CH	62	21	41		34		D4318	
B-6	25	98	Fat Clay	CH	57	20	37		33.6		D4318	
B-8	2	2	Silty Clay	CL	31	19	12		11.5		D4318	
B-8	4	6	Fat Clay	CH	56	17	39		18.8		D4318	
B-8	5	8	Silty Clay	CL	34	15	19		13.2		D4318	
B-8	7	13	Fat Clay	CH	56	18	38		28		D4318	
B-8	9	23	Fat Clay	CH	74	22	52		30.6		D4318	
B-8	10	28	Fat Clay	CH	94	28	66		43		D4318	
B-8	12	38	Fat Clay	CH	51	21	30		33.1		D4318	
B-8	13	43	Silty Clay	CL	48	18	30		24.9		D4318	
B-8	15	53	Fat Clay	CH	67	23	44		24.5		D4318	
B-8	16	58	Fat Clay	CH	79	29	50		35.6		D4318	
B-8	22	83	Fat Clay	CH	53	15	38		39.1		D4318	
B-8	23	88	Fat Clay	CH	55	16	39		34.2		D4318	
B-8	25	98	Silty Clay	CL	49	19	30		29		D4318	

EXPLORATION	SAMPLE NUMBER	DEPTH	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) GROUP NAME	USCS SYMBOL	LL	PL	PI	FINES (%)	NAT MC (%)	TEST BY/RVW	TEST STD	TEST NOTE
B-9	3	4	Silty Clay	CL	47	17	30		17.3		D4318	
B-9	4	6	Silty Clay	CL	30	11	19		16.5		D4318	
B-9	5	8	Silty Clay	CL	49	16	33		22.8		D4318	
B-9	6	10	Silty Clay	CL	49	16	33		19.9		D4318	
B-9	7	13	Silty Clay	CL	36	15	21		22.5		D4318	
B-9	8	18	Silty Clay	CL	30	12	18		20.9		D4318	
B-9	9	23	Silty Clay	CL	29	14	15		21.7		D4318	
B-9	11	33	Fat Clay	CH	71	28	43		32.7		D4318	
B-9	12	38	Silty Clay	CL	46	15	31		29.4		D4318	
B-9	13	43	Fat Clay	CH	67	26	41		37.5		D4318	
B-9	14	48	Silty Clay	CL	39	21	18		25.7		D4318	
B-9	16	58	Fat Clay	CH	55	25	30		31.1		D4318	
B-9	17	63	Silty Clay	CL	37	22	15		33.1		D4318	
B-10	2	2	Silty Clay	CL	38	12	26		20.9		D4318	
B-10	4	6	Silty Clay	CL	41	13	28		24.3		D4318	
B-10	5	8	Silty Clay	CL	40	13	27		21.7		D4318	
B-10	6	10	Fat Clay	CH	51	15	36		21.6		D4318	
B-10	8	18	Silty Clay	CL	29	12	17		15.5		D4318	
B-10	9	23	Fat Clay	CH	64	20	44		36.5		D4318	
B-10	10	28	Fat Clay	CH	87	25	62		43.9		D4318	
B-10	11	33	Silty Clay	CL	44	14	30		22.6		D4318	
B-10	13B	44	Fat Clay	CH	56	25	31		32.2		D4318	
B-10	15	53	Fat Clay	CH	64	22	42		34.5		D4318	
B-10	16	58	Silty Clay	CL	34	16	18		29.4		D4318	
B-11	2	2	Fat Clay	CH	67	17	50		25.7		D4318	
B-11	3	4	Fat Clay	CH	56	16	40		25.2		D4318	
B-11	4	6	Silty Clay	CL	37	13	24		15.2		D4318	
B-11	6	10	Silty Clay	CL	42	13	29		17.4		D4318	
B-11	7	13	Silty Clay	CL	49	15	34		24		D4318	
B-11	8	18	Silty Clay	CL	28	12	16		16.4		D4318	
B-11	10	28	Fat Clay	CH	66	18	48		33		D4318	
B-11	17	58	Fat Clay	CH	62	14	48	61	32.4		D4318	
B-11	18	63	Silty Clay	CL	46	14	32		22.7		D4318	
B-11	19	68	Silty Clay	CL	41	14	27		22.7		D4318	
B-11	20	73	Silty Clay	CL	46	21	25		29.2		D4318	
B-11	21	78	Fat Clay	CH	53	20	33		31.5		D4318	
B-11	23	88	Fat Clay	CH	81	25	56		37.4		D4318	
B-12	2	2	Fat Clay	CH	58	15	43		20.4		D4318	
B-12	3	4	Fat Clay	CH	52	16	36		17.5		D4318	
B-12	4	6	Fat Clay	CH	57	15	42		21.5		D4318	
B-12	6	10	Silty Clay	CL	27	13	14		20.6		D4318	
B-12	7	13	Silty Clay	CL	31	13	18		23.3		D4318	
B-12	9	23	Fat Clay	CH	54	18	36		18.5		D4318	
B-12	10	28	Fat Clay	CH	87	29	58		38.6		D4318	
B-12	19	63	Fat Clay	CH	68	23	45		44.8		D4318	
B-12	20	68	Fat Clay	CH	51	18	33		30.4		D4318	
B-12	23	83	Silty Clay	CL	31	17	14		26.2		D4318	
B-12	24	88	Fat Clay	CH	78	33	45		33.5		D4318	
B-12	26	98	Silty Clay	CL	29	12	17		22.6		D4318	

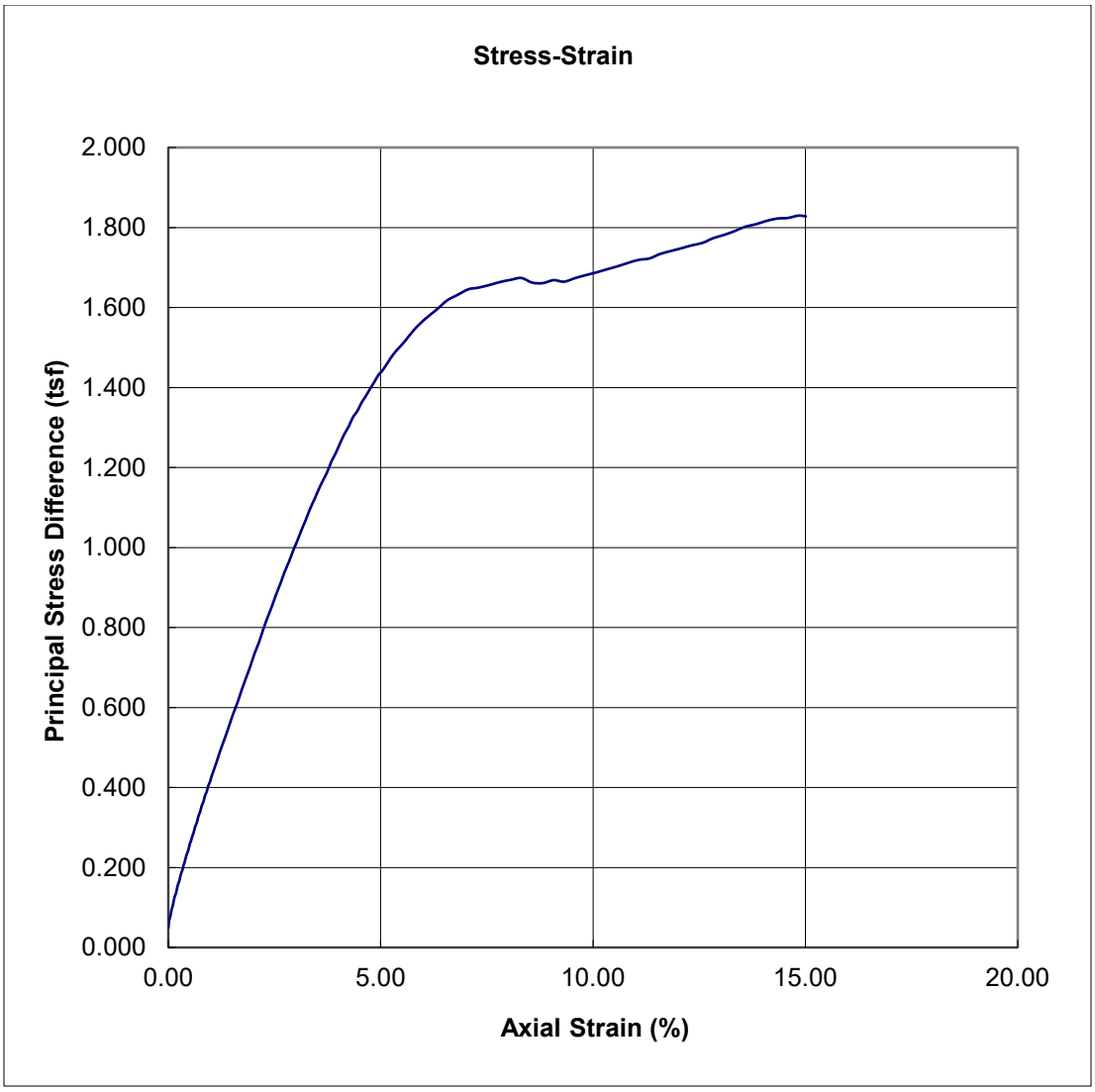
GULF SOUTH
ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

GRAIN SIZE DISTRIBUTION TEST RESULTS

St. Tammany Trace Bridges
St. Tammany Parish, LA



	EXPLORATION	SAMPLE NUMBER	DEPTH	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) GROUP NAME	USCS SYMBOL	COBBLE (%)	GRAVEL (%)	SAND (%)	FINES (%)	CF (%)	NAT WC...	D10	D15	D30	D50	D60	D85	D90	D100	CU	CC	TEST BY/RVW	TEST STD	NOTES
■	B-2	6	10				31	54	14		4.3		0.08	0.2	1.33	3.28	8.92							
◆	B-11	17	58				6	33	61		32.4						0.44	1.94						
●	B-12	17	53				5	87	8		24.1	0.11	0.12	0.15	0.2	0.22	0.35	0.41		2	0.93			



SAMPLE: **24-057 B-1 #3 4-6'**

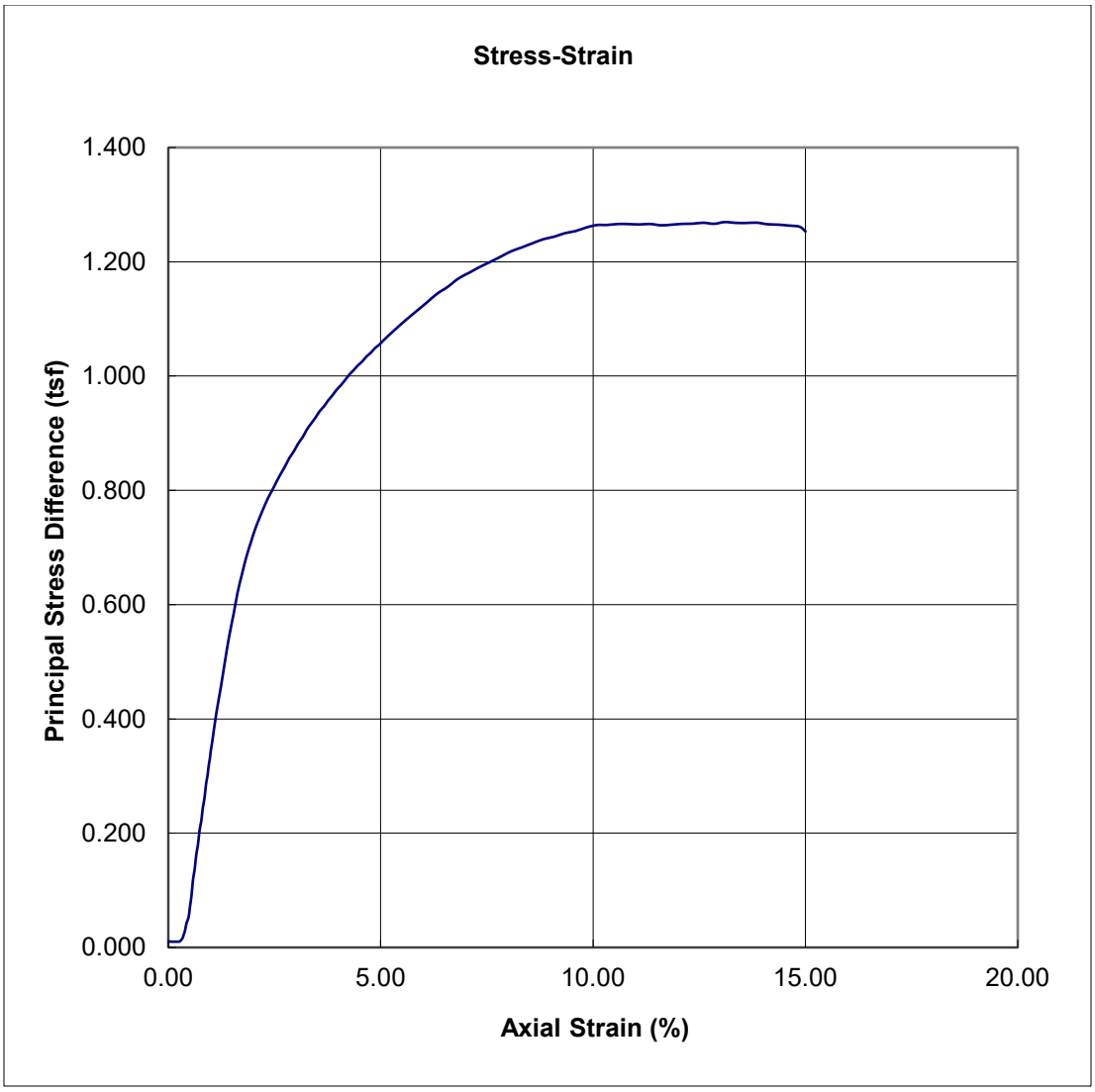
TEST TYPE: **UNCONSOLIDATED UNDRAINED (UU)**

COMPRESSIVE STRENGTH: **1.830 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **5.4 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-1 #5 8-10'**

TEST TYPE: **UNCONSOLIDATED UNDRAINED (UU)**

COMPRESSIVE STRENGTH: **1.270 tsf**

STRAIN: **13.10%**

CONFINING PRESSURE: **6.8 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with sand**

SAMPLE: **24-057 B-1 #6 10-12'**

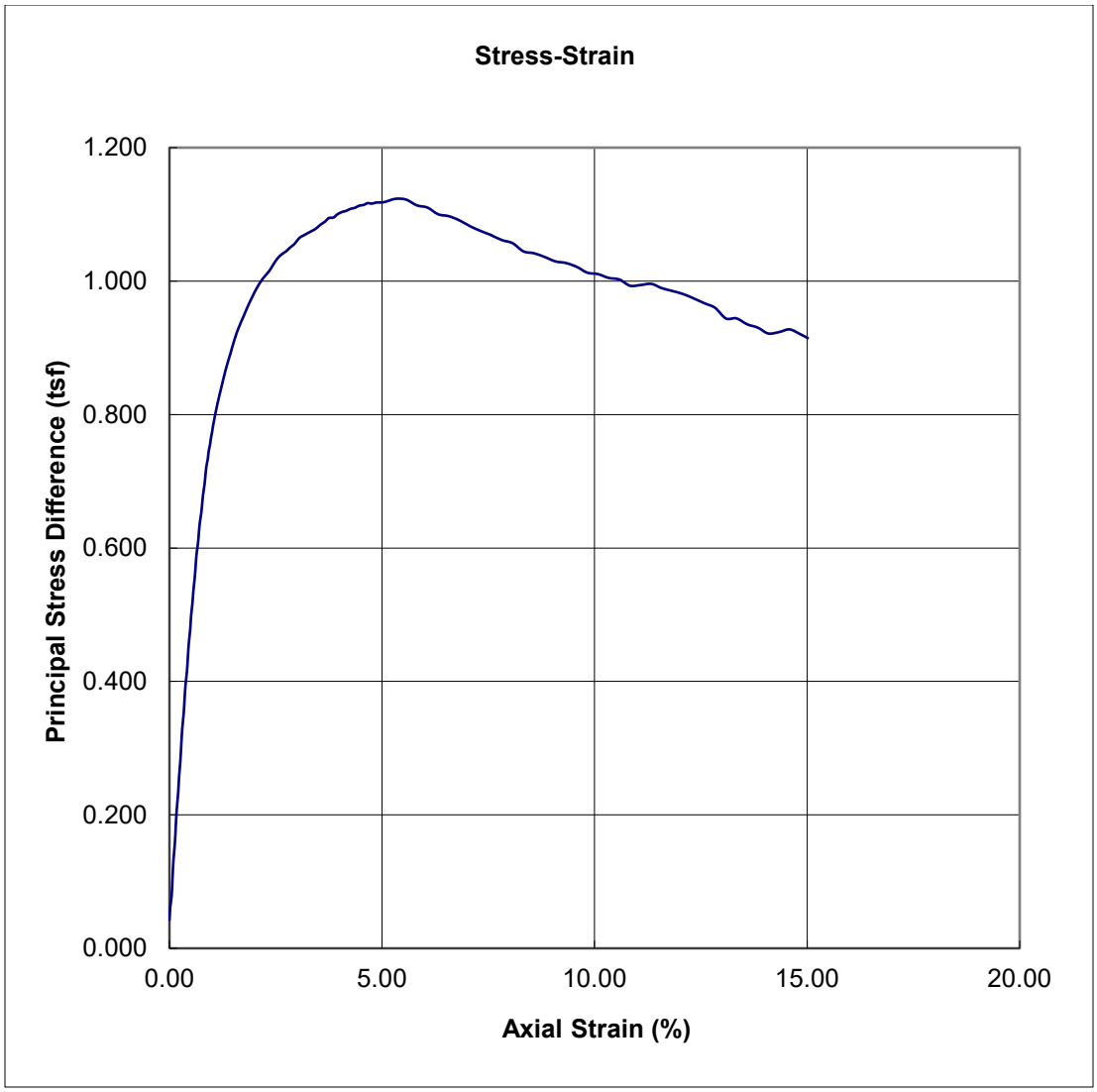
TEST TYPE: **UNCONSOLIDATED UNDRAINED (UU)**

COMPRESSIVE STRENGTH: **1.479 tsf**

STRAIN: **14.83%**

CONFINING PRESSURE: **7.4 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-1 #12 33-35'**

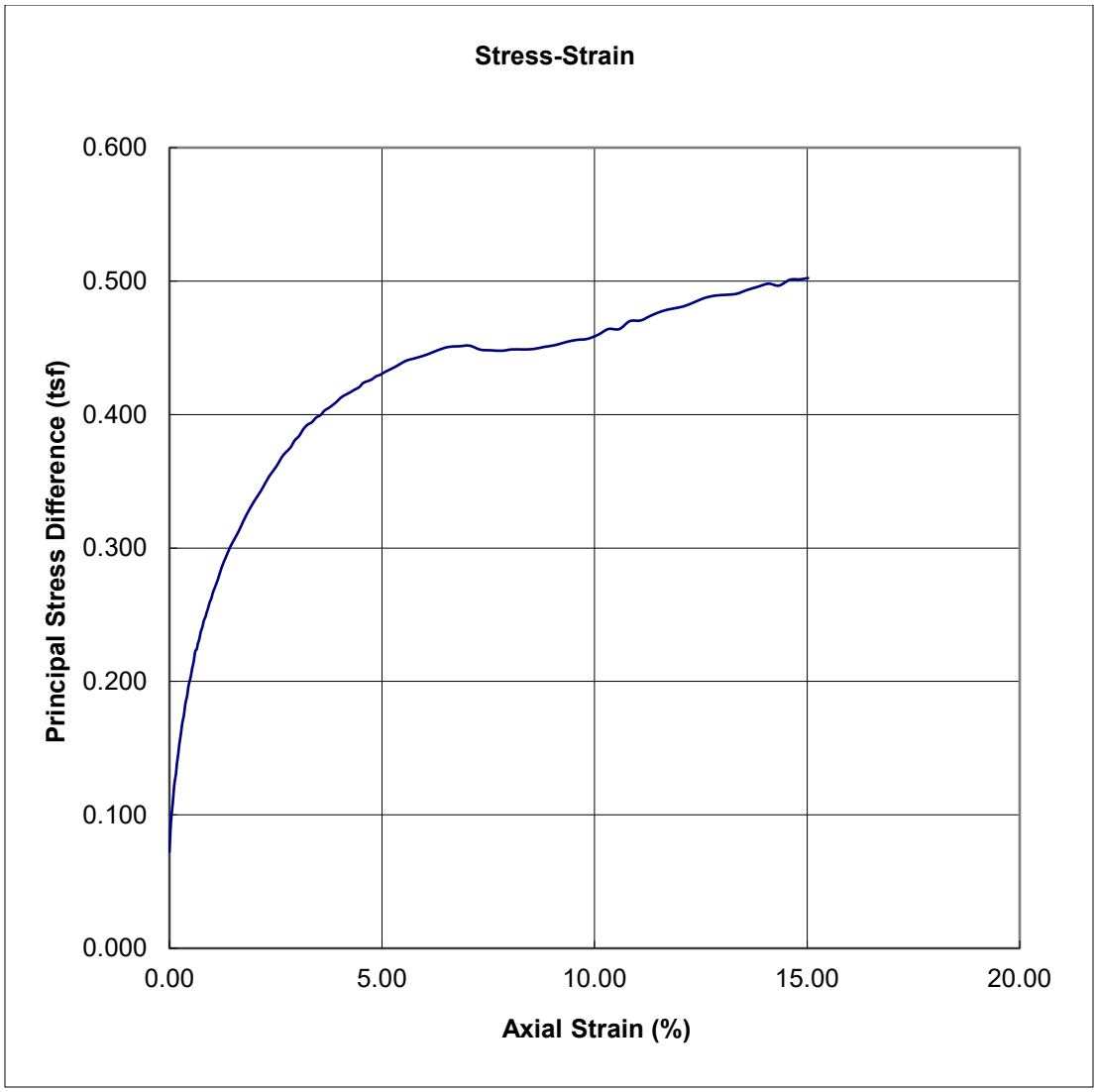
TEST TYPE: **UNCONSOLIDATED UNDRAINED (UU)**

COMPRESSIVE STRENGTH: **1.123 tsf**

STRAIN: **5.32%**

CONFINING PRESSURE: **15.1 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-1 #13 38-40'**

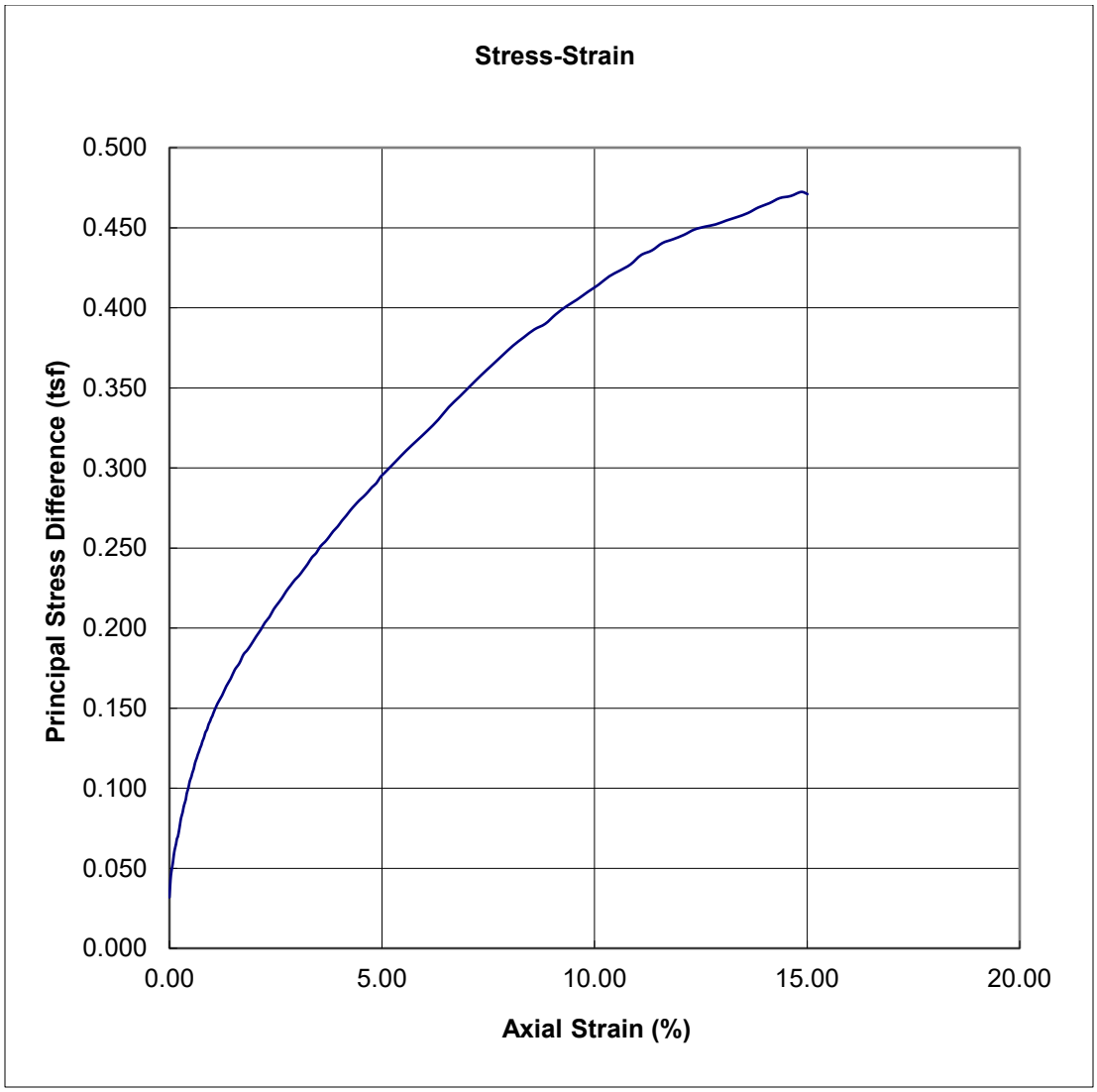
TEST TYPE: **UNDRAINED UNCONSOLIDATED**

COMPRESSIVE STRENGTH: **0.502 tsf**

STRAIN: **15.02%**

CONFINING PRESSURE: **16.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with trace silt and sand**



SAMPLE: **24-057 B-1 #14 43-45'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED**

COMPRESSIVE STRENGTH: **0.472 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **18.4 psi**

SAMPLE DESCRIPTION: **Soft Gray Fat Clay (CH) with sand trace shell fragments**

SAMPLE: **24-057 B-1 #15 48-50'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.669 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **20.1 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with shell fragments**

SAMPLE: **24-057 B-1 #16 53-55'**

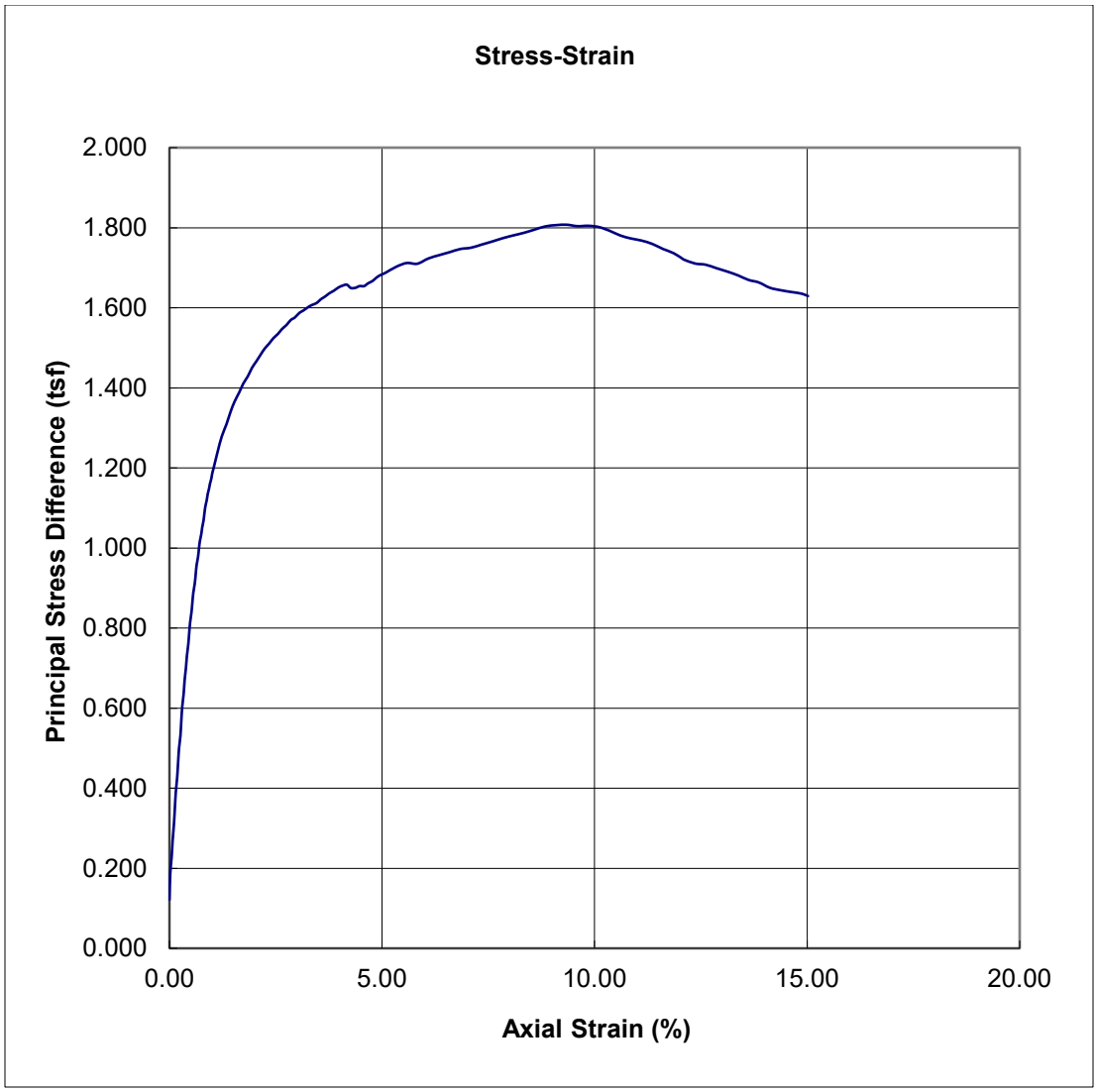
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.861 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **21.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with silt, shell, trace sand**



SAMPLE: **24-057 B-1 #18 63-65'**

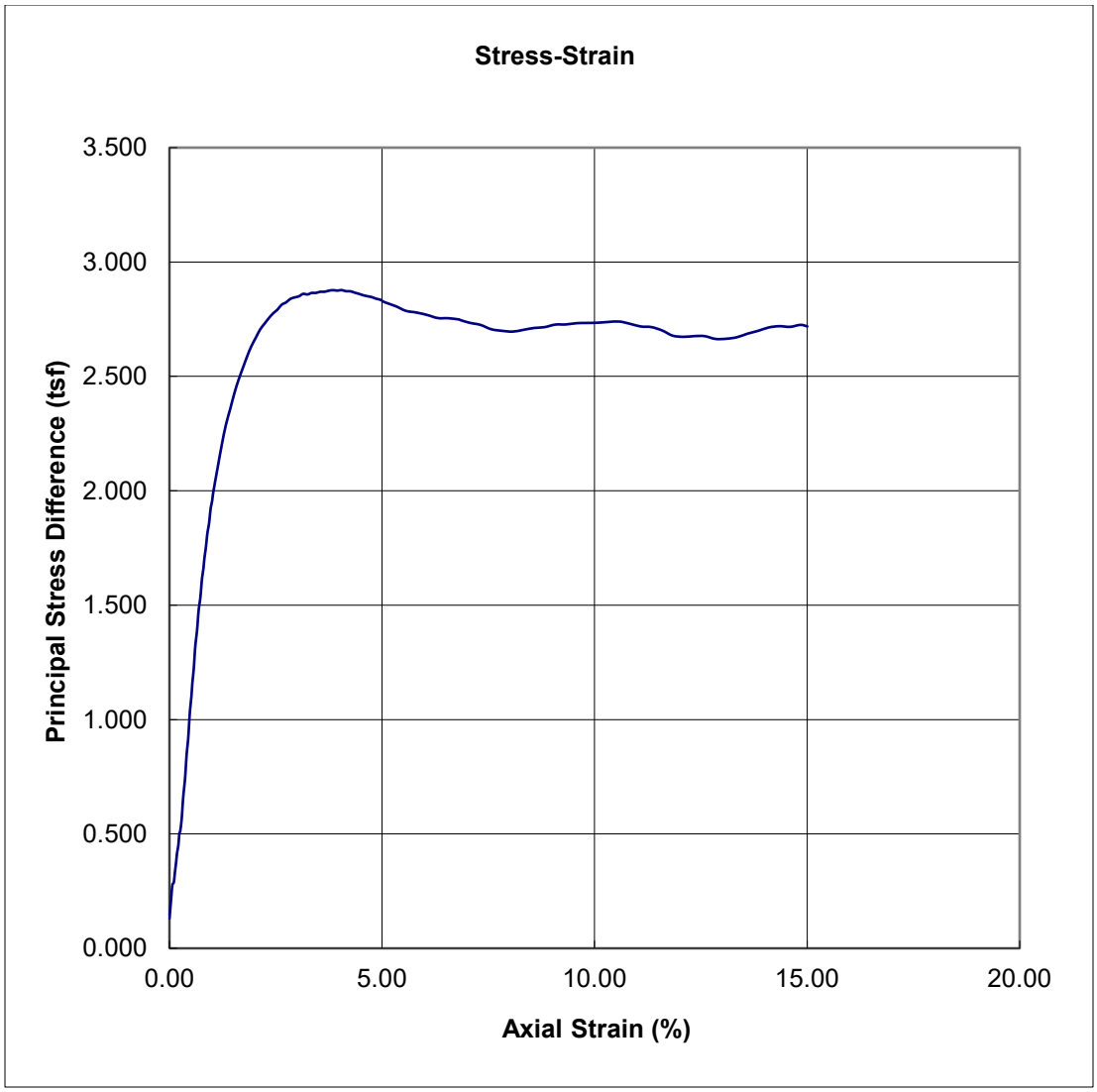
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.807 tsf**

STRAIN: **9.35%**

CONFINING PRESSURE: **25.1 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Tan Fat Clay (CH)**



SAMPLE: **24-057 B-1 #19 68-70'**

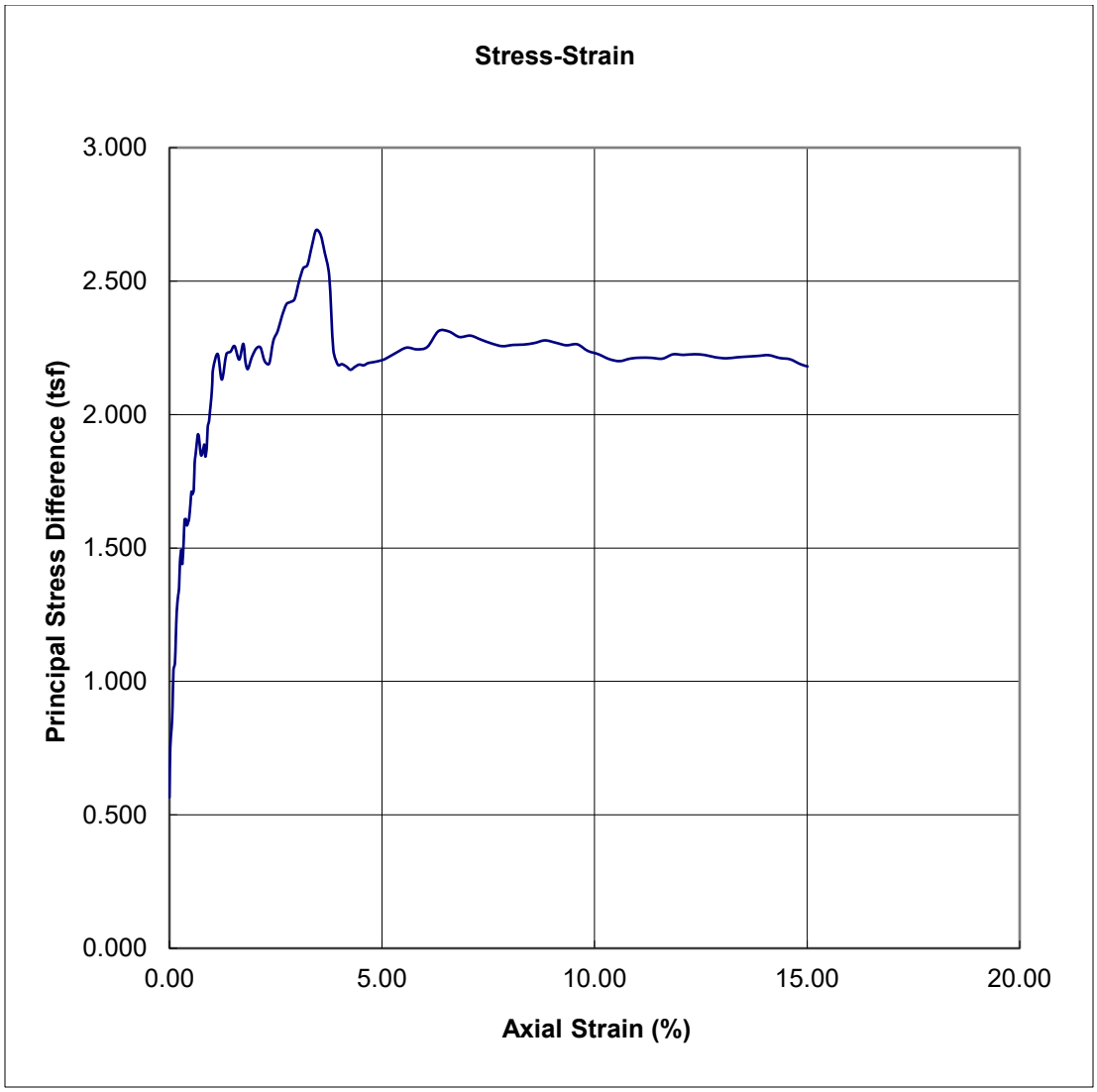
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.877 tsf**

STRAIN: **4.05%**

CONFINING PRESSURE: **26.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-1 #20 73-75'**

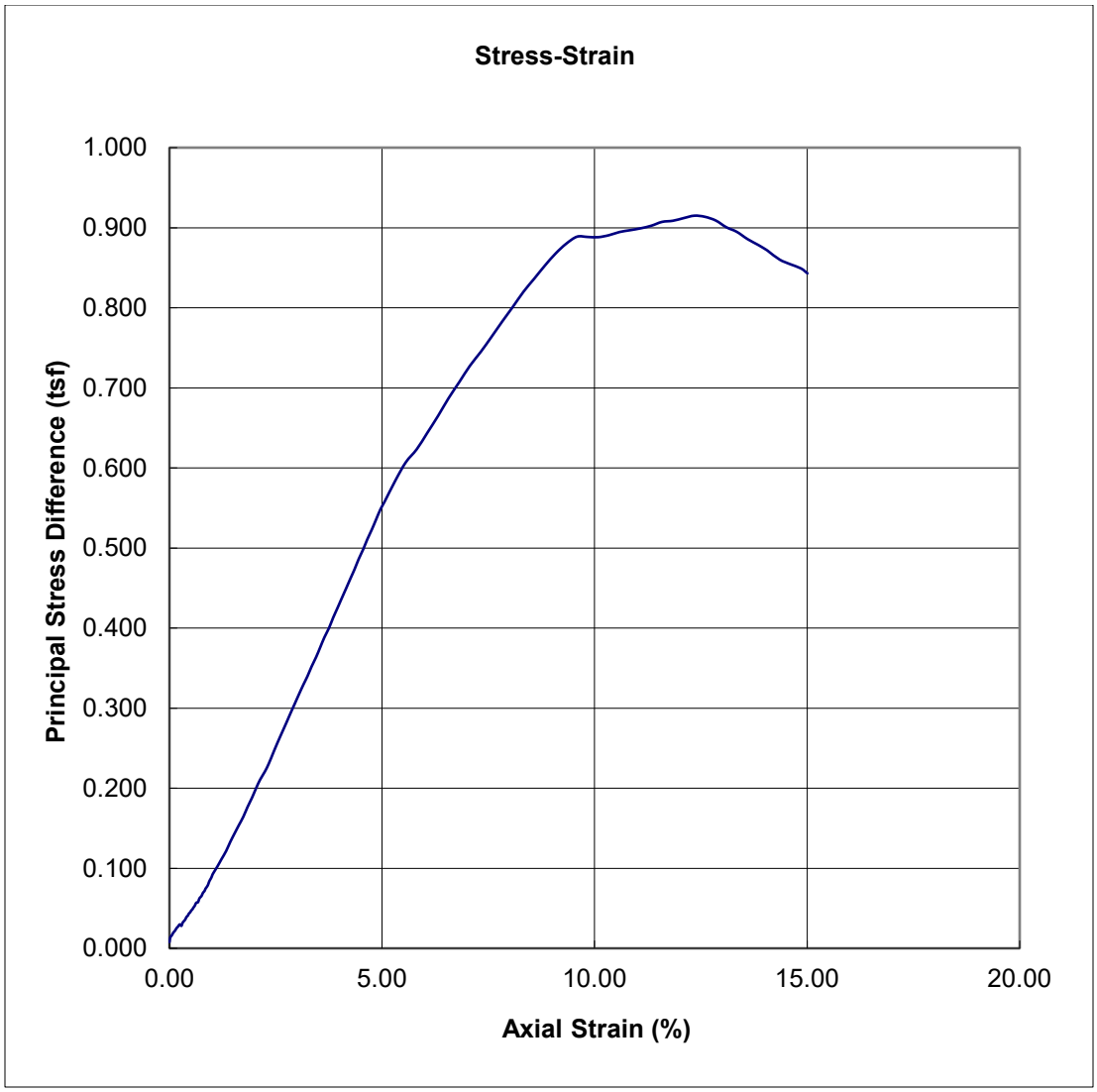
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.691 tsf**

STRAIN: **3.45%**

CONFINING PRESSURE: **32.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-1 #25 93-95'**

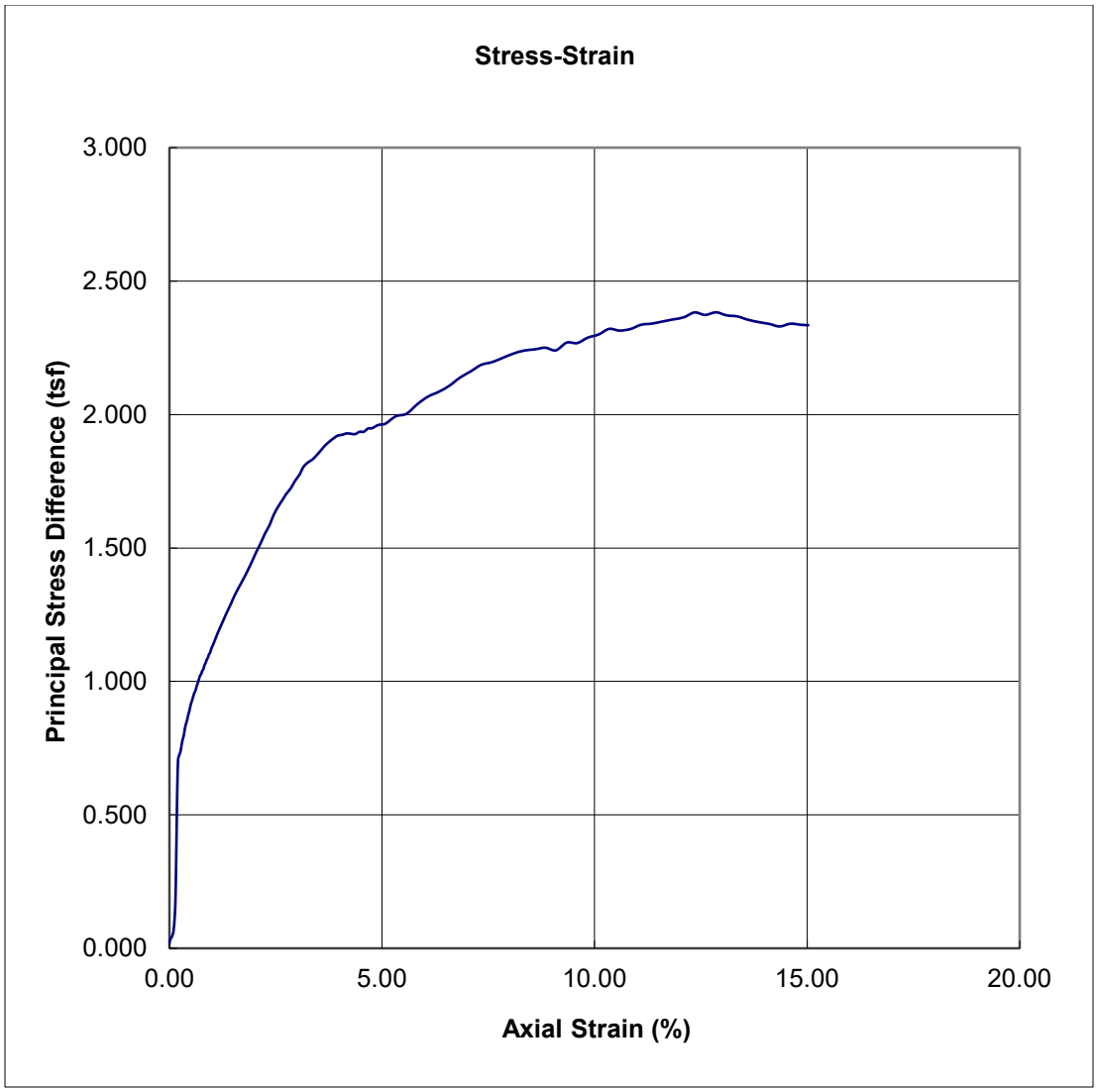
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.915 tsf**

STRAIN: **12.35%**

CONFINING PRESSURE: **39.4 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Sandy Clay (CL) with silt**



SAMPLE: **24-057 B-2 #2 2-4'**

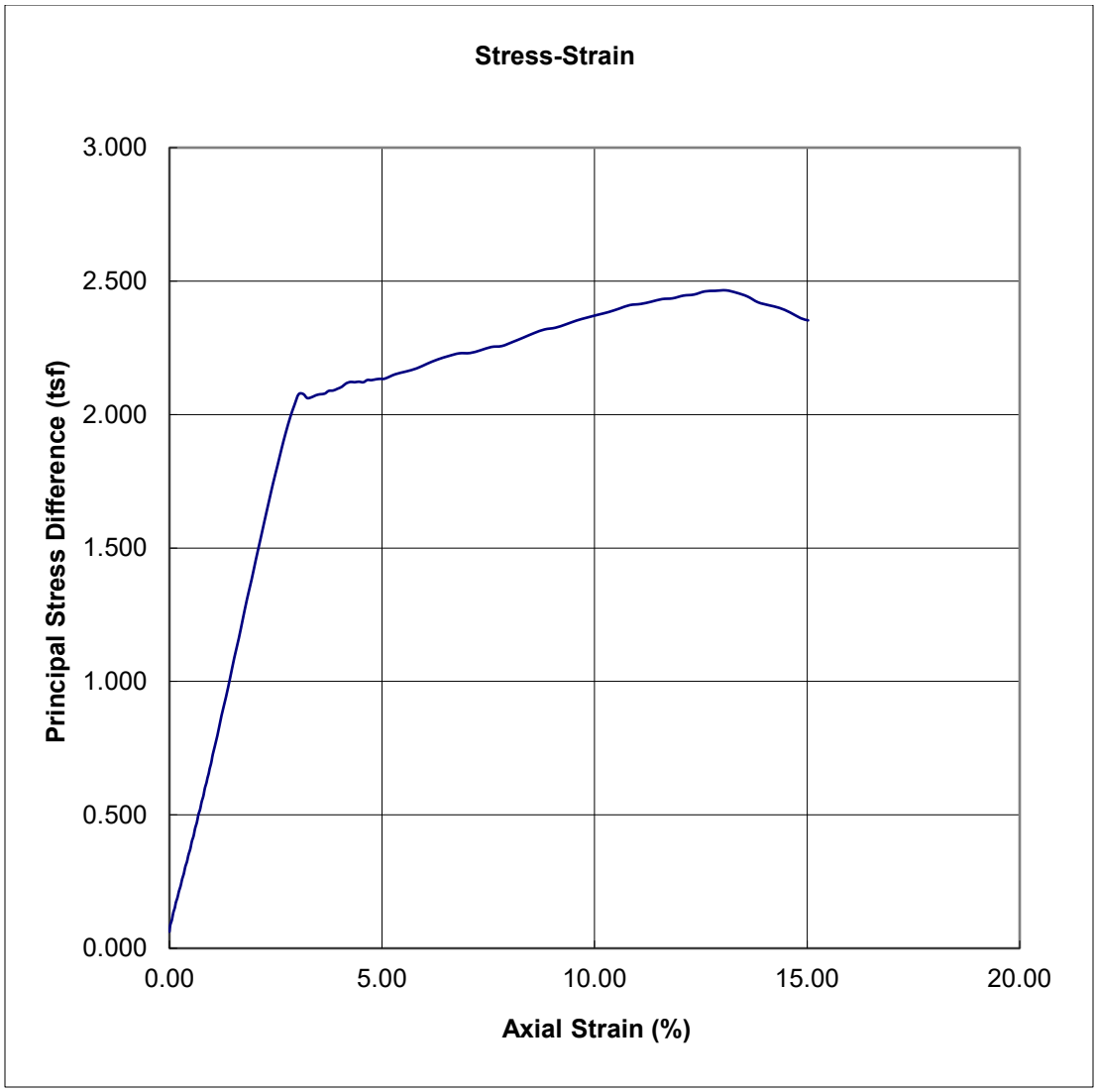
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.383 tsf**

STRAIN: **12.86%**

CONFINING PRESSURE: **4.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-2 #3 4-6'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.465 tsf**

STRAIN: **13.09%**

CONFINING PRESSURE: **5.4 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray Silty Clay (CL) with sand**

SAMPLE: **24-057 B-2 #5 8-10'**

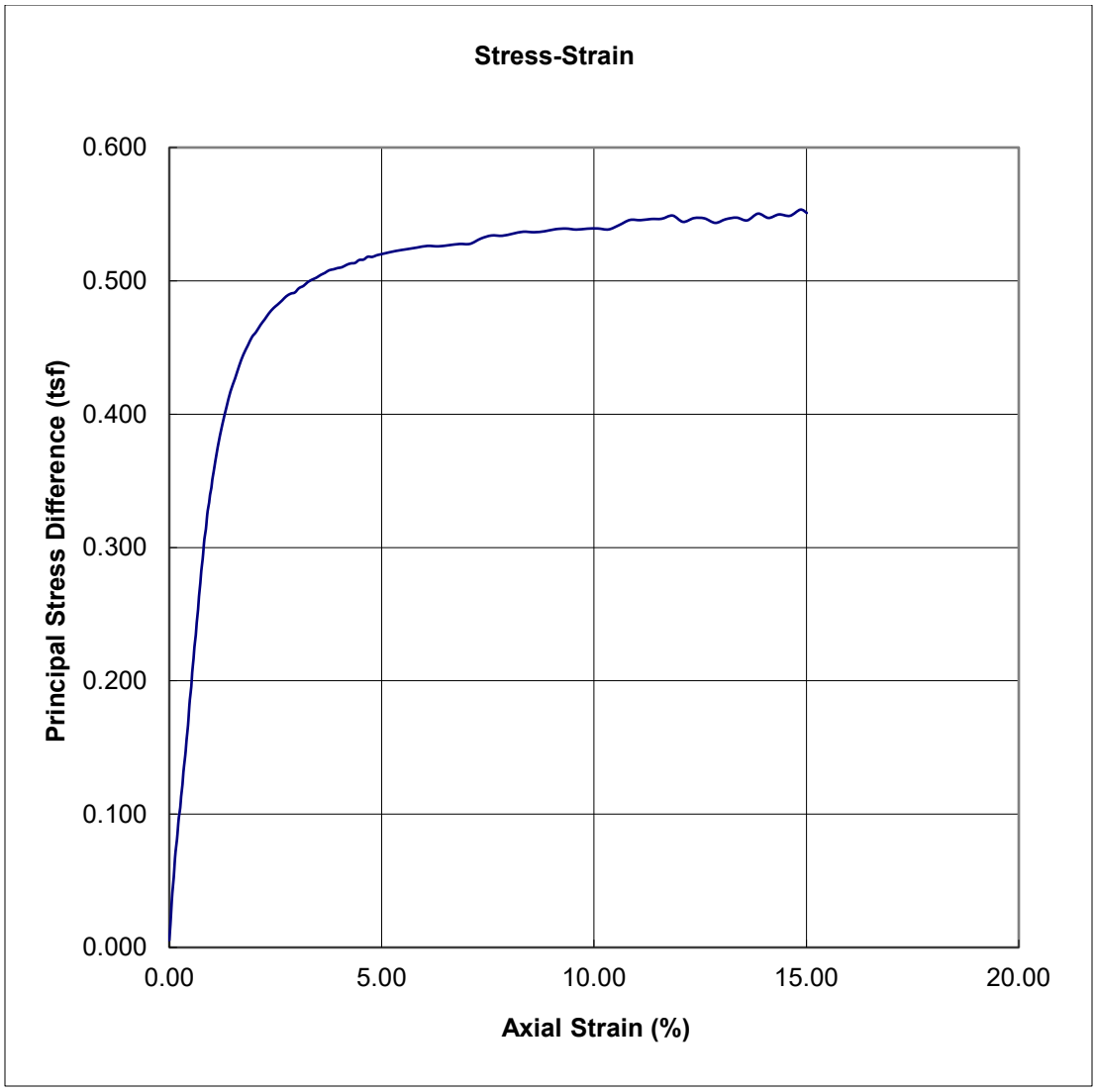
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.110 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **6.8 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with trace sand, roots**



SAMPLE: **24-057 B-2 #11 28-30'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.553 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **13.4 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with trace rock**

SAMPLE: **24-057 B-2 #12 33-35'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.166 tsf**

STRAIN: **14.60%**

CONFINING PRESSURE: **15.1 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Tan Fat Clay (CH)**

SAMPLE: **24-057 B-2 #13 38-40'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.676 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **16.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with sand, silt pockets**

SAMPLE: **24-057 B-2 #15 48-50'**

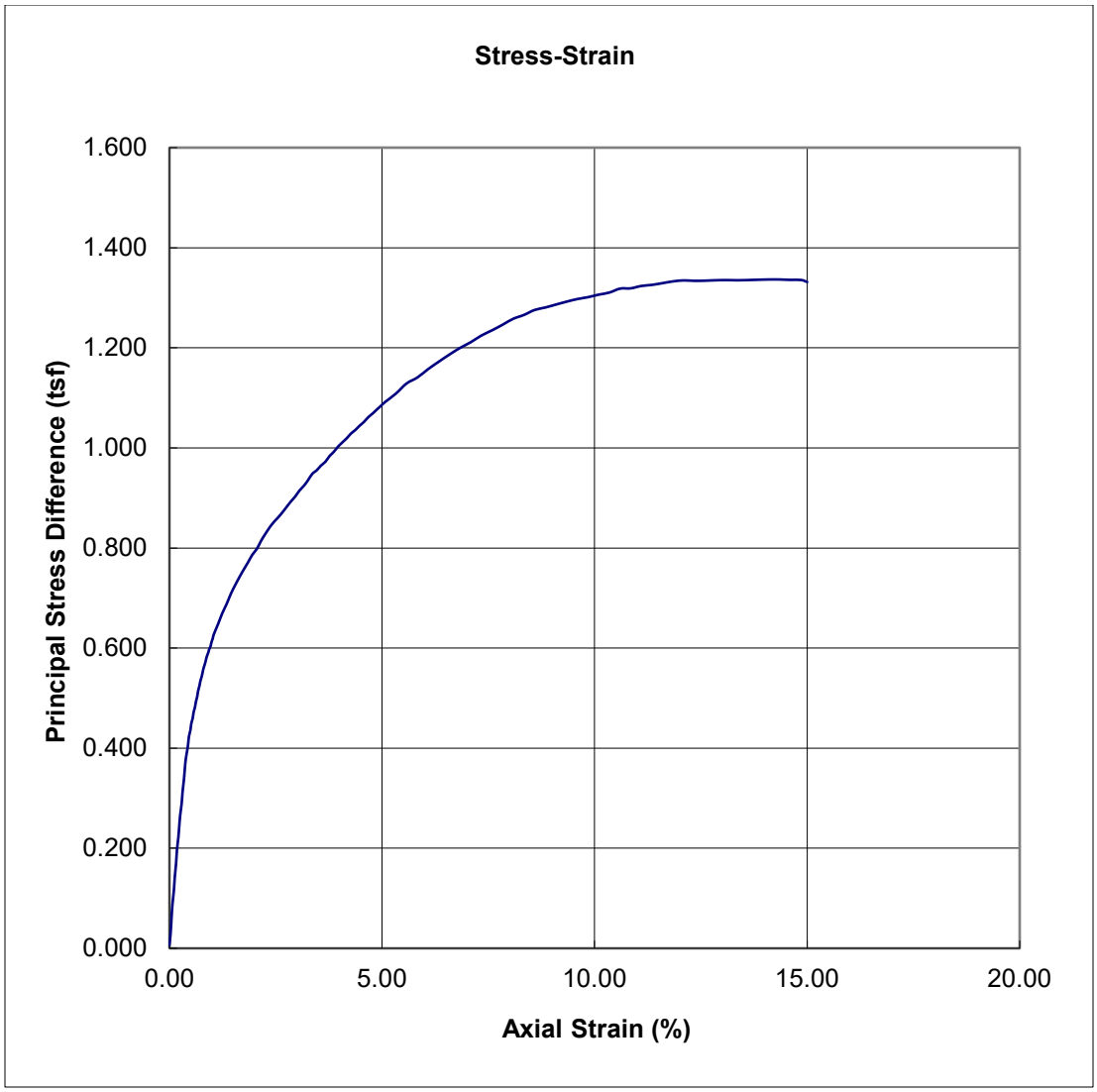
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.618 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **20.1 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with sand, shell fragments**



SAMPLE: **24-057 B-2 #17 58-60'**

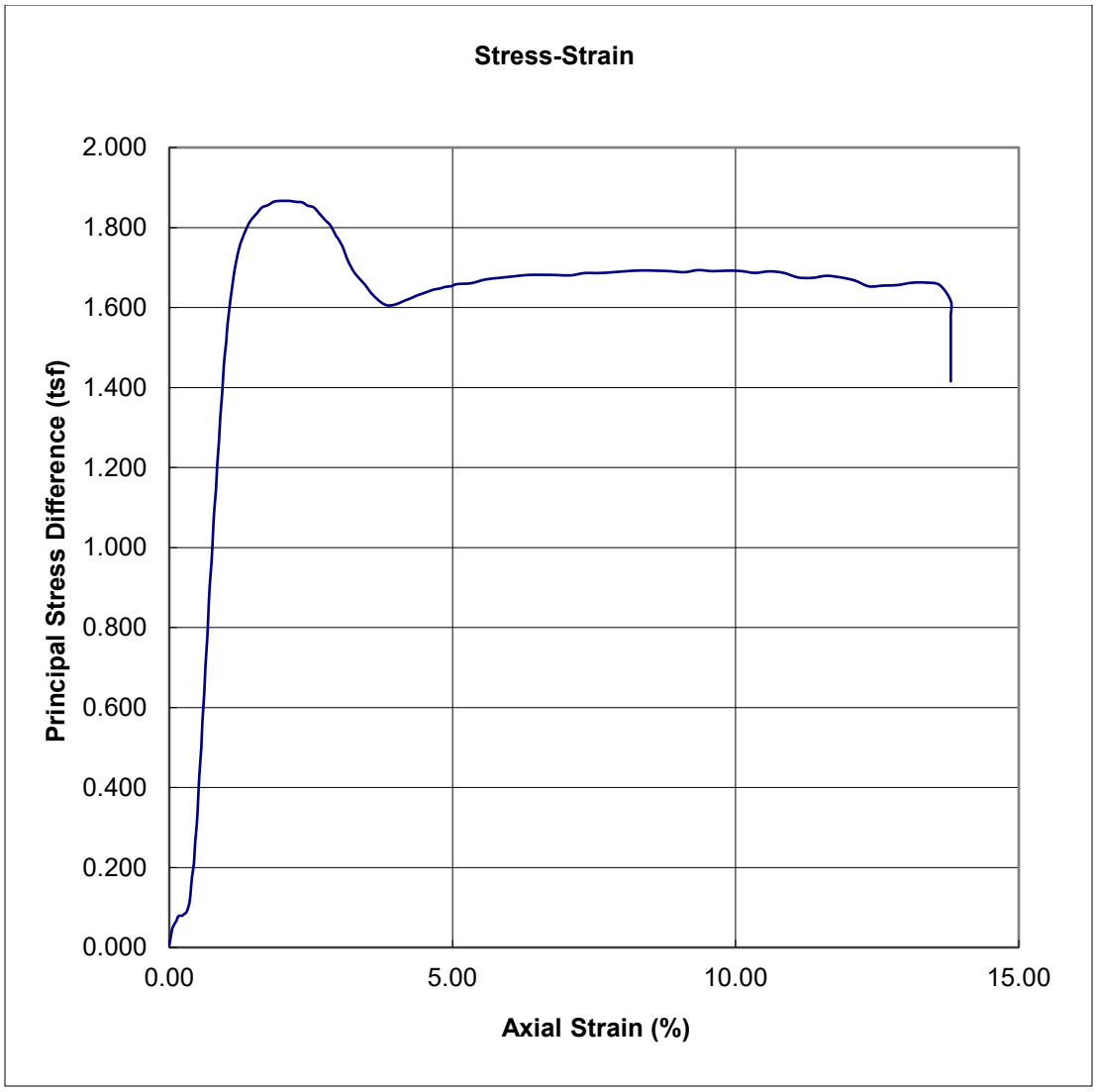
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.337 tsf**

STRAIN: **14.10%**

CONFINING PRESSURE: **23.4 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with silt seams, sand, rock layer**



SAMPLE: **24-057 B-2 #19 68-70'**

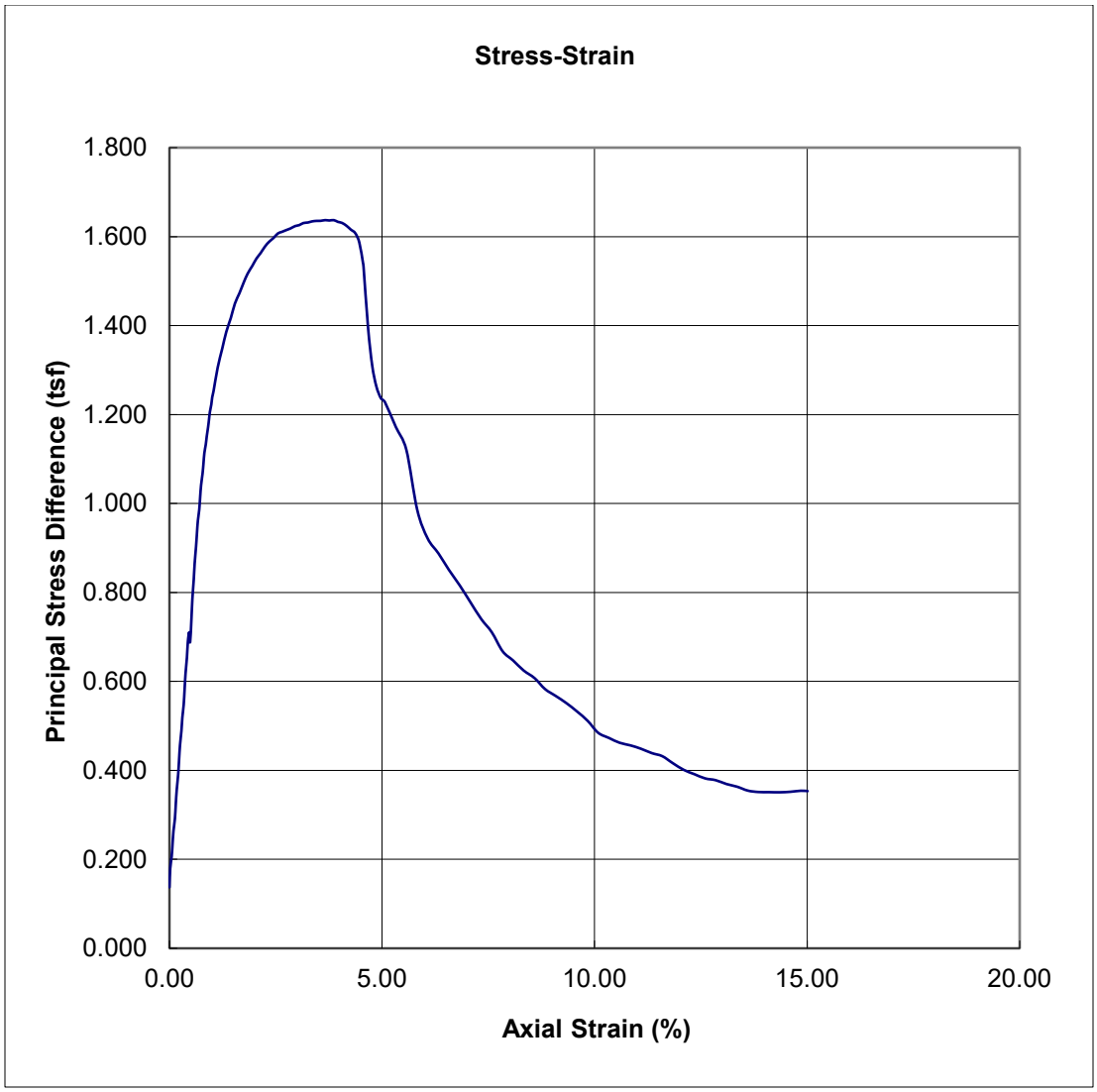
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.867 tsf**

STRAIN: **2.04%**

CONFINING PRESSURE: **26.8 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-2 #20 73-75'**

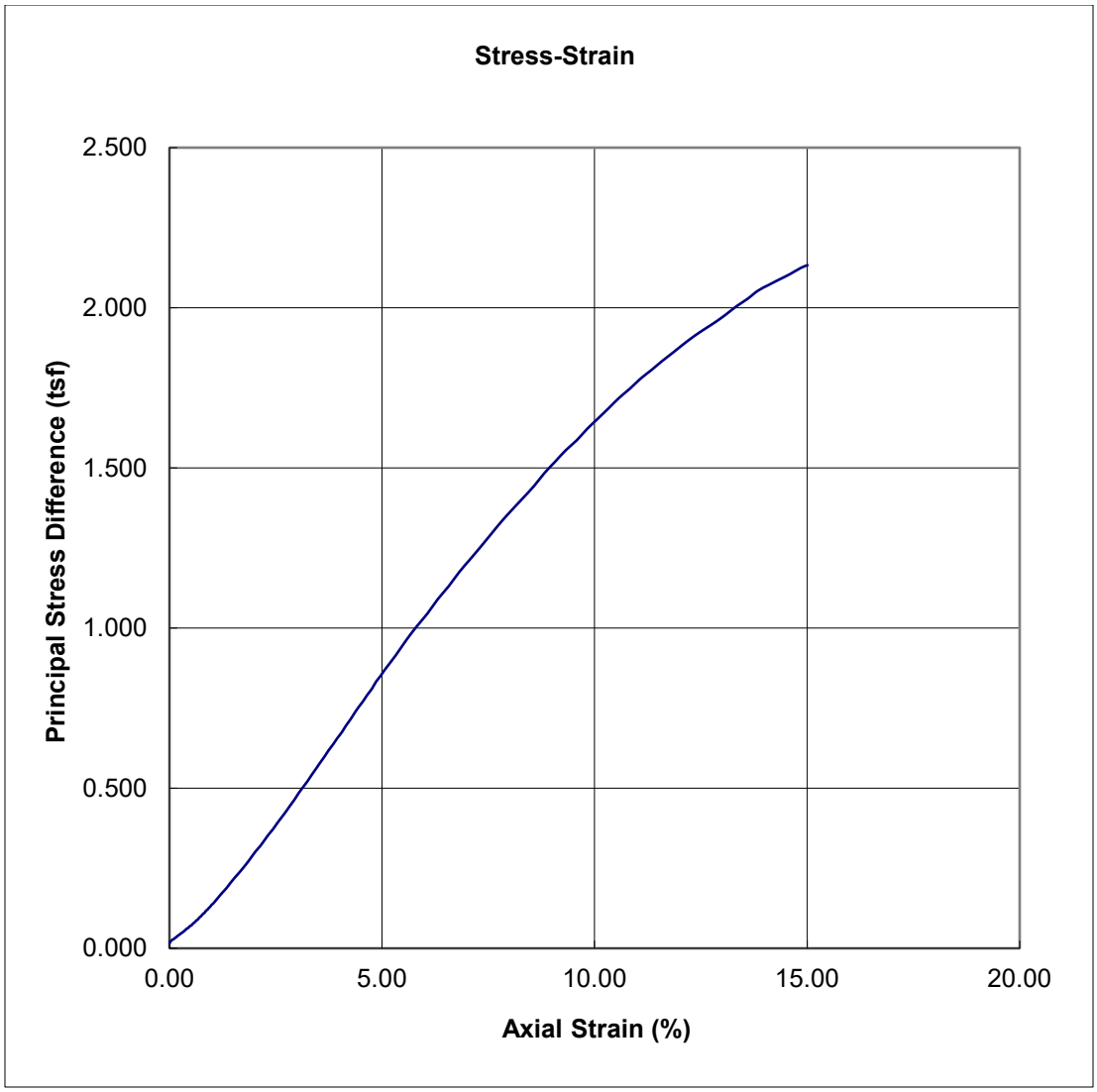
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.637 tsf**

STRAIN: **3.66%**

CONFINING PRESSURE: **32.8 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-2 #25 93-95'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.133 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **39.4 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Sandy Clay (CL)**

SAMPLE: **24-057 B-2 #26 98-100'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.618 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **41.1 psi**

SAMPLE DESCRIPTION: **Stiff Gray Sandy Clay (CL)**

SAMPLE: **24-057 B-3 #2 2-4'**

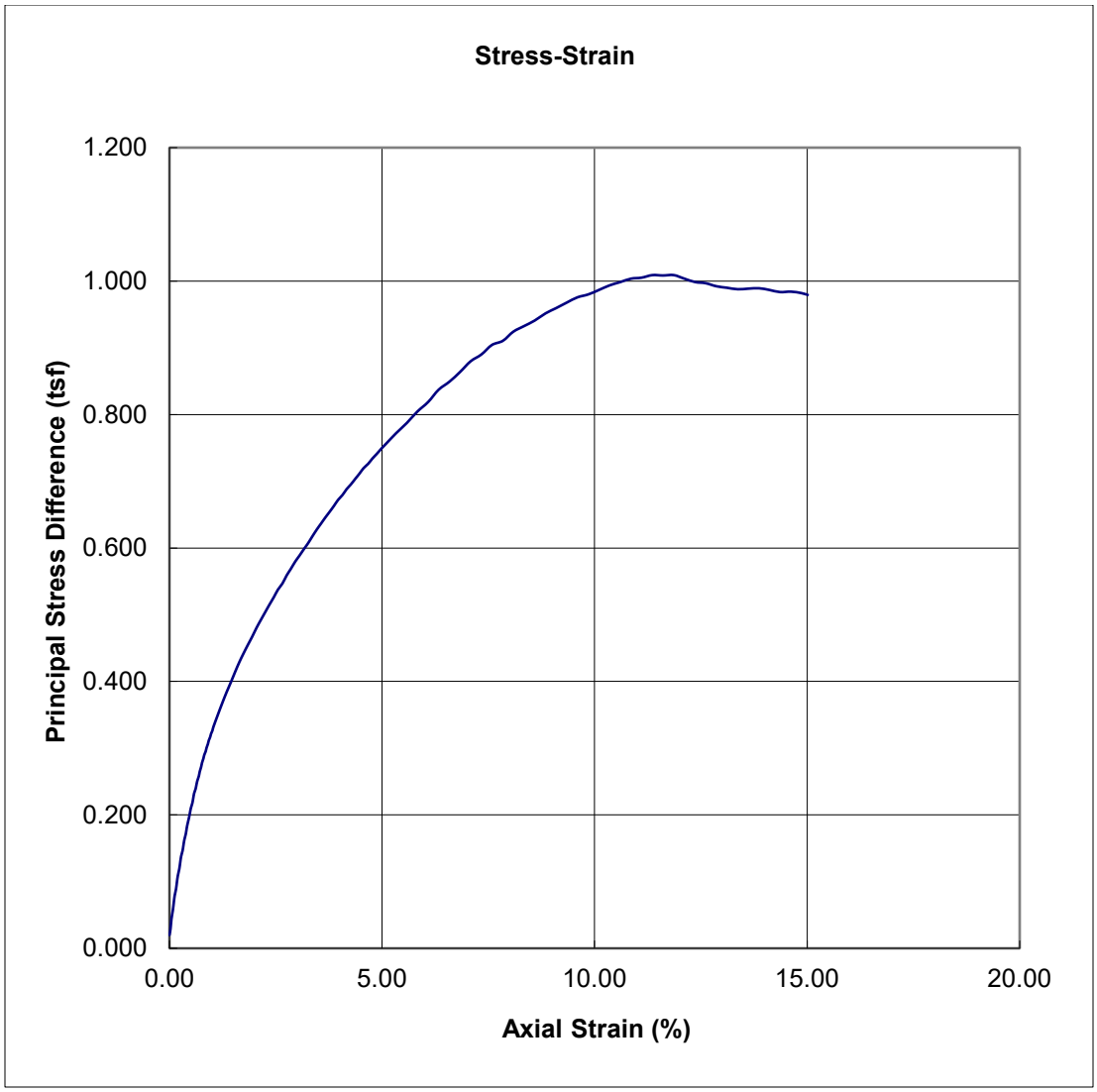
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.862 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **3.9 psi**

SAMPLE DESCRIPTION: **Medium Stiff Tan / Gray Silty Clay (CL) with rocks, black organics**



SAMPLE: **24-057 B-3 #3 4-6'**

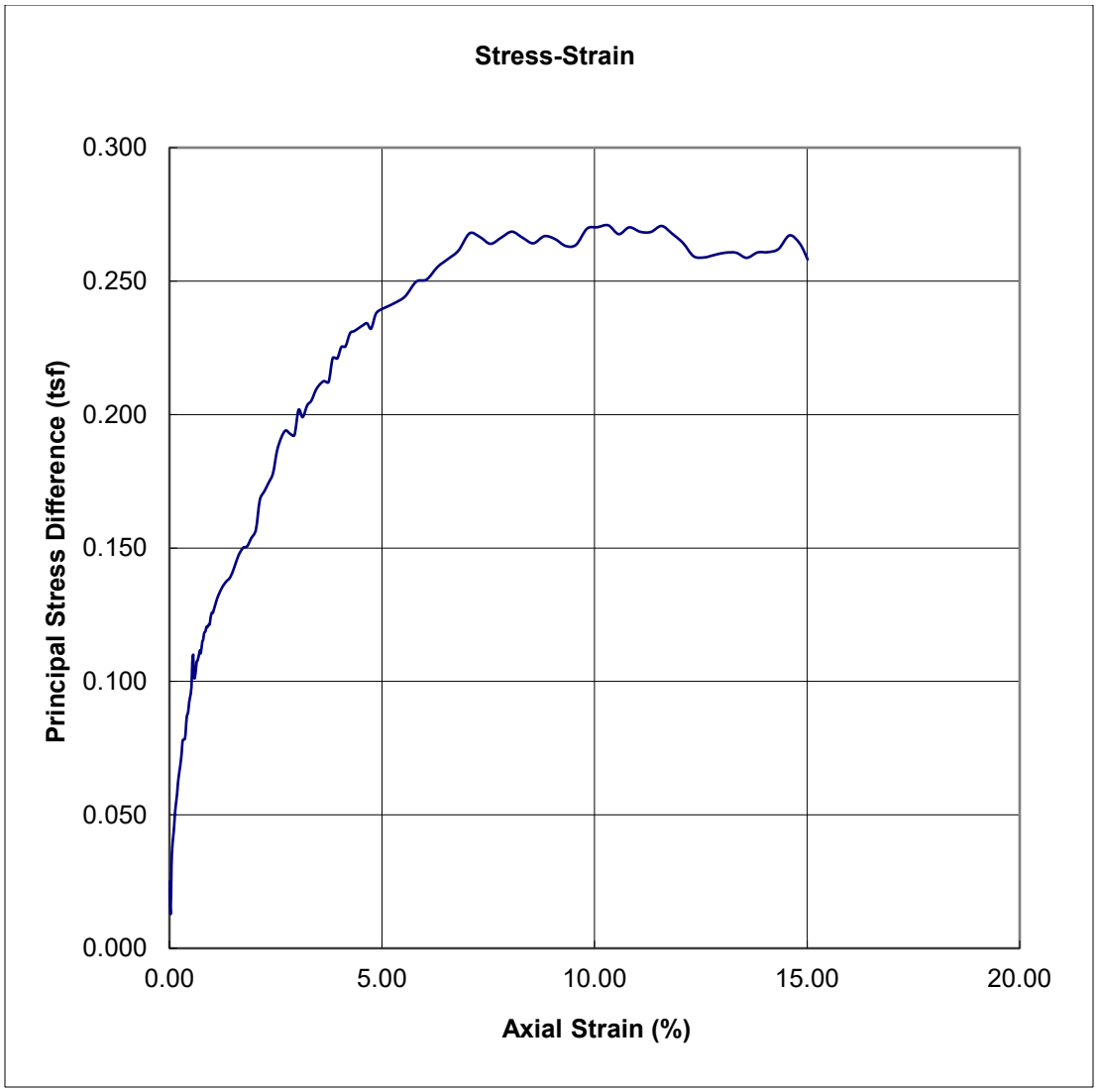
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.009 tsf**

STRAIN: **11.86%**

CONFINING PRESSURE: **4.6 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Silty Clay (CL) with black streaks**



SAMPLE: **24-057 B-3 #4 6-8'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.271 tsf**

STRAIN: **10.32%**

CONFINING PRESSURE: **5.3 psi**

SAMPLE DESCRIPTION: **Soft Tan / Gray Silty Clay (CL) with sand and rock**

SAMPLE: **24-057 B-3 #6 10-12'**

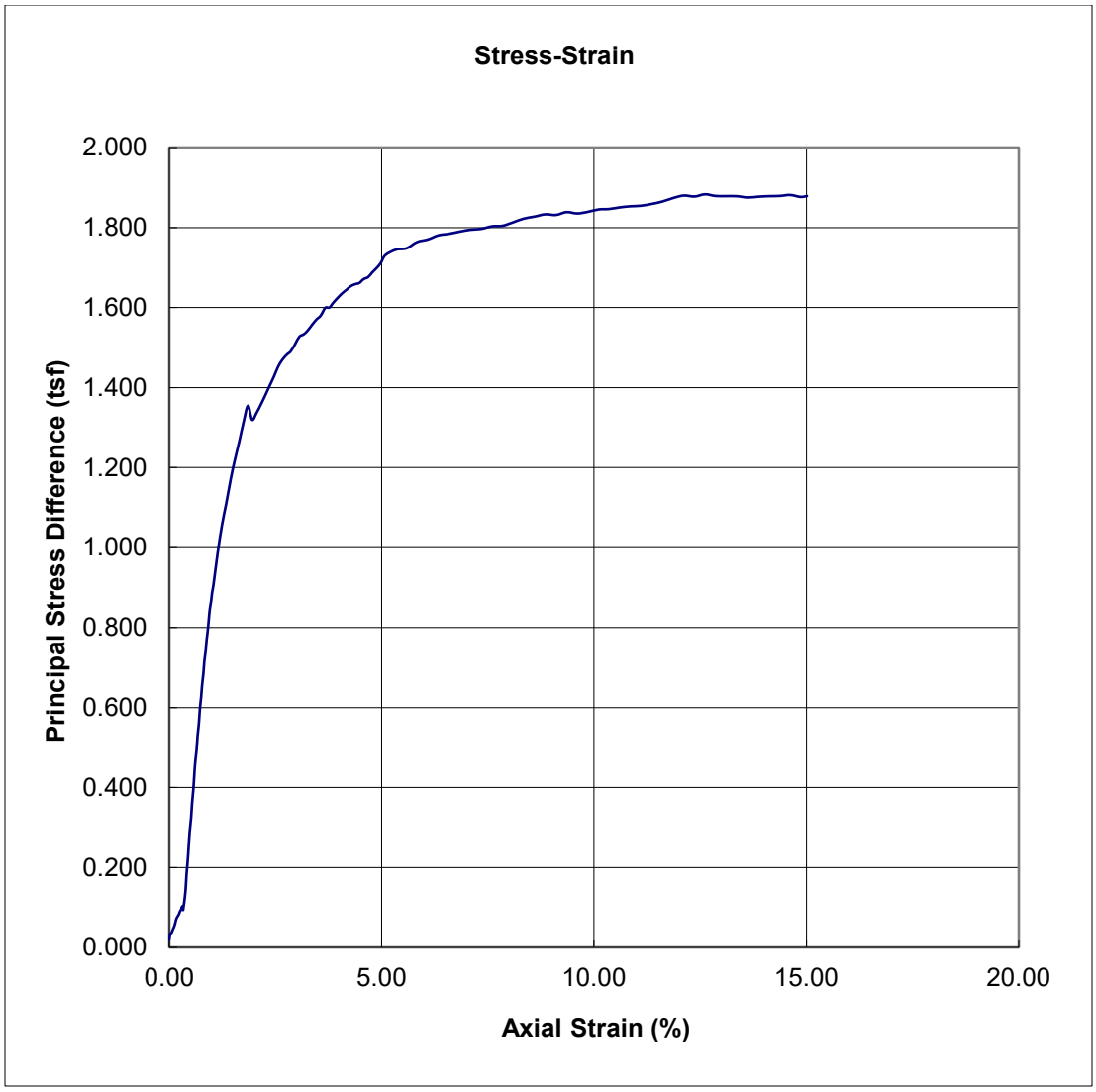
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.073 tsf**

STRAIN: **13.35%**

CONFINING PRESSURE: **6.6 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Silty Clay (CL) with trace sand**



SAMPLE: **24-057 B-3 #7 13-15'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.883 tsf**

STRAIN: **12.61%**

CONFINING PRESSURE: **7.6 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with tan spots**

SAMPLE: **24-057 B-3 #8 18-20'**

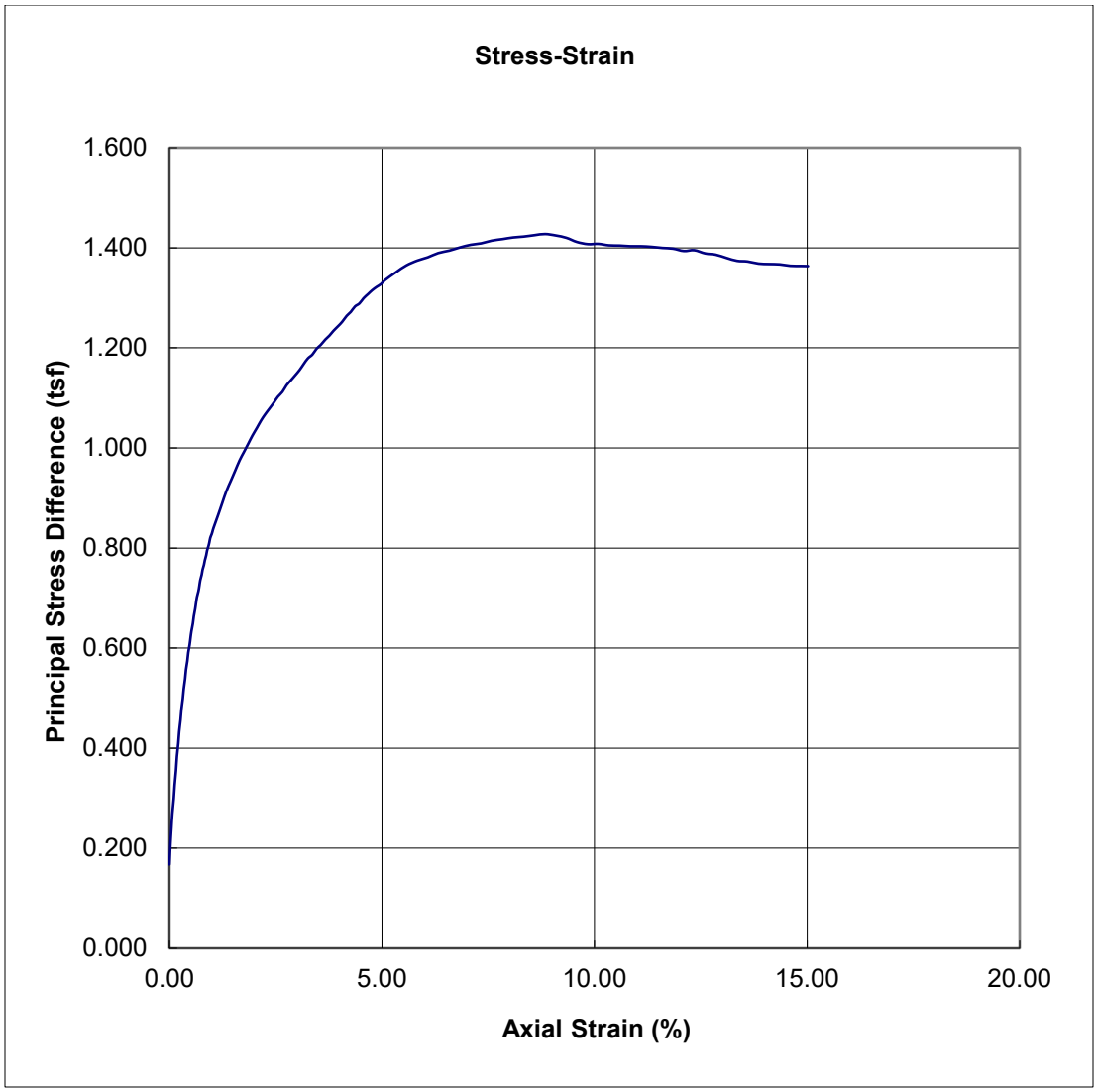
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.163 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **9.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with silt trace tan spots**



SAMPLE: **24-057 B-3 #9 23-25'**

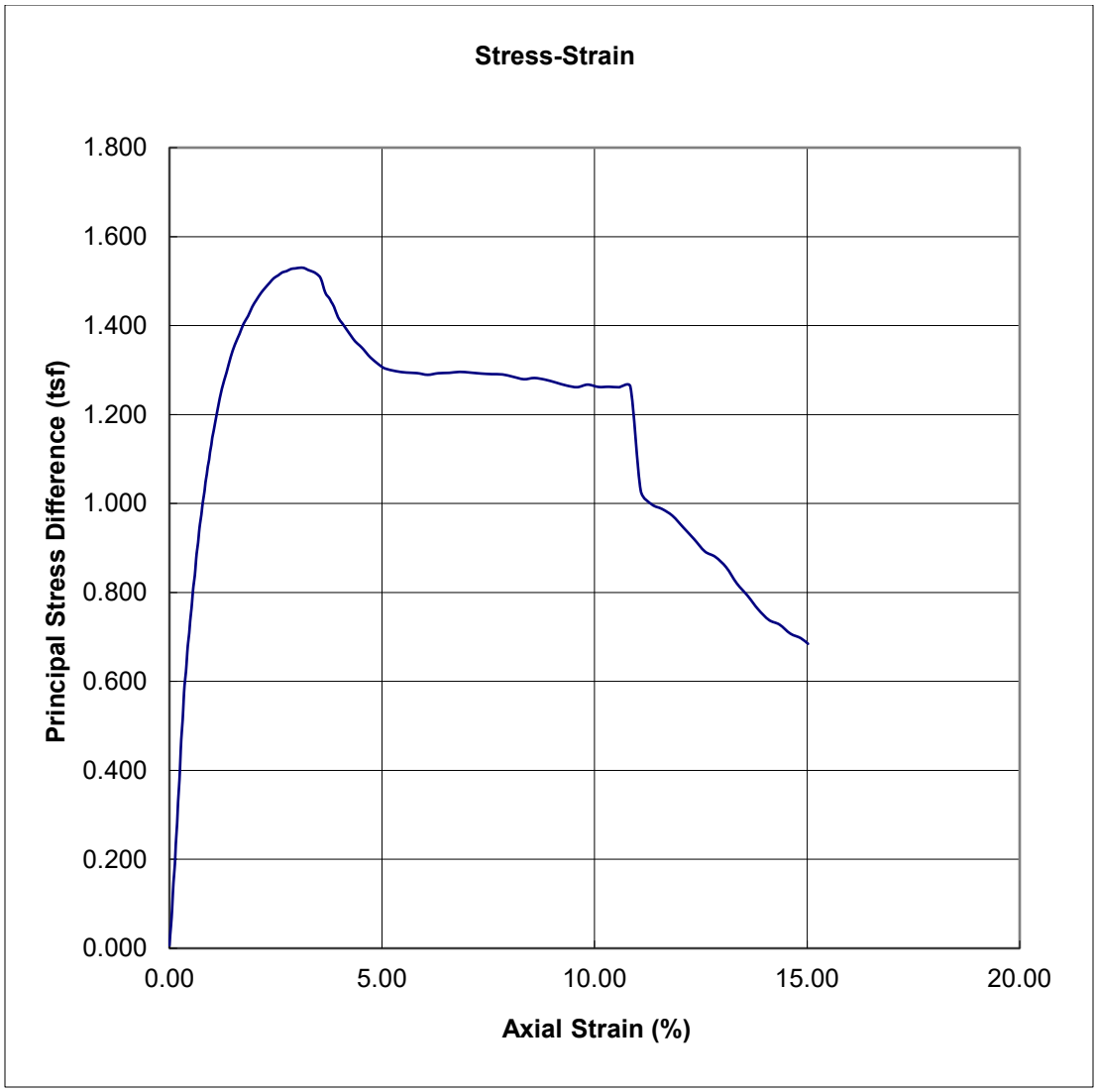
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.427 tsf**

STRAIN: **8.84%**

CONFINING PRESSURE: **10.9 psi**

SAMPLE DESCRIPTION: **Stiff Light Gray / Brown Fat Clay (CH) with silt**



SAMPLE: **24-057 B-3 #11 33-35'**

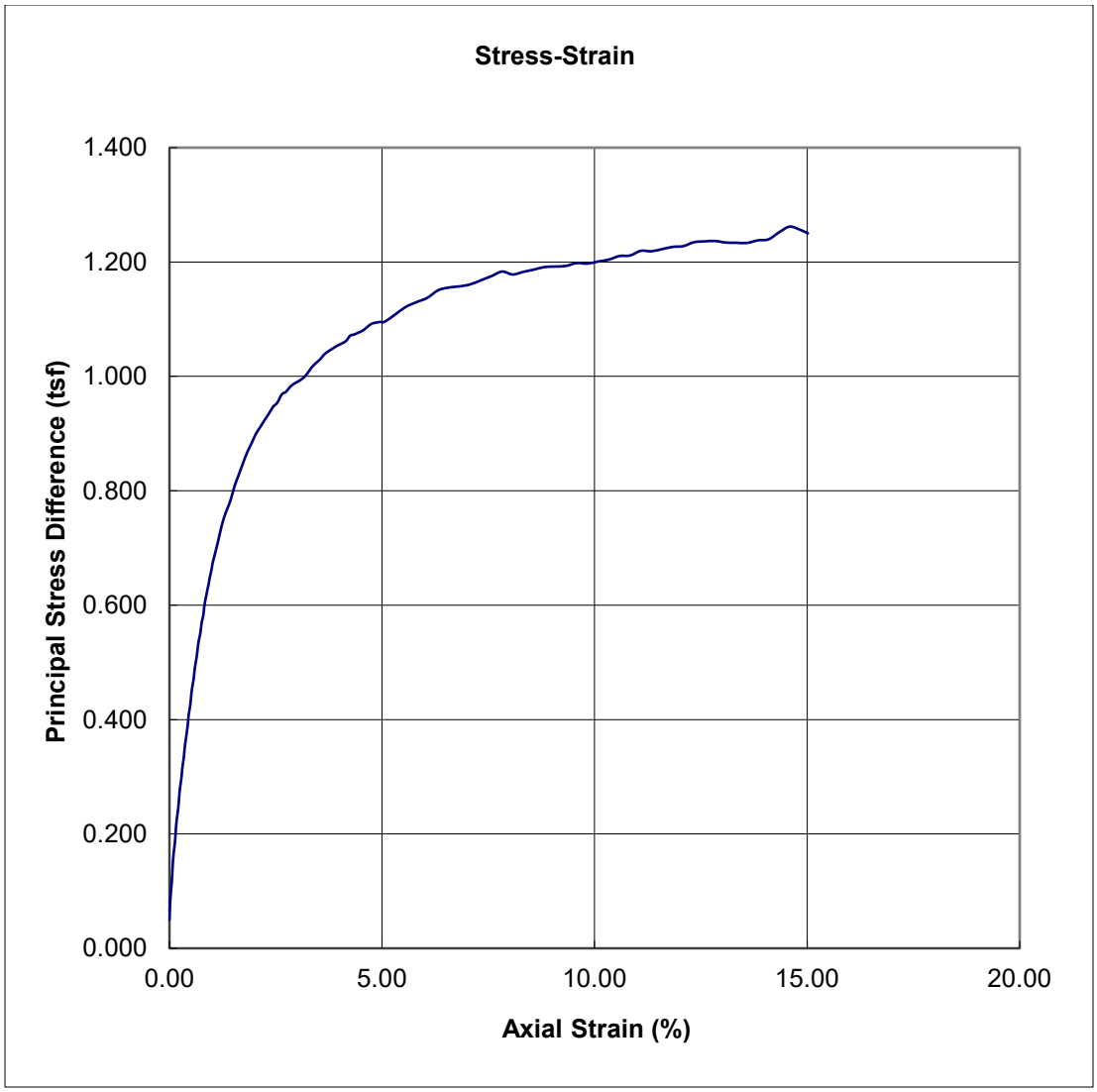
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.530 tsf**

STRAIN: **3.05%**

CONFINING PRESSURE: **14.3 psi**

SAMPLE DESCRIPTION: **Stiff Light Gray Fat Clay (CH) with tan streaks**



SAMPLE: **24-057 B-3 #12 38-40'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.262 tsf**

STRAIN: **14.59%**

CONFINING PRESSURE: **15.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH)**

SAMPLE: **24-057 B-3 #13 43-45'**

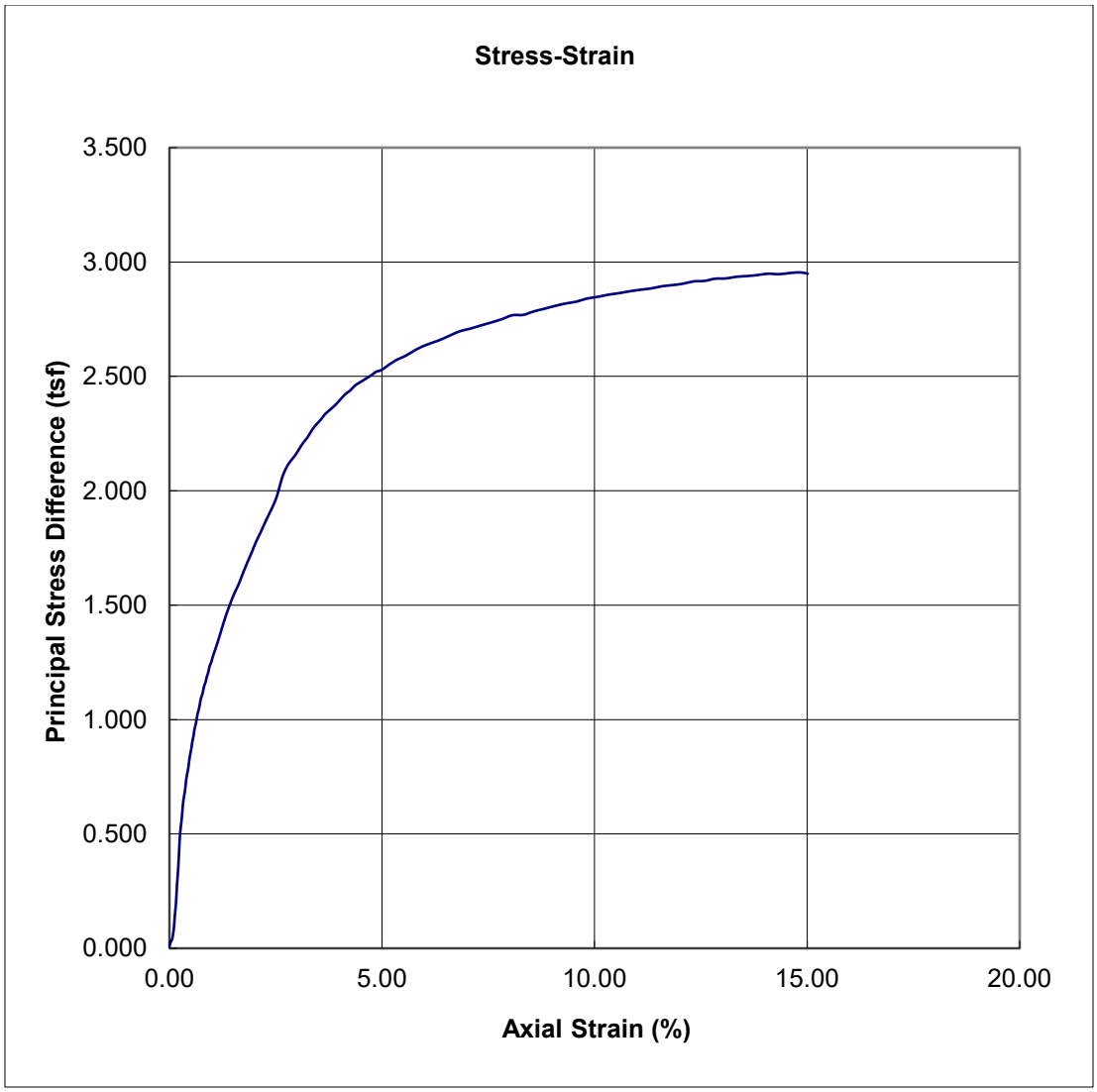
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.459 tsf**

STRAIN: **11.33%**

CONFINING PRESSURE: **17.6 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-3 #15 53-55'**

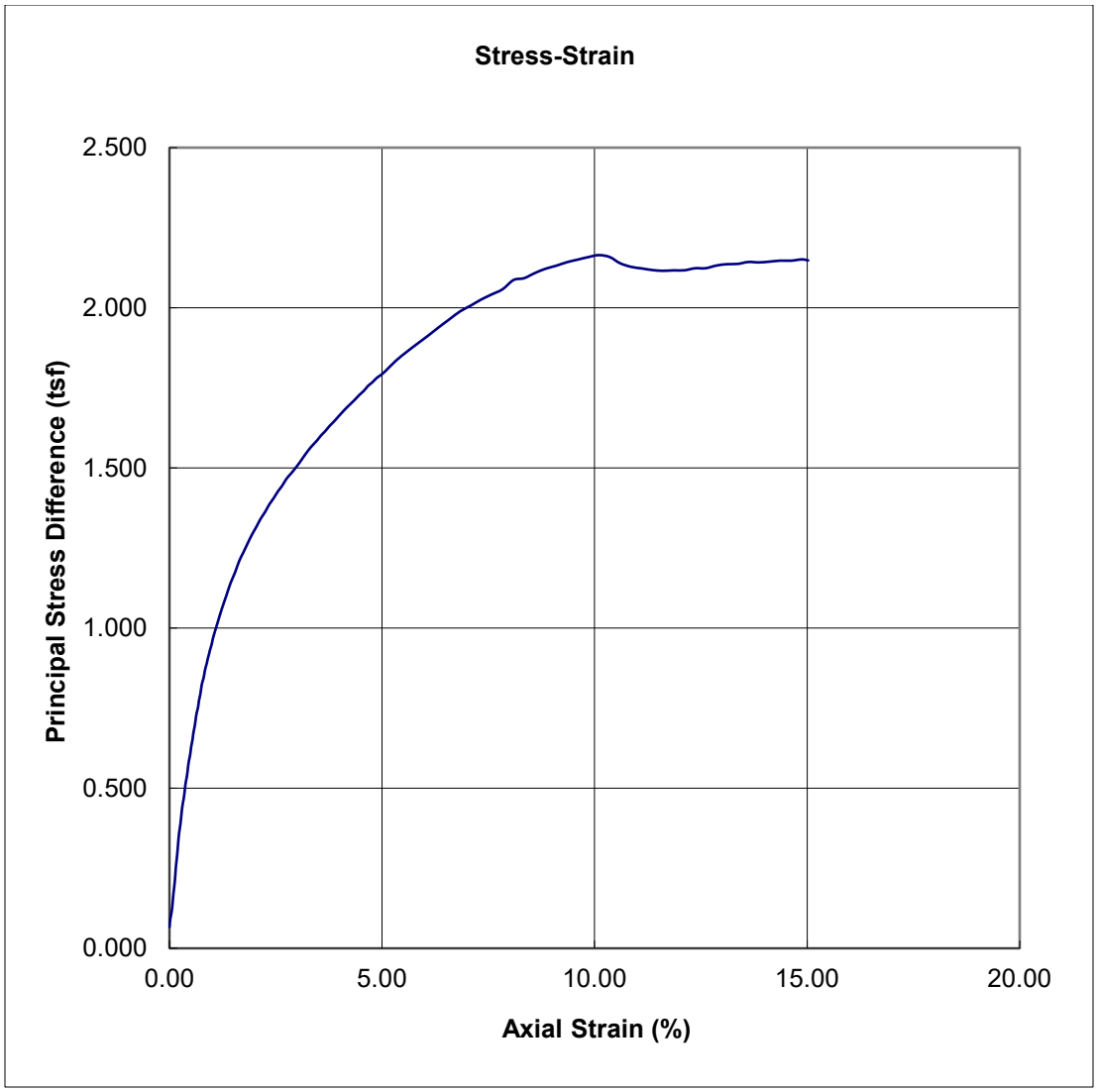
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.955 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **20.9 psi**

SAMPLE DESCRIPTION: **Very Stiff Light Blue /Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-3 #17 63-65'**

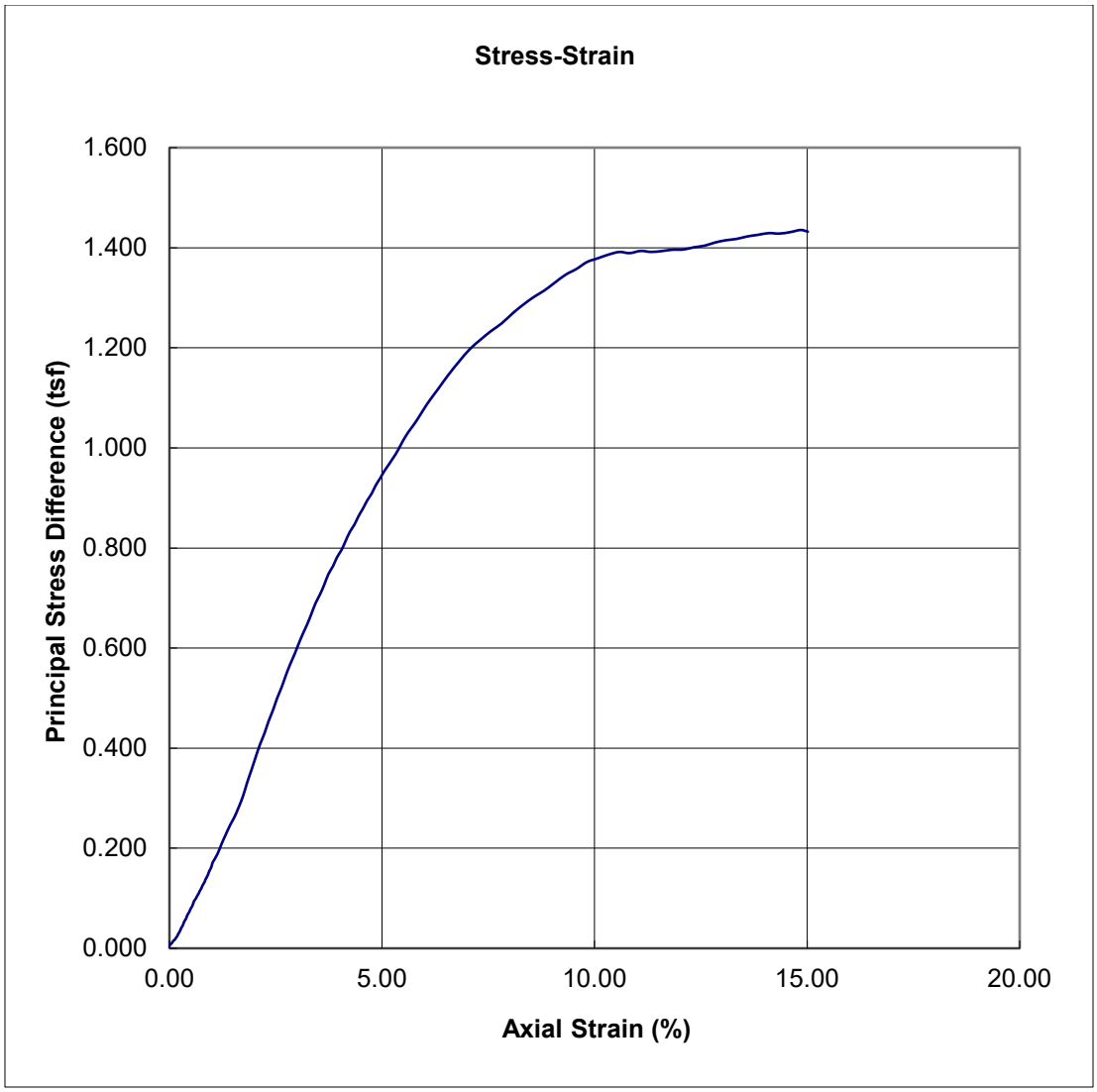
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.164 tsf**

STRAIN: **1.010%**

CONFINING PRESSURE: **24.3 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-4 #2 2-4'**

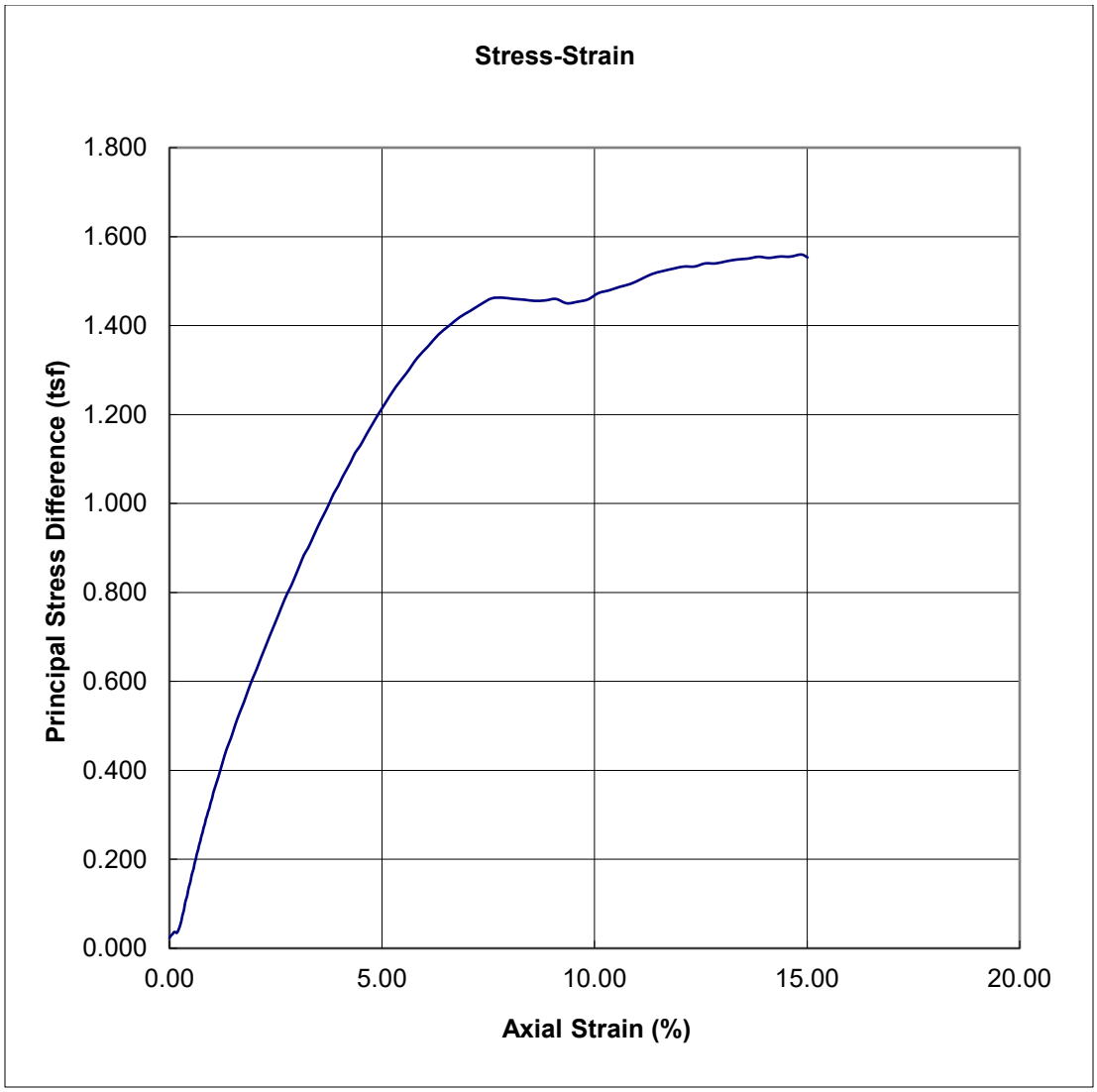
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.435 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **1.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL) with tan and black streaks**



SAMPLE: **24-057 B-4 #3 4-6'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.560 tsf**

STRAIN: **14.86**

CONFINING PRESSURE: **2.0 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Silty Clay (CL) with sand**

SAMPLE: **24-057 B-4 #4 6-8'**

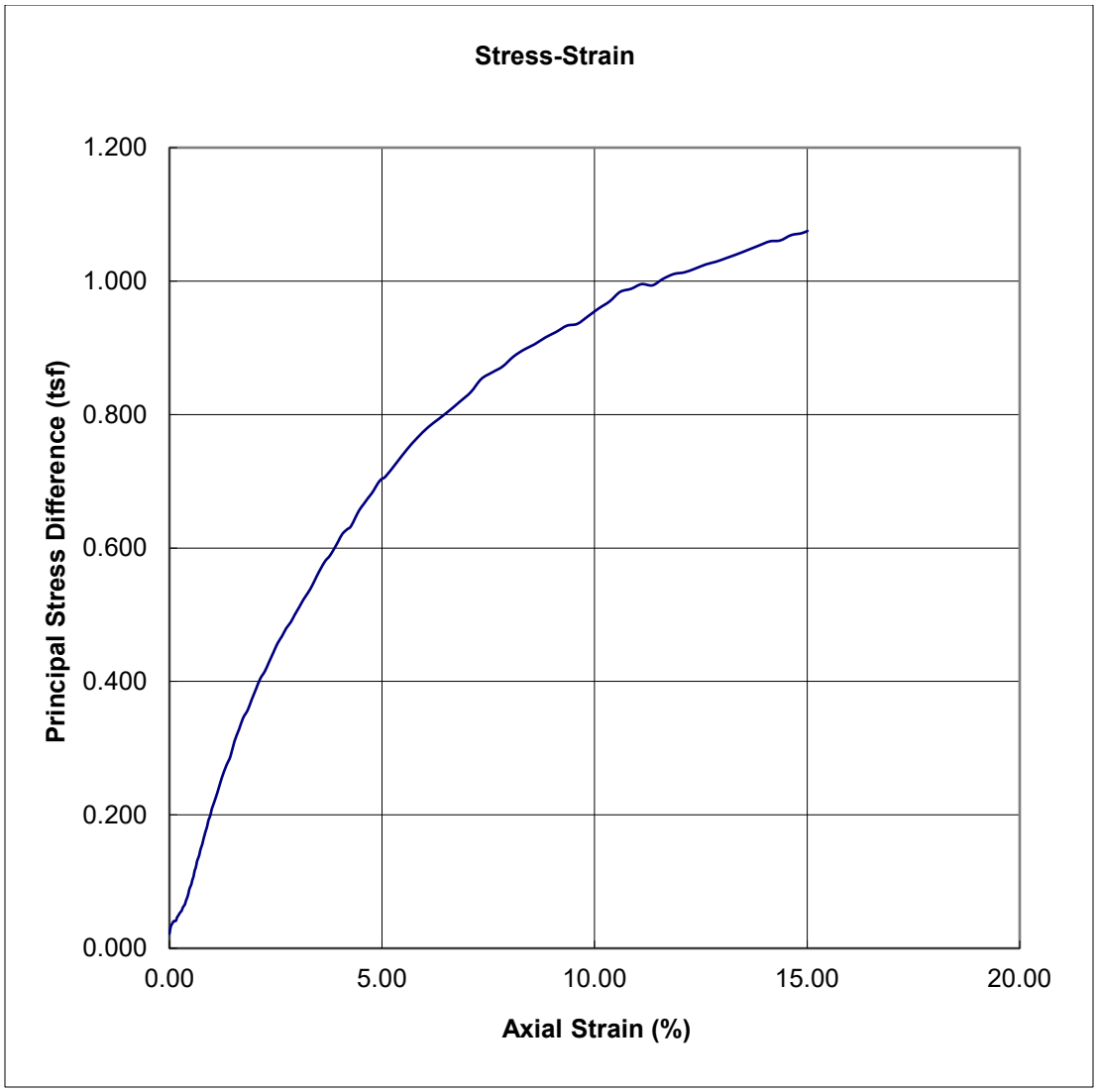
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.808 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **2.7 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Dark Gray Silty Clay (CL) with sand and gravel**



SAMPLE: **24-0 57 B-4 #5 8-10'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.075 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **3.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Silty Clay (CL) with black streaks, gravel trace sand**

SAMPLE: **24-057 B-4 #6 10-12'**

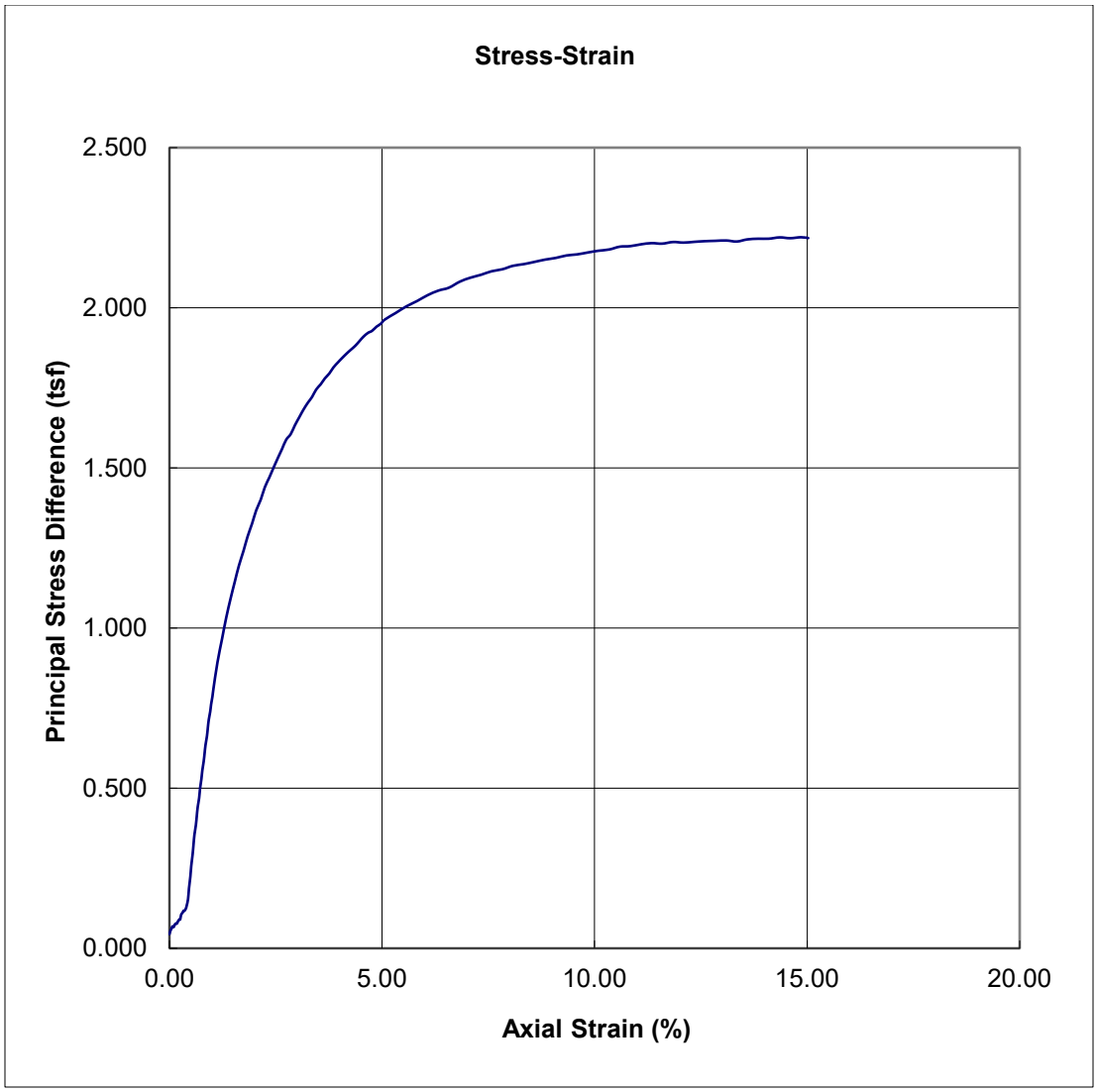
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **3.005 tsf**

STRAIN: **14.61%**

CONFINING PRESSURE: **4.0 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray / Tan Fat Clay (CH) with sand**



SAMPLE: **24-057 B-4 #7 13-15'**

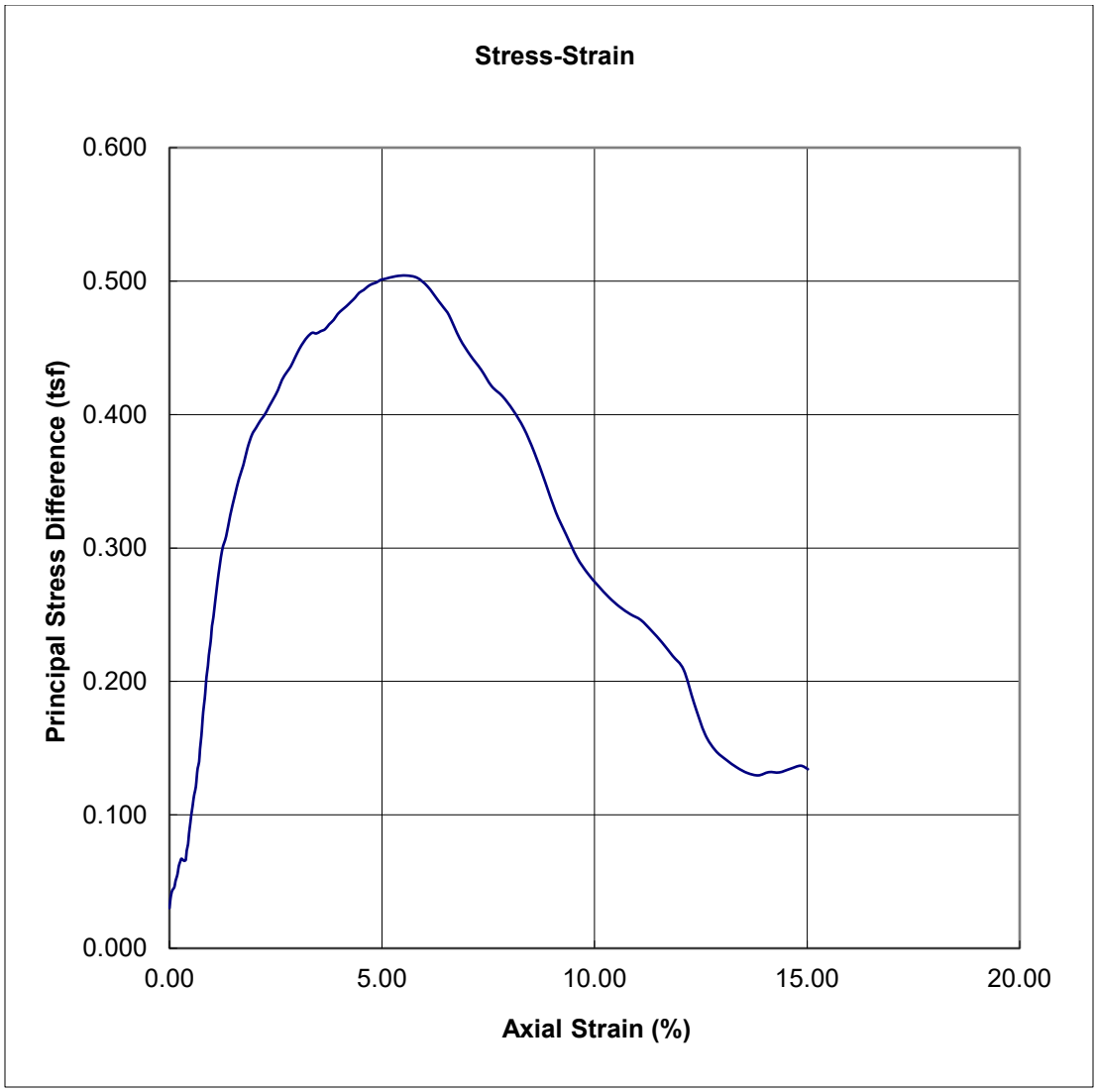
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.220 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **5.0 psi**

SAMPLE DESCRIPTION: **Very Stiff Light Gray Fat Clay (CH)**



SAMPLE: **24-057 B-4 #9 23-25'**

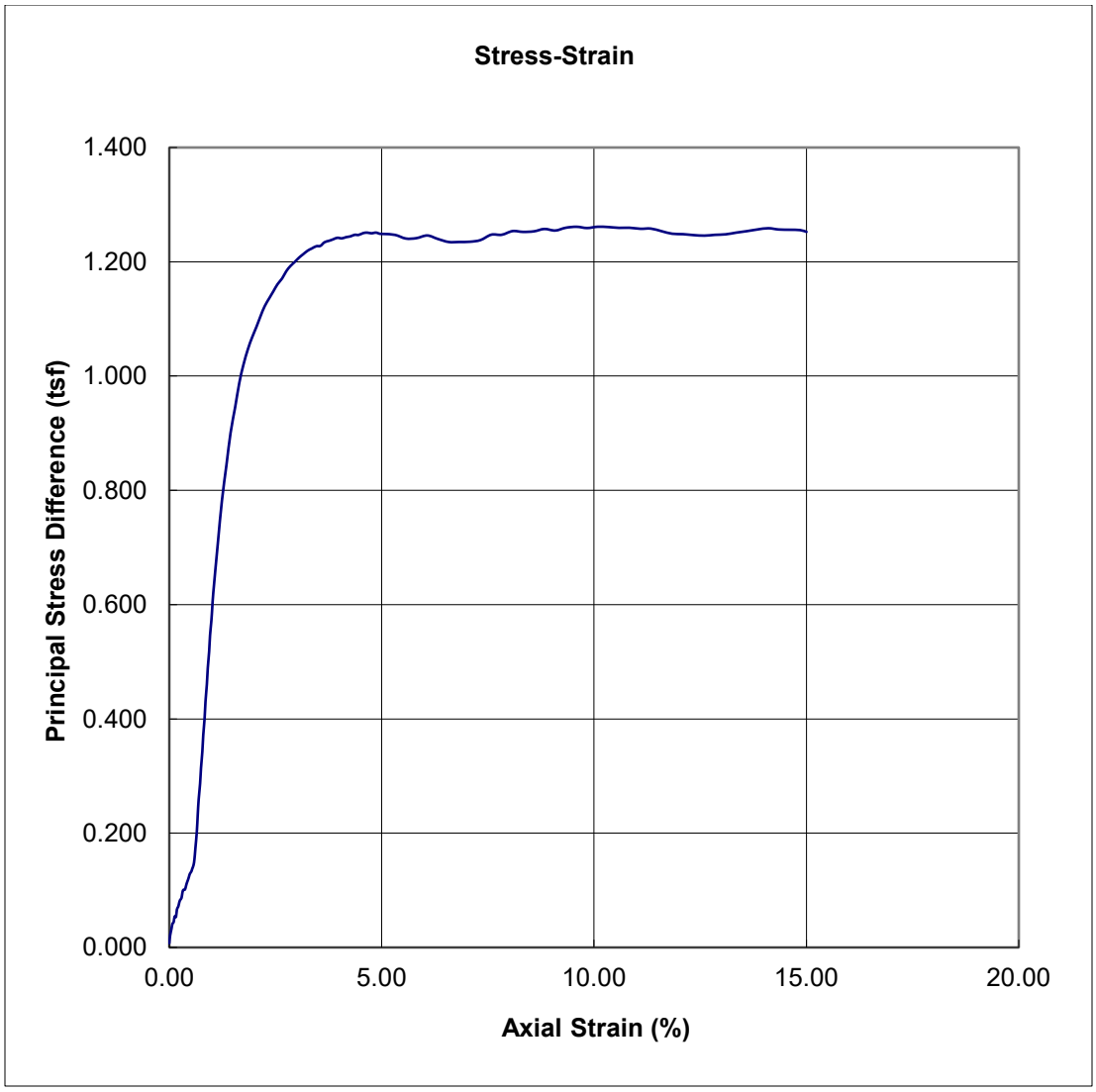
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.504 tsf**

STRAIN: **5.57%**

CONFINING PRESSURE: **8.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Tan Fat Clay (CH) with silt and calcium deposits**



SAMPLE: **24-057 B-4 #10 28-30'**

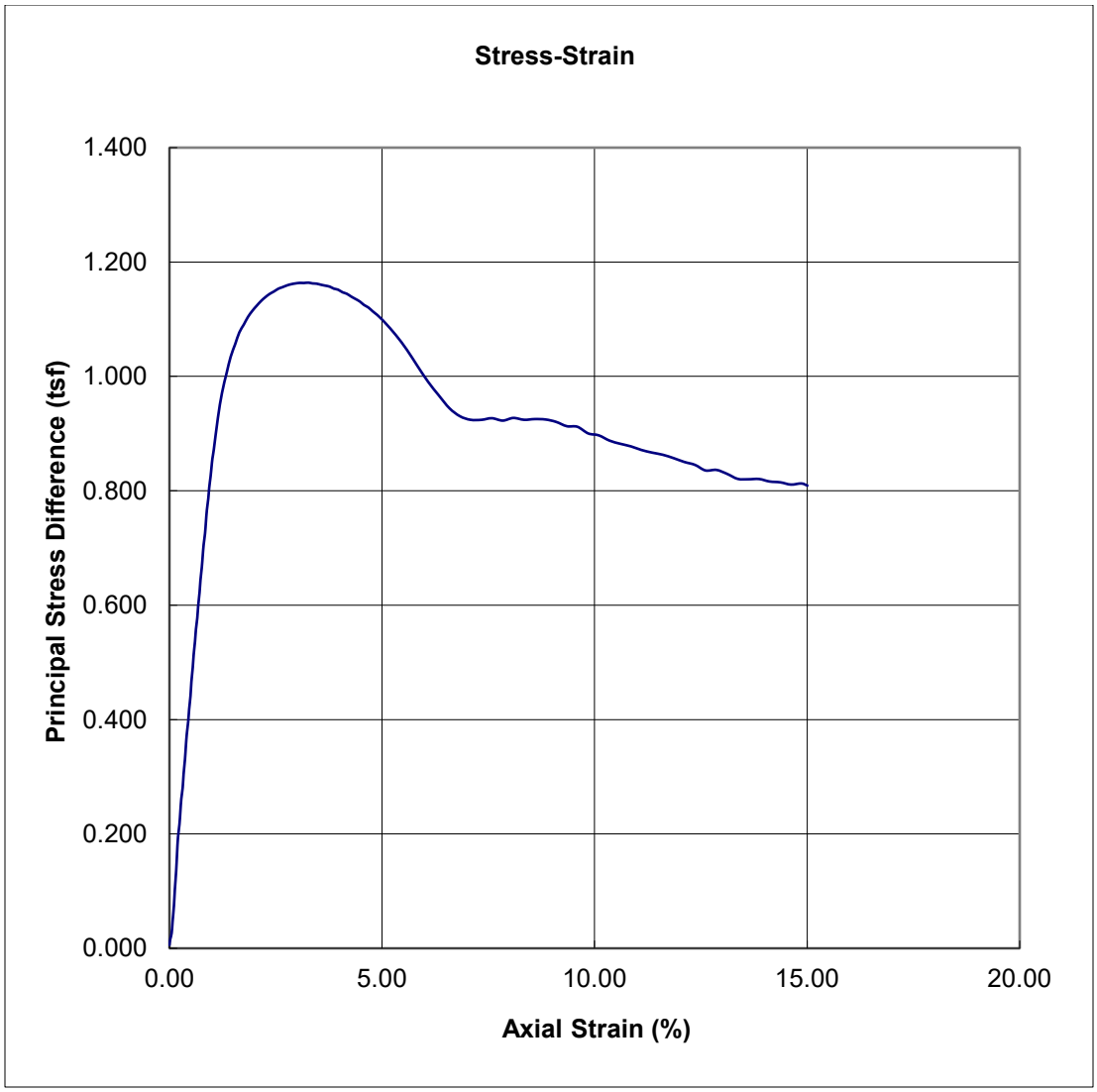
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.261 tsf**

STRAIN: **10.08%**

CONFINING PRESSURE: **10.0 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Light Gray Fat Clay (CH) with gravel and silt**



SAMPLE: **24-057 B-4 #12 38-40'**

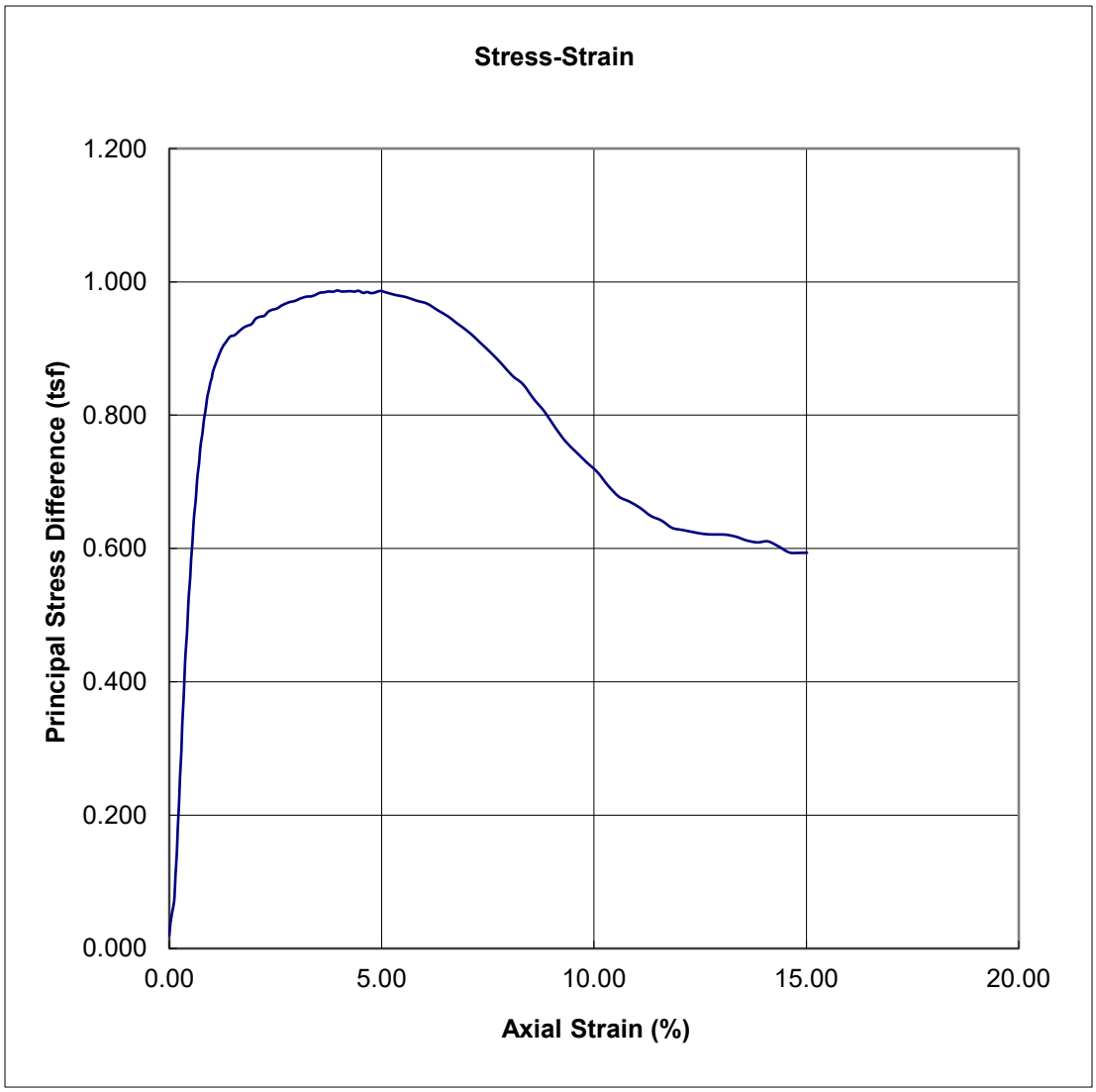
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.164 tsf**

STRAIN: **3.27%**

CONFINING PRESSURE: **13.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Fat Clay (CH)**



SAMPLE: **24-057 B-4 #13 43-45'**

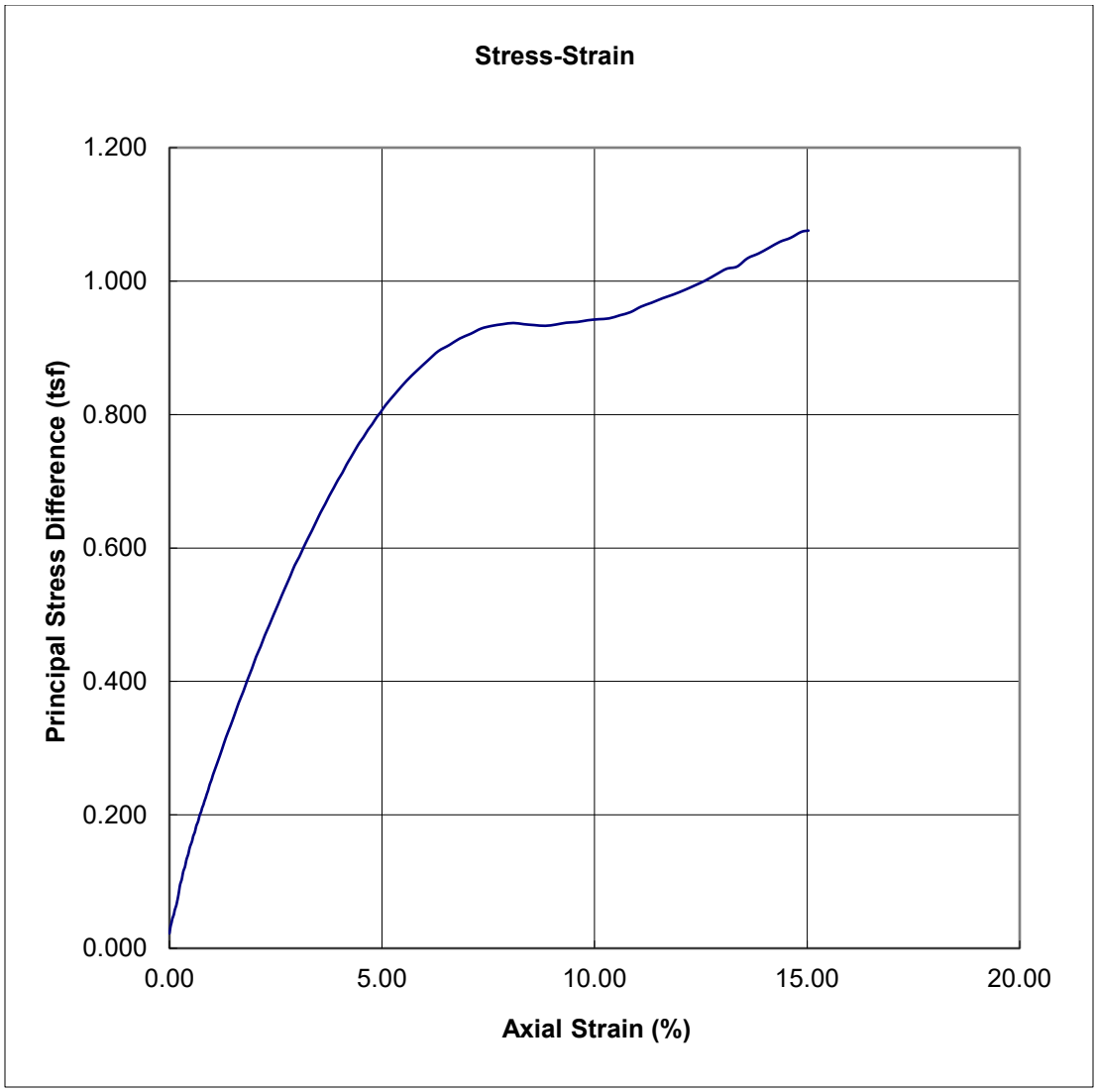
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.987 tsf**

STRAIN: **3.95%**

CONFINING PRESSURE: **15.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with tan streaks**



SAMPLE: **24-057 B-4 #14 48-50'**

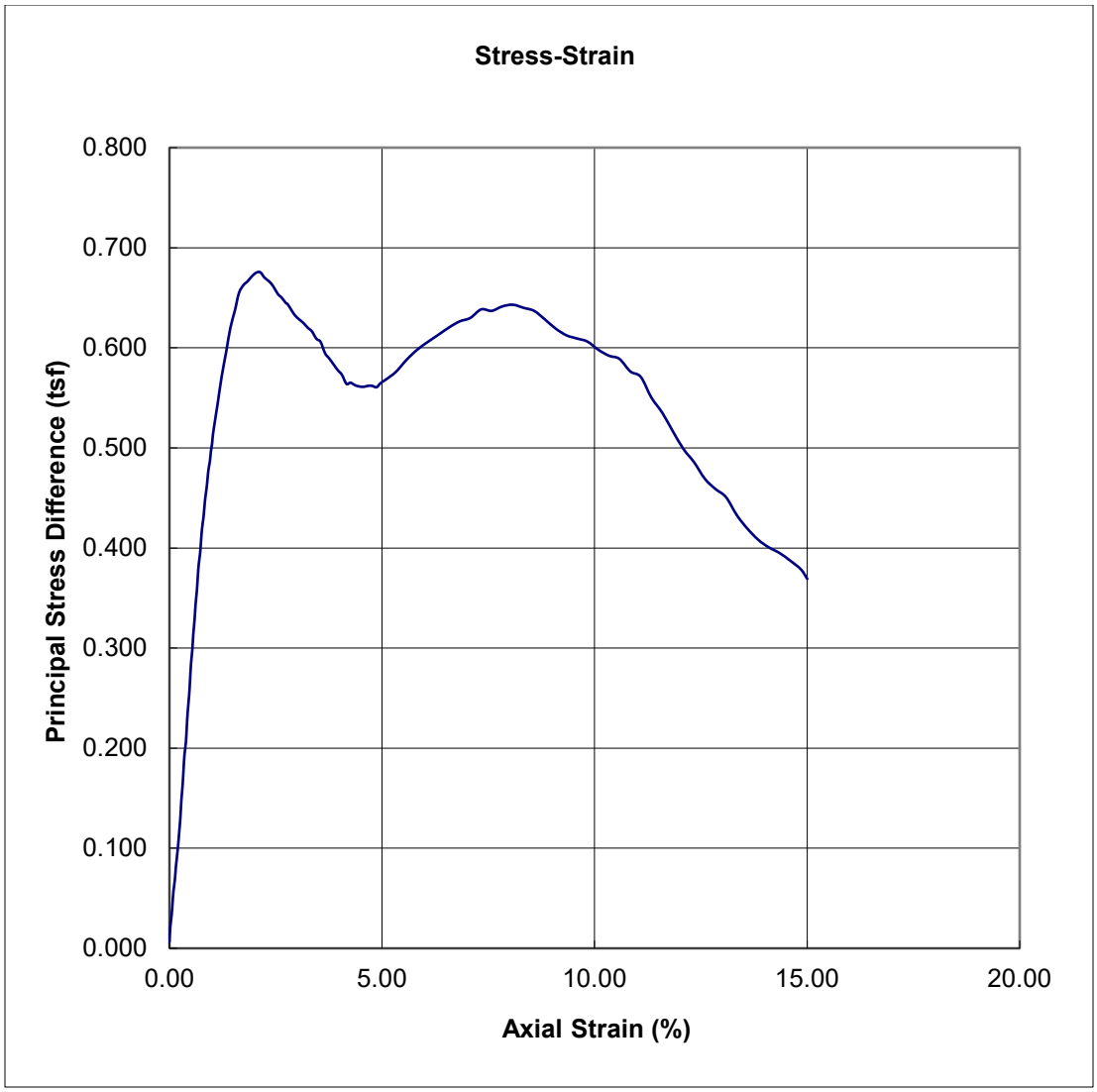
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.076 tsf**

STRAIN: **15.03%**

CONFINING PRESSURE: **16.7 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Tan Silty Clay (CL)**



SAMPLE: **24-057 B-4 #16 58-60'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.675 tsf**

STRAIN: **2.14%**

CONFINING PRESSURE: **20.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Blue Fat Clay (CH) with tan spots trace sand**

SAMPLE: **24-057 B-4 #23 88-90'**

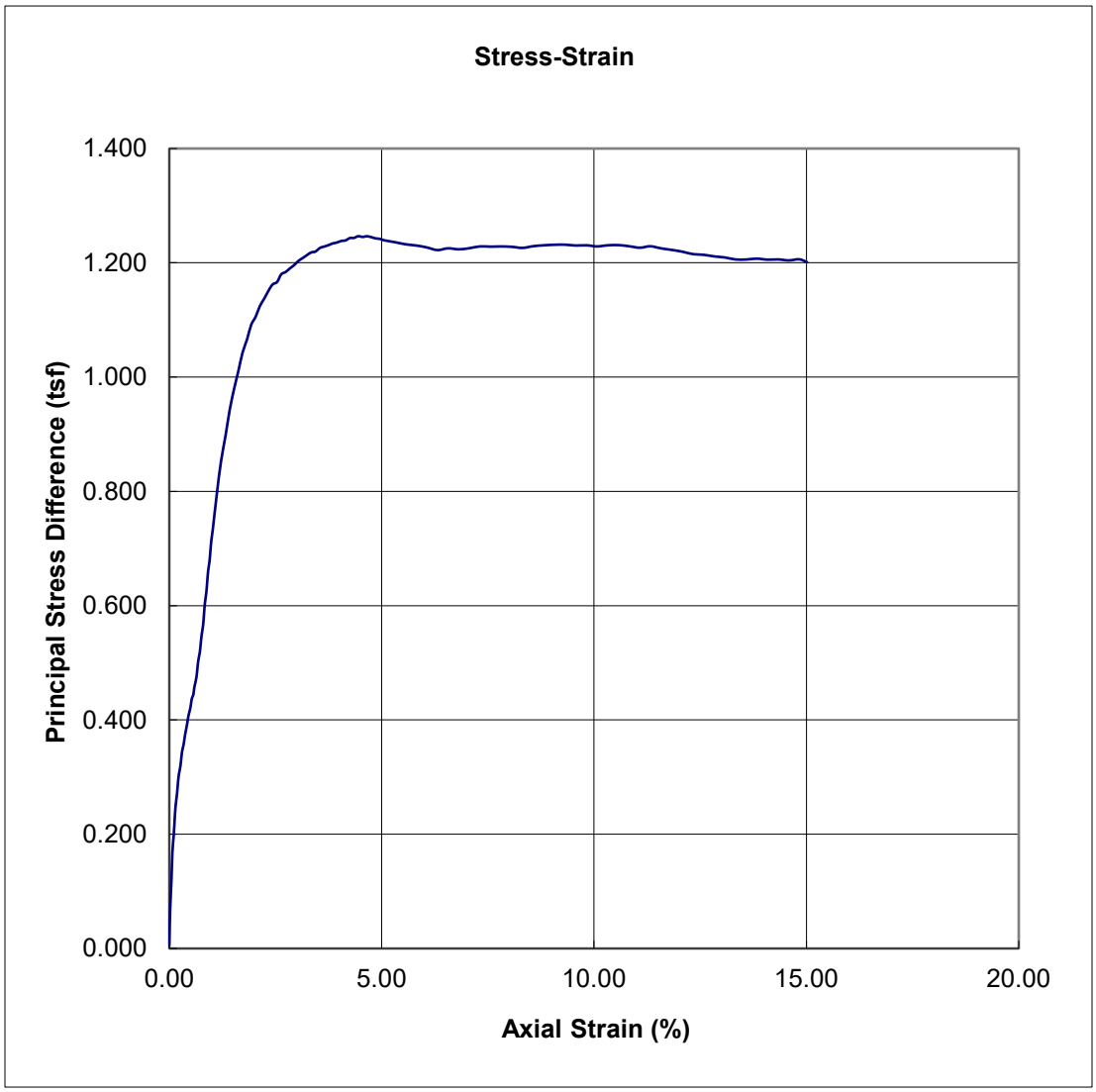
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.990 tsf**

STRAIN: **14.60%**

CONFINING PRESSURE: **30.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-4 #25 98-100'**

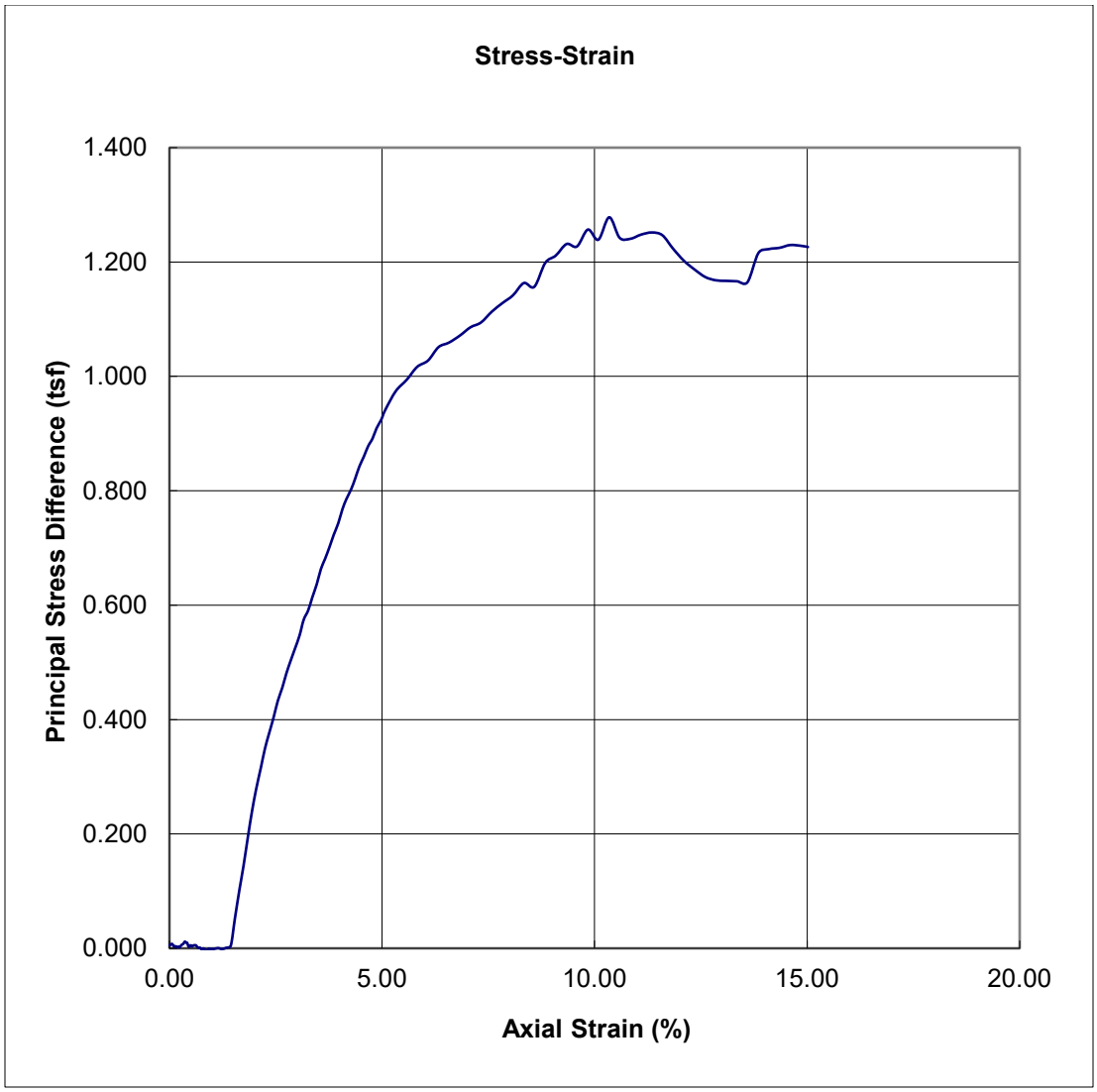
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.247 tsf**

STRAIN: **4.45%**

CONFINING PRESSURE: **33.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-5 #2 2-4'**

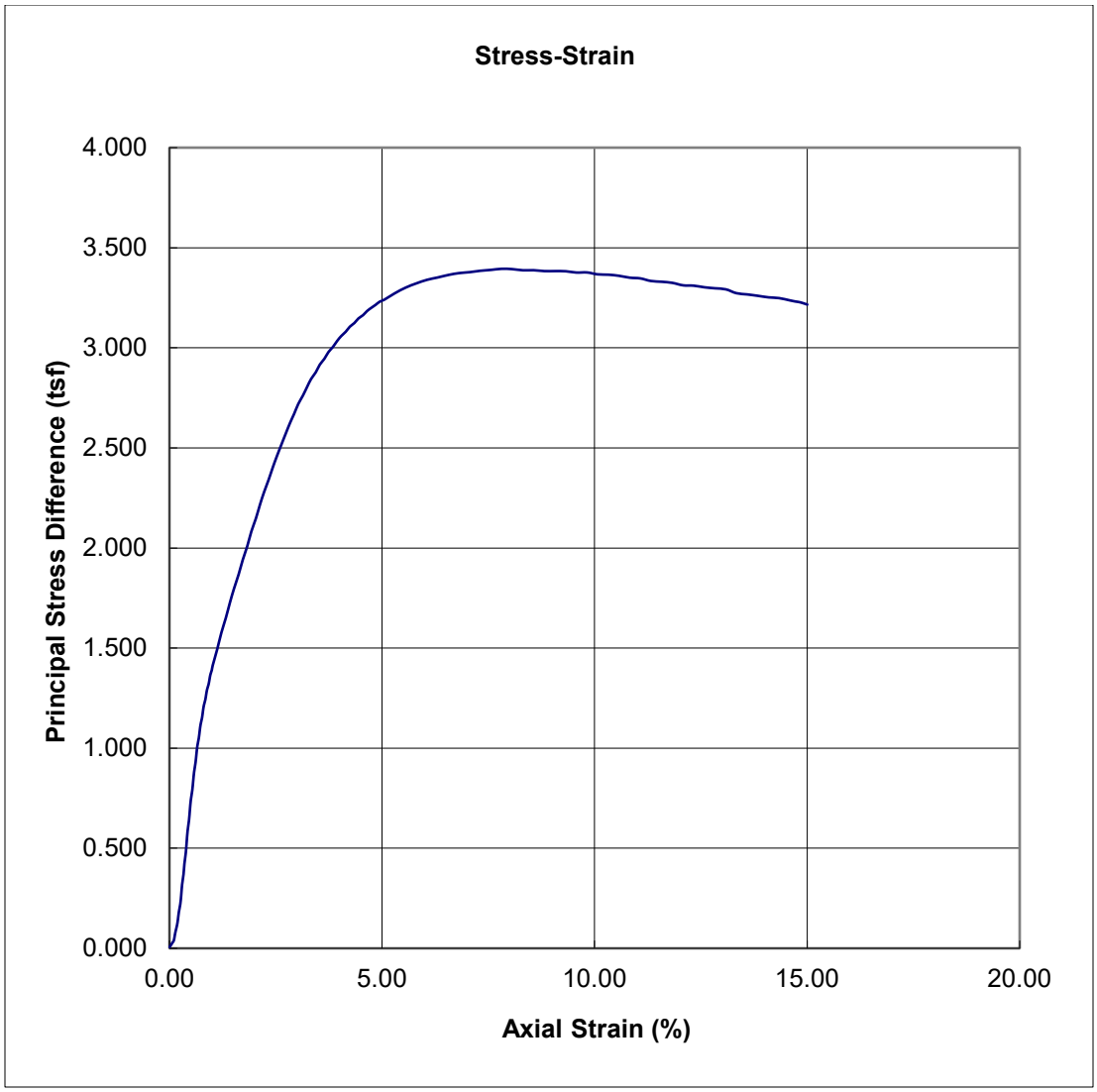
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.278 tsf**

STRAIN: **10.34%**

CONFINING PRESSURE: **9.1 psi**

SAMPLE DESCRIPTION: **Stiff Tan Silty Clay (CL)**



SAMPLE: **24-057 B-5 #6 10-12'**

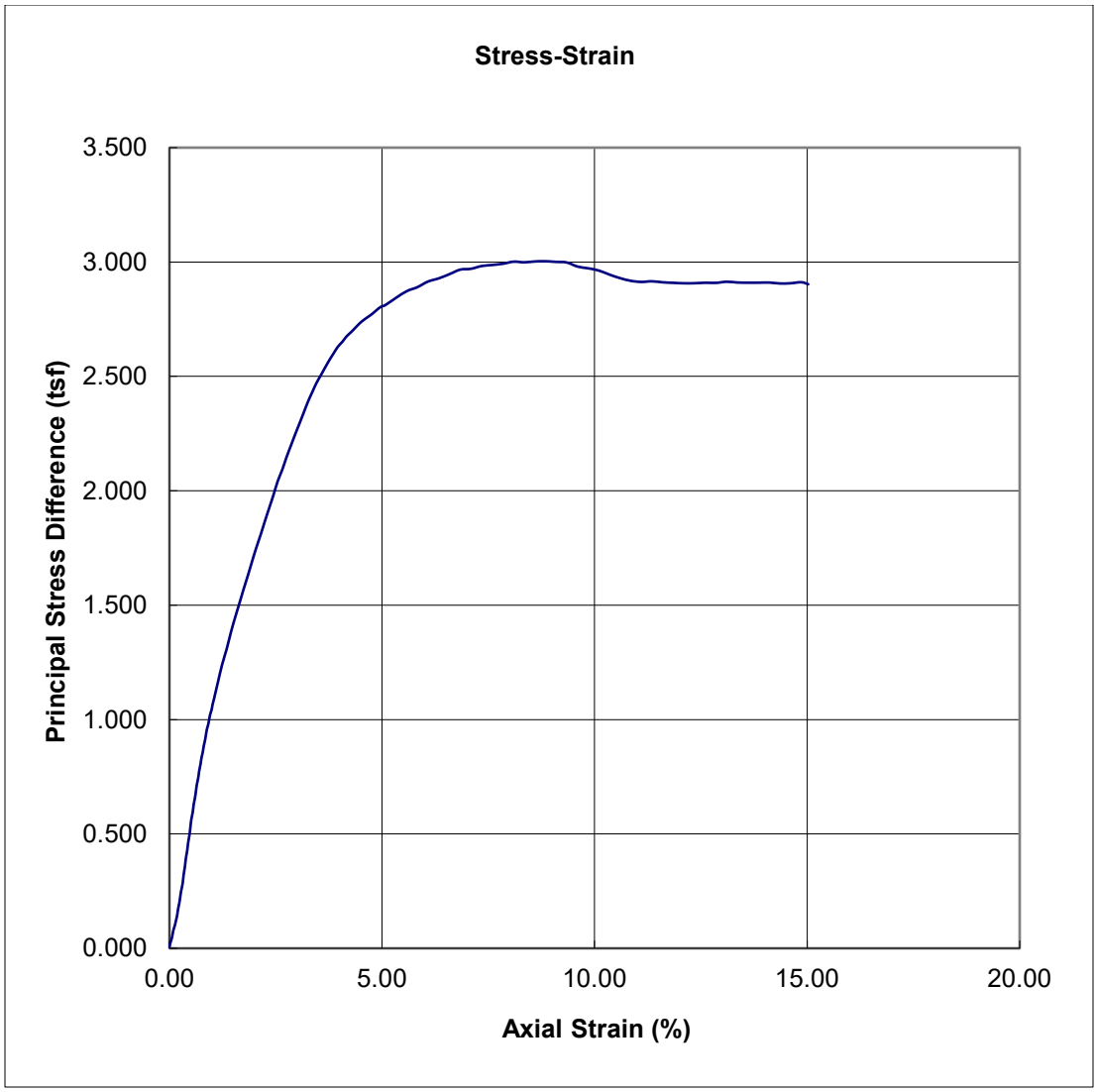
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **3.395 tsf**

STRAIN: **7.81%**

CONFINING PRESSURE: **11.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-5 #7 13-15'**

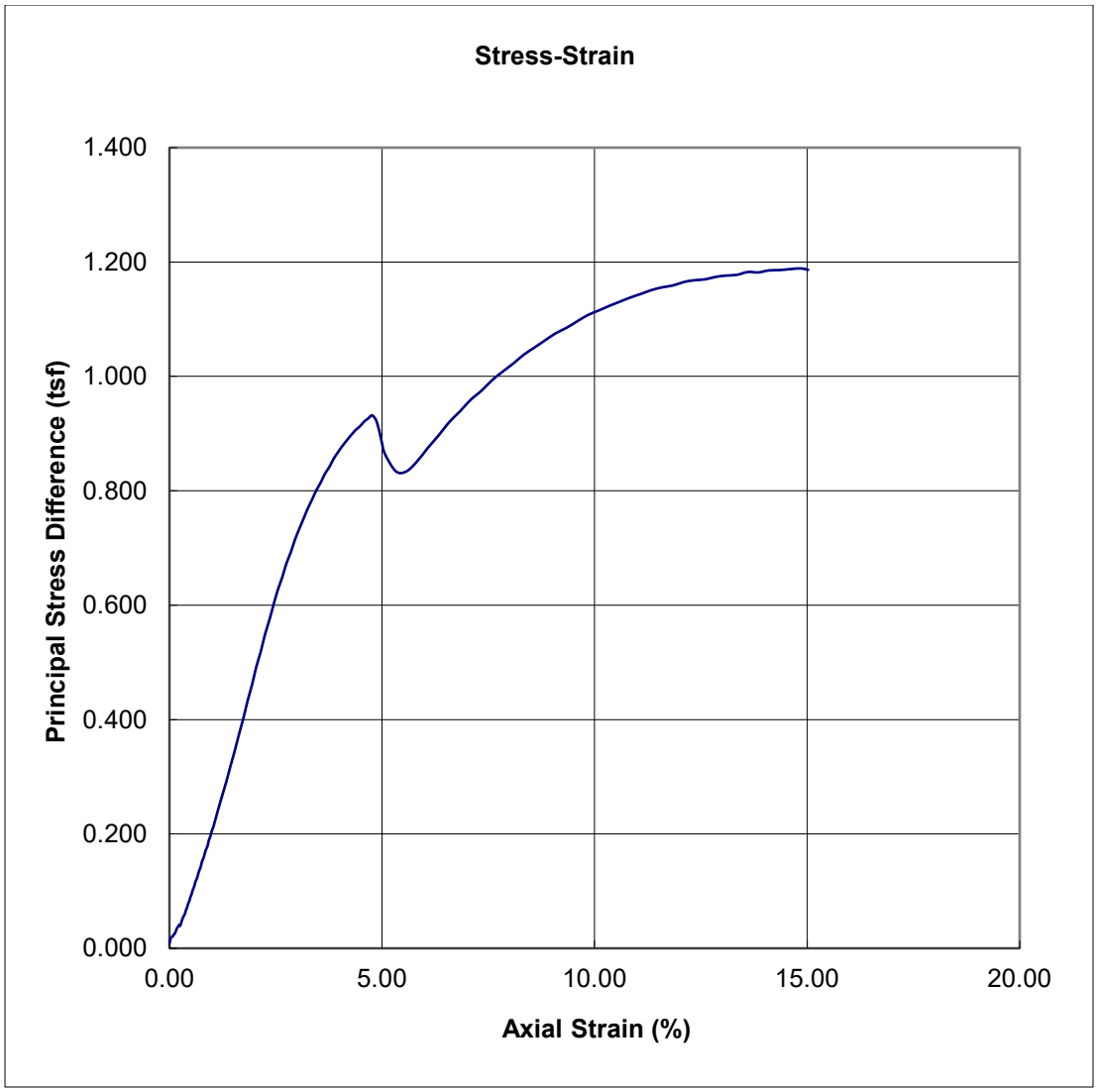
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **3.003 tsf**

STRAIN: **8.84%**

CONFINING PRESSURE: **12.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Tan / Gray Silty Clay (CL) with trace sand pockets**



SAMPLE: **24-057 B-5 #8 18-20'**

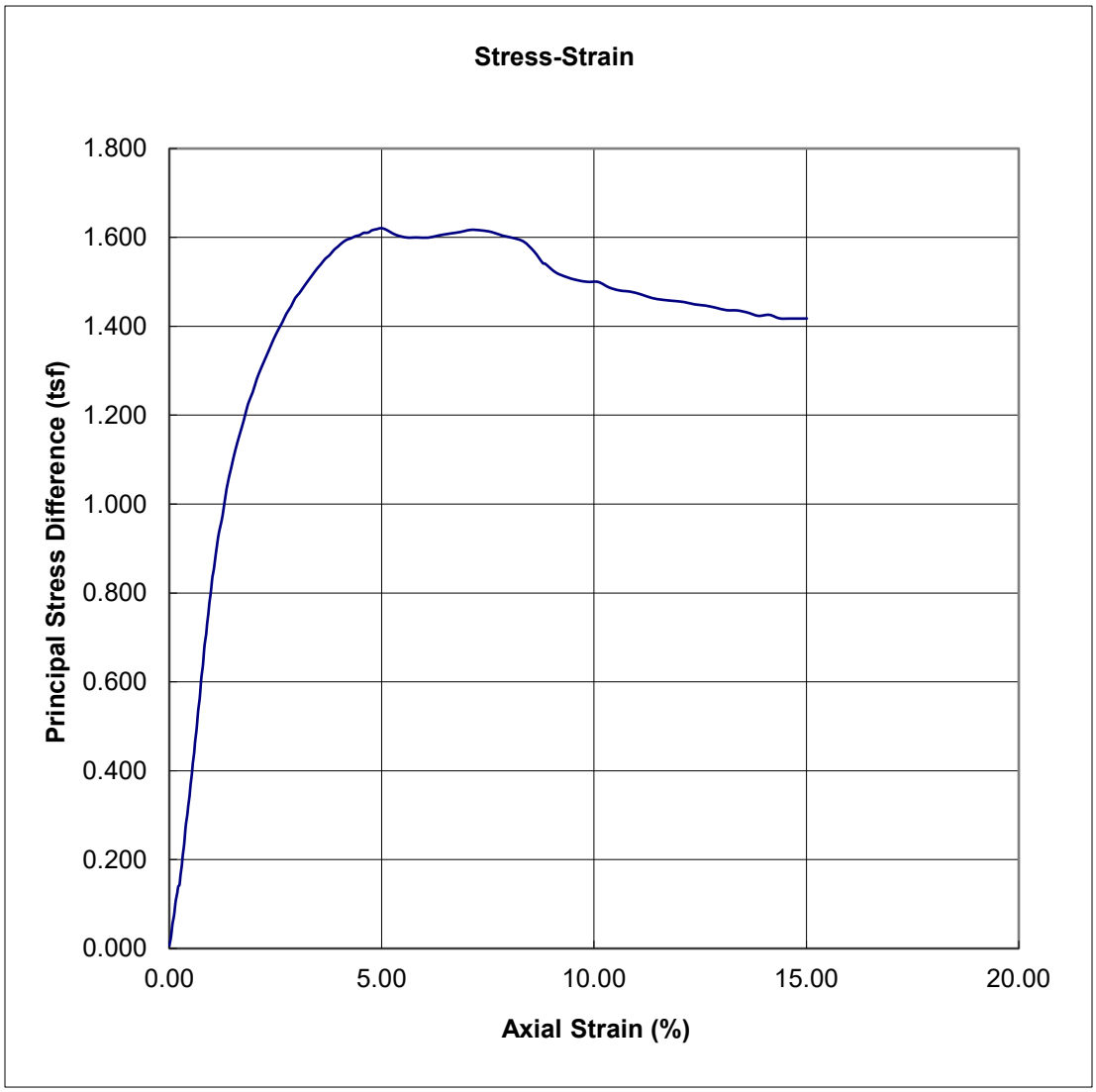
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.189 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **14.4 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Silty Clay (CL) with sand**



SAMPLE: **24-057 B-5 #9 23-25'**

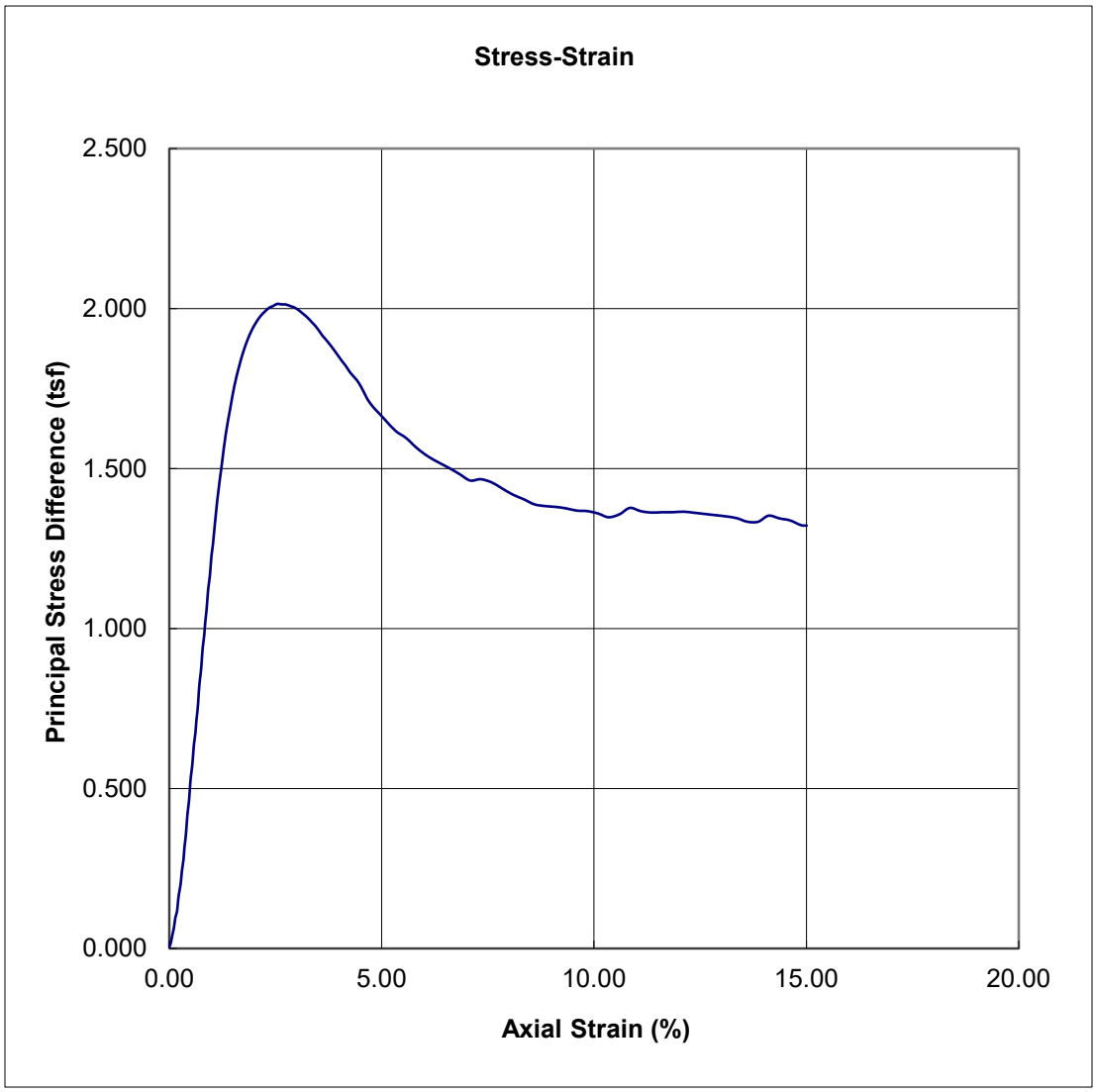
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.621 tsf**

STRAIN: **4.98%**

CONFINING PRESSURE: **16.1 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Fat Clay (CH) with trace silt seams**



SAMPLE: **24-057 B-5 #11 33-35'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.015 tsf**

STRAIN: **2.54%**

CONFINING PRESSURE: **19.4 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray / Tan Fat Clay (CH)**

SAMPLE: **24-057 B-5 #12 38-40'**

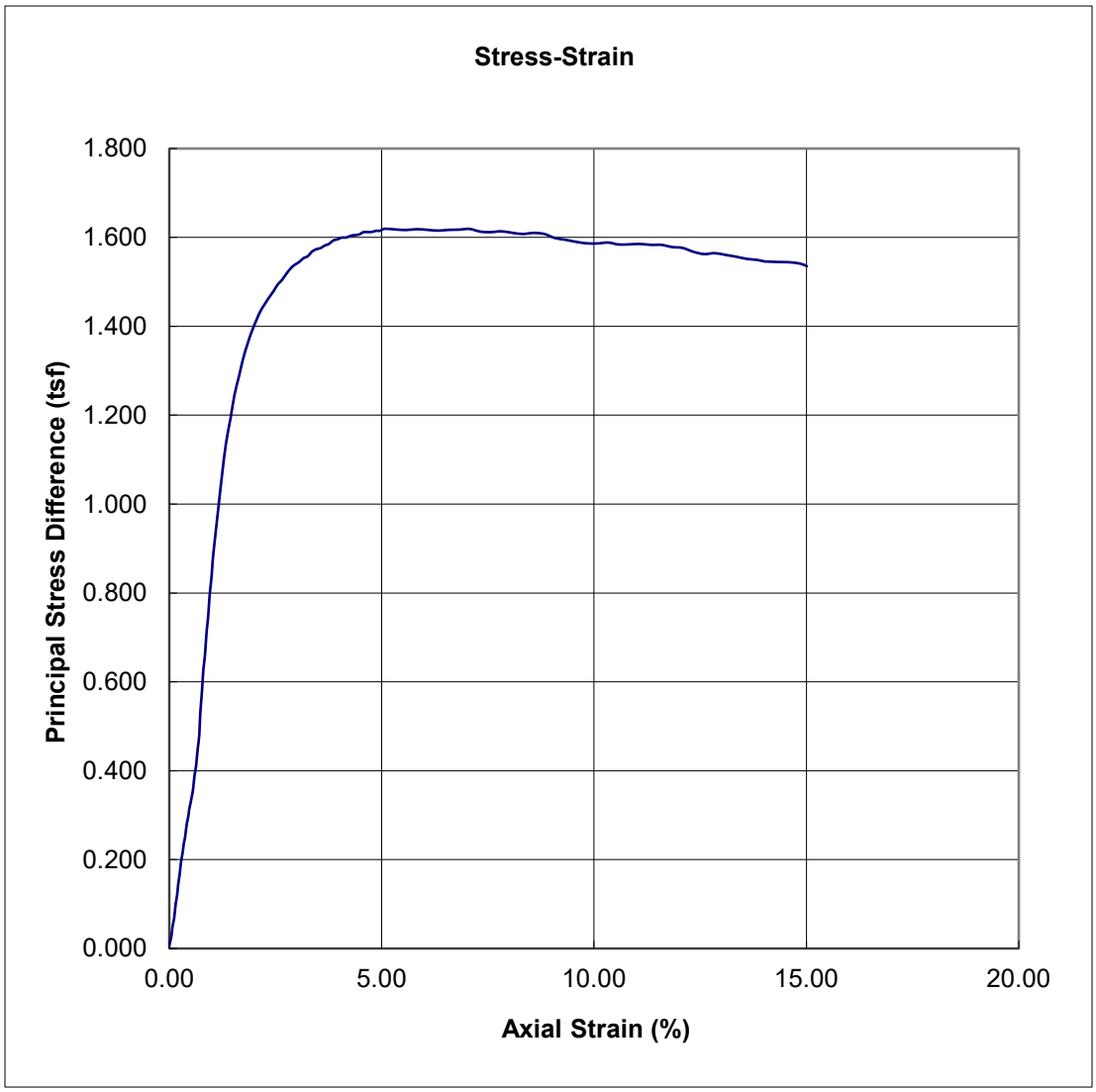
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.258 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **21.1 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with trace sand**



SAMPLE: **24-057 B-5 #13 43-45'**

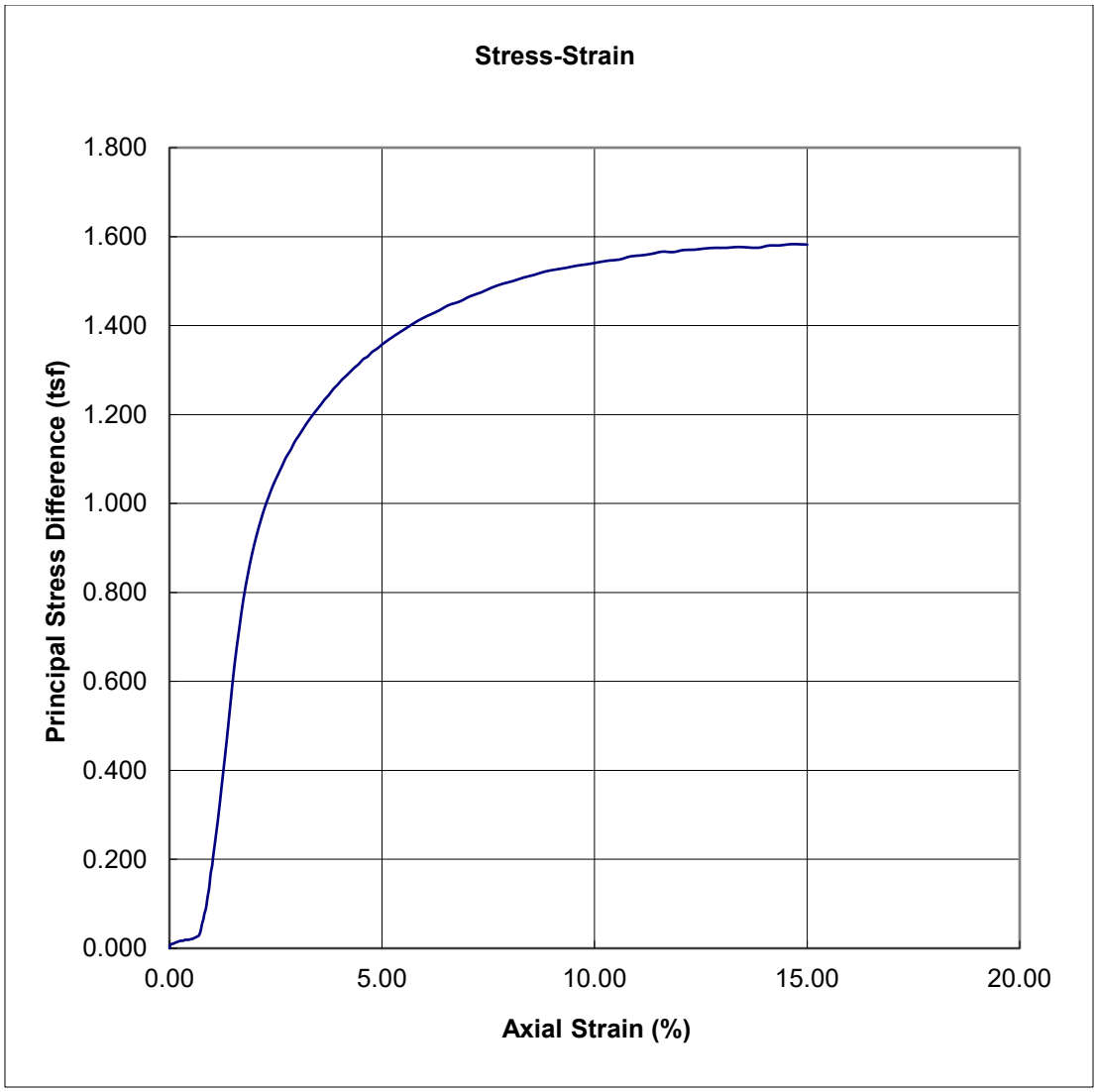
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.619 tsf**

STRAIN: **5.07%**

CONFINING PRESSURE: **22.8 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with trace organics**



SAMPLE: **24-057 B-5 #14 48-50'**

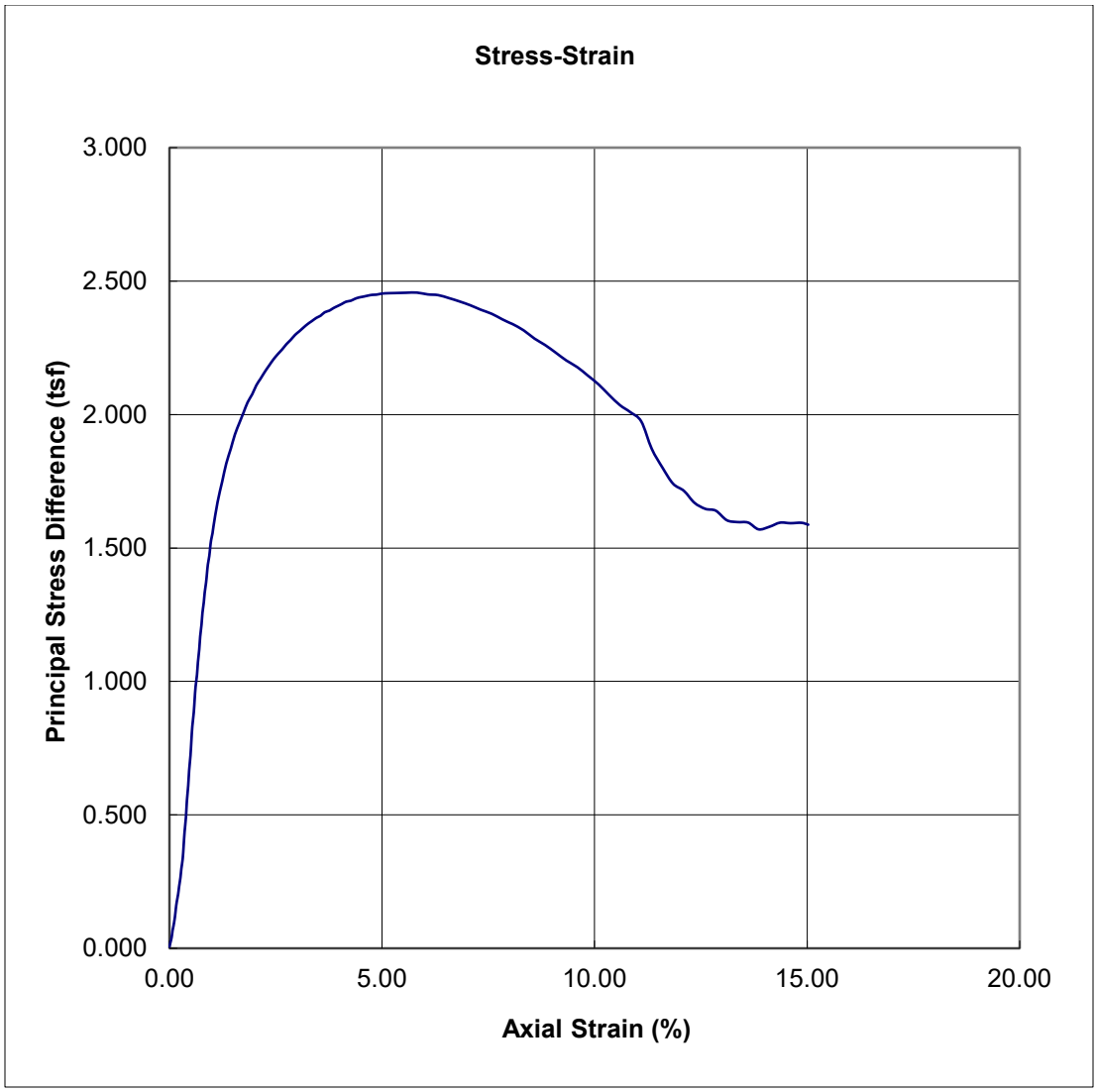
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.583 tsf**

STRAIN: **14.60%**

CONFINING PRESSURE: **24.4 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-5 #16 58-60'**

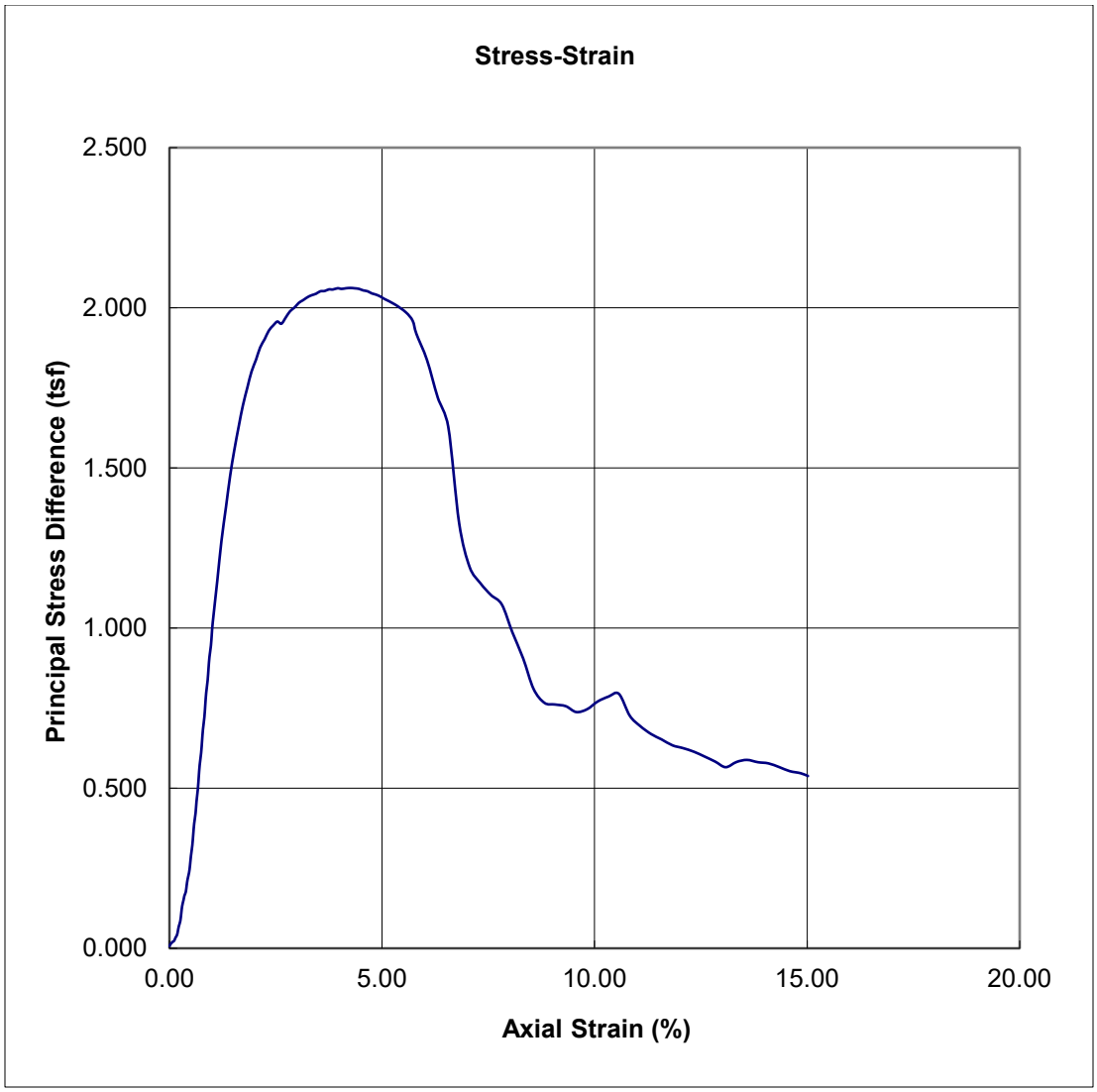
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.457 tsf**

STRAIN: **5.82%**

CONFINING PRESSURE: **27.8 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-5 #17 63-65'**

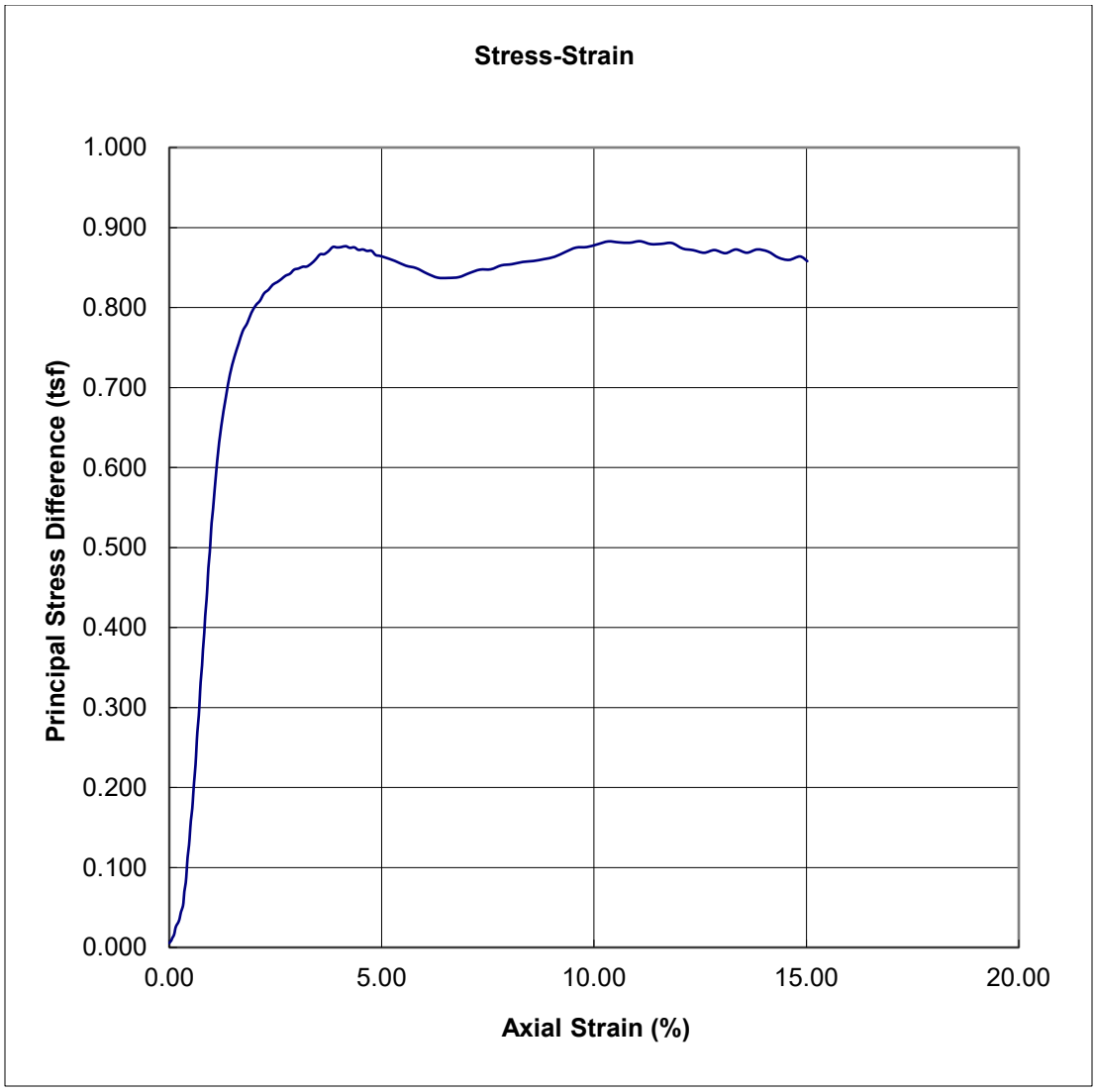
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.062 tsf**

STRAIN: **4.26%**

CONFINING PRESSURE: **29.4 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-5 #23 88-90'**

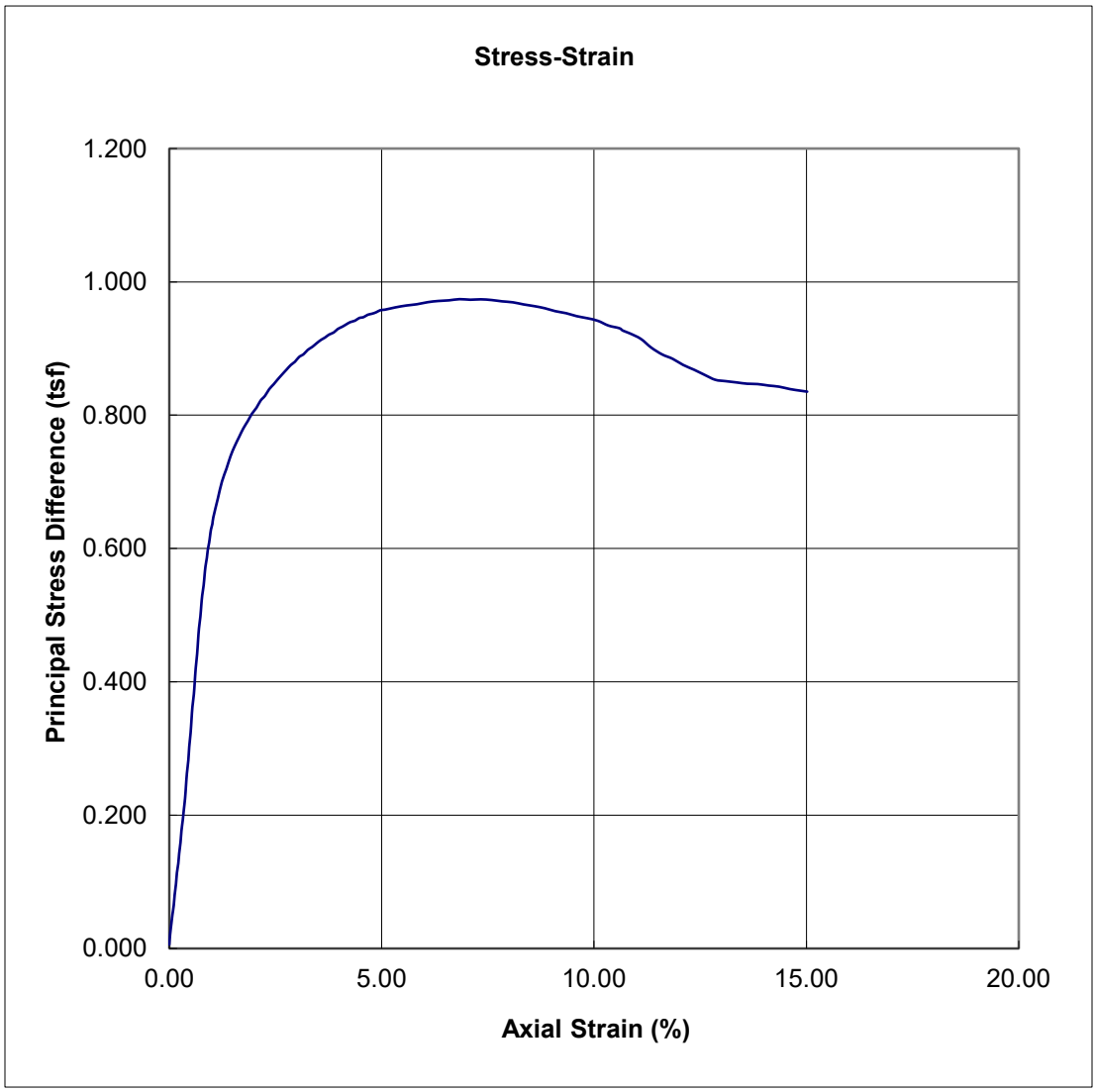
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.883 tsf**

STRAIN: **11.08%**

CONFINING PRESSURE: **37.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-5 #24 93-95'**

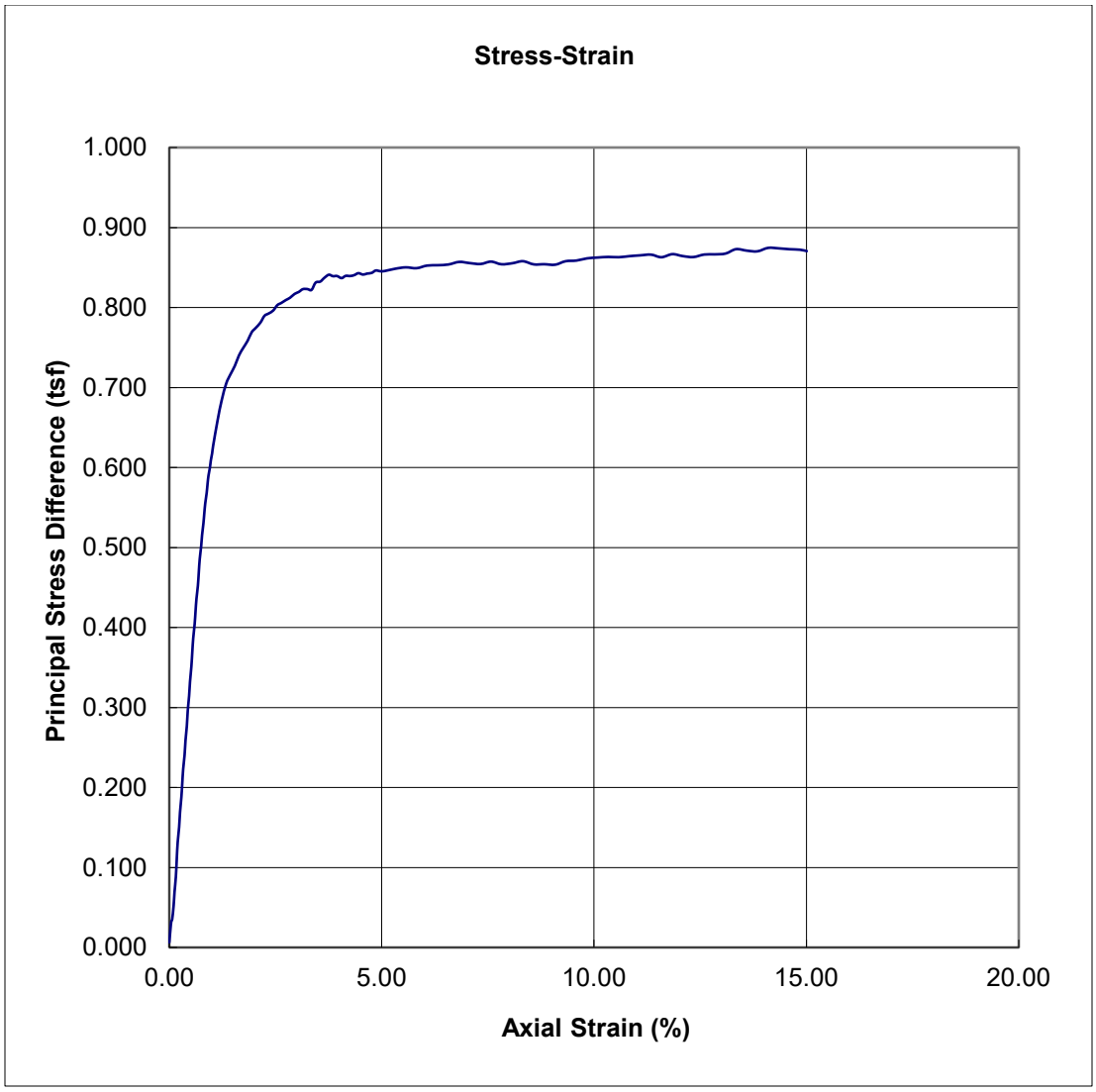
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.974 tsf**

STRAIN: **6.83%**

CONFINING PRESSURE: **39.4 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-5 #25 98-100'**

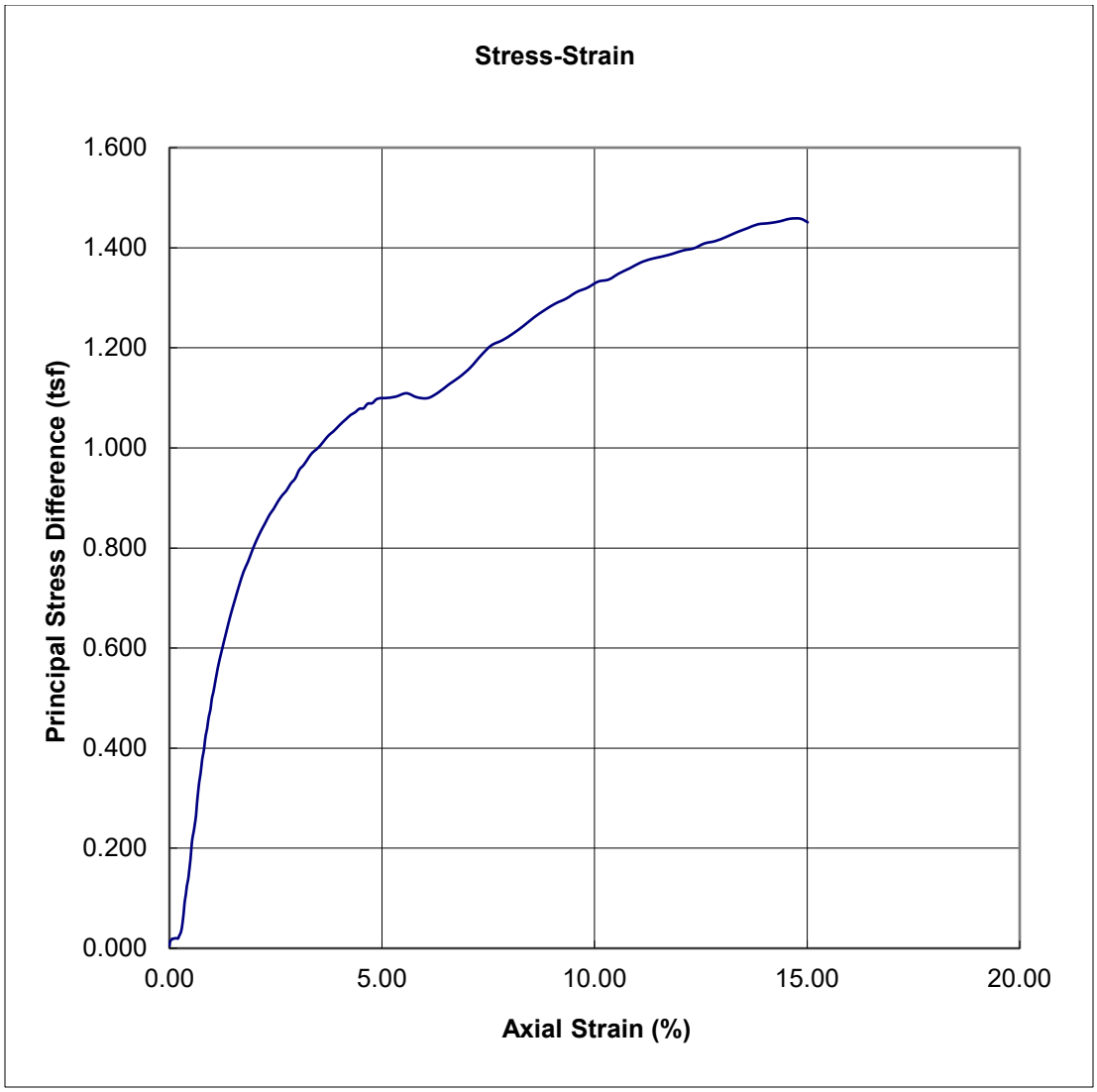
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.875 tsf**

STRAIN: **14.10%**

CONFINING PRESSURE: **41.1 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-6 #4 4-6'**

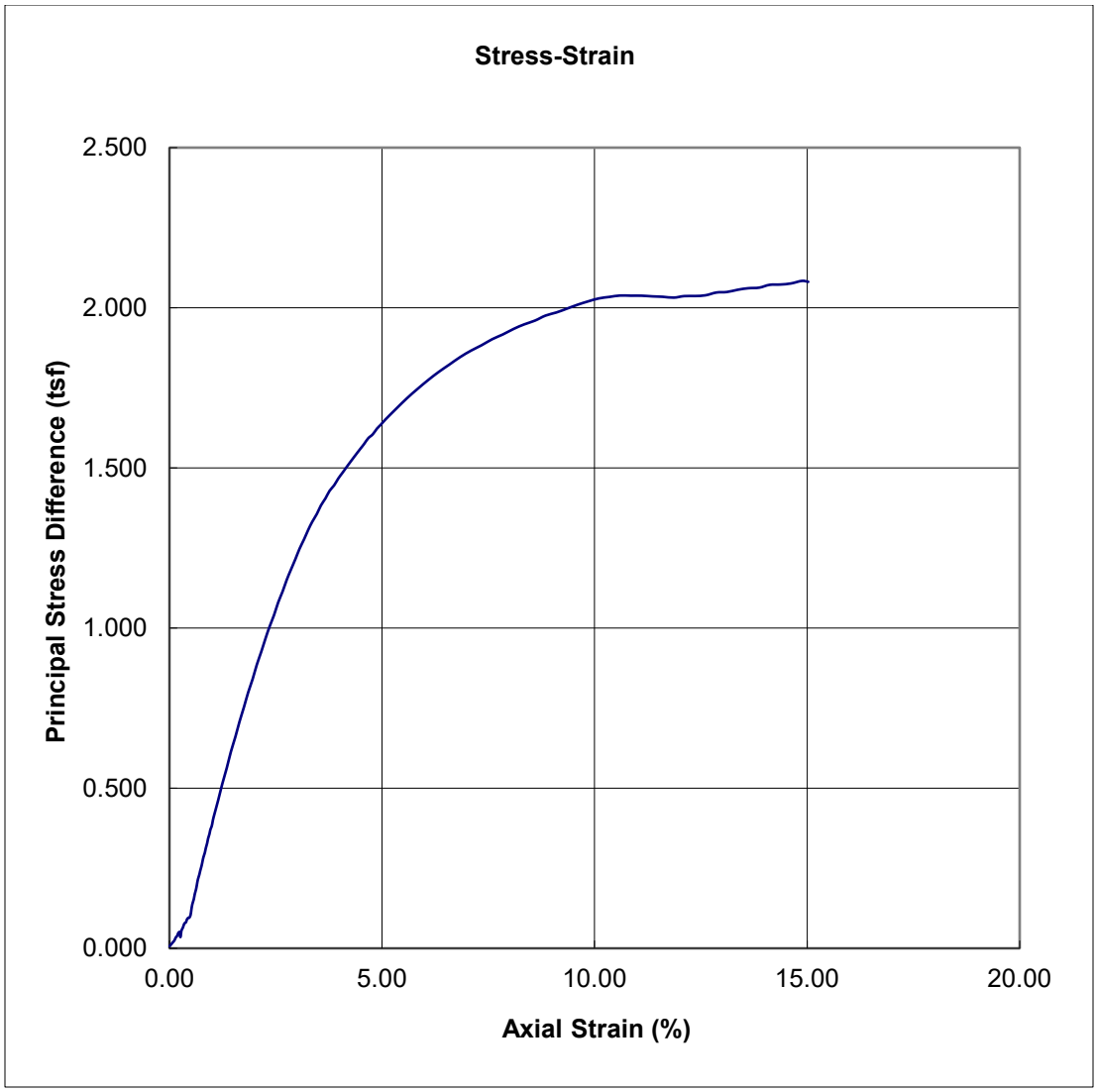
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.458 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **7.8 psi**

SAMPLE DESCRIPTION: **Stiff Tan Sandy Clay (CL)**



SAMPLE: **24-057 B-6 #6 10-12'**

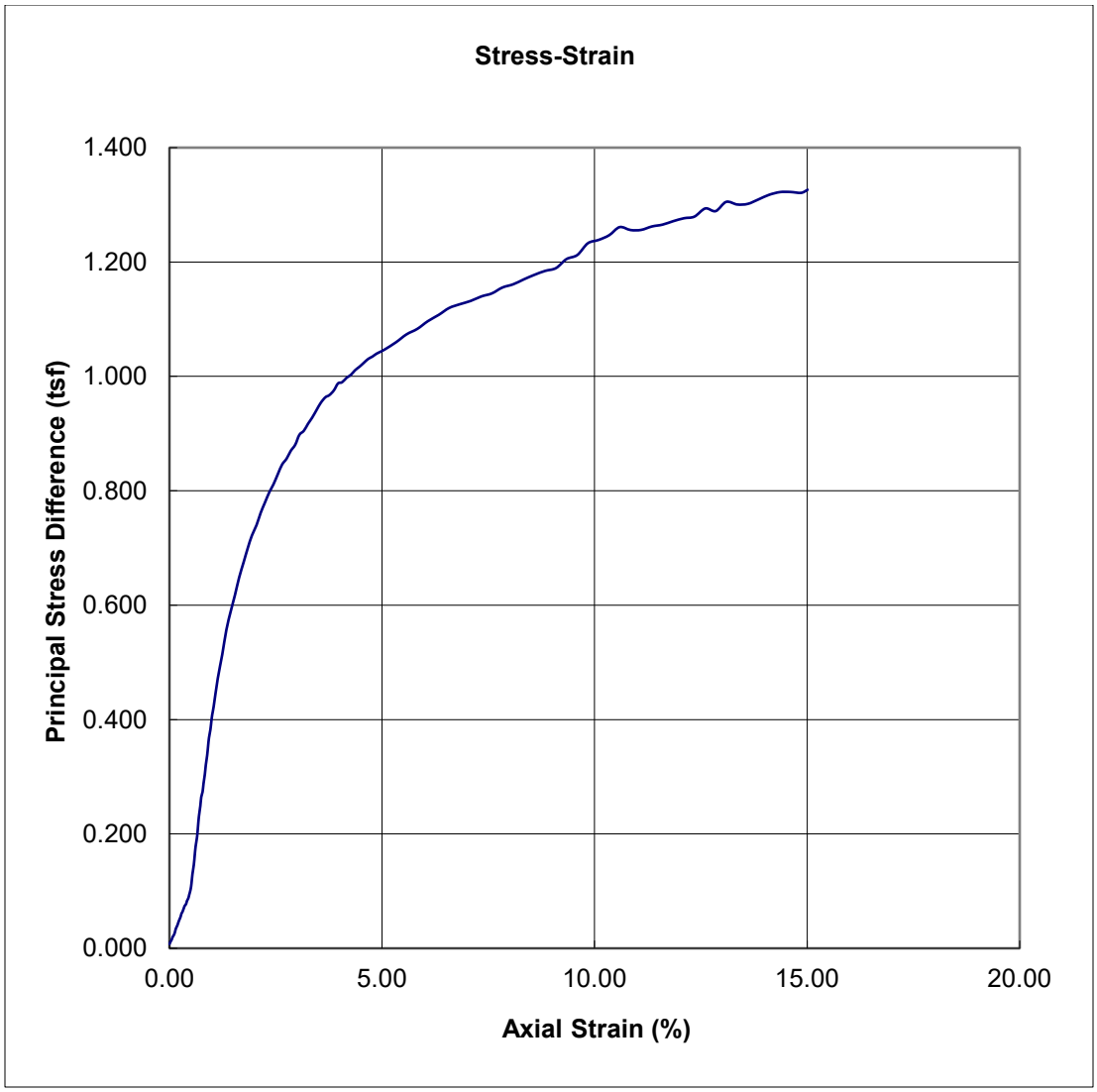
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.084 tsf**

STRAIN: **14.88%**

CONFINING PRESSURE: **9.2 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray / Tan Sandy Clay (CL)**



SAMPLE: **24-057 B-6 #7 13-15'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.326 psi**

STRAIN: **15.01%**

CONFINING PRESSURE: **10.2 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Tan Silty Clay (CL) with sand**

SAMPLE: **24-057 B-6 #8 18-20'**

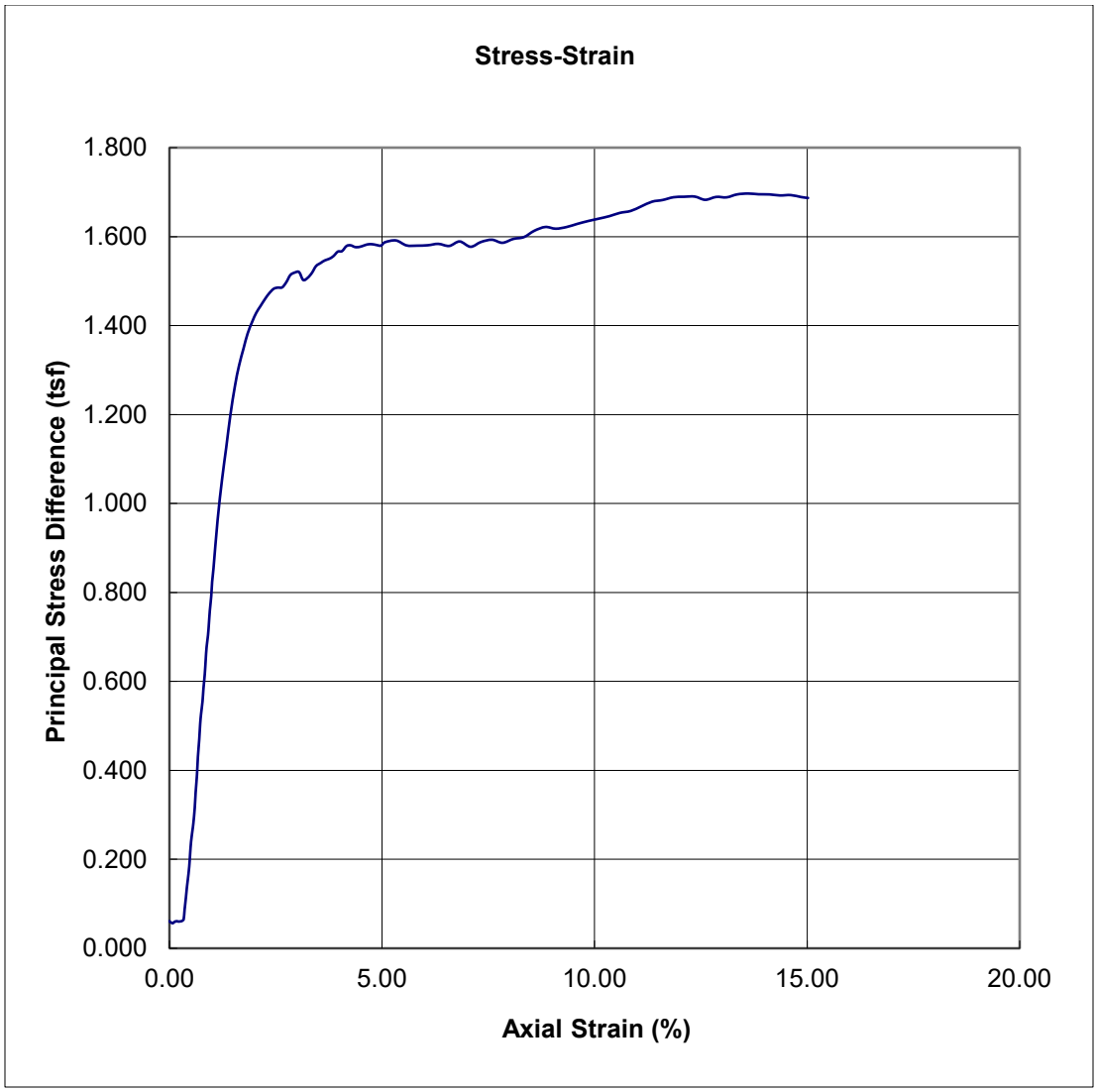
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.454 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **11.8 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with silt and sand seams**



SAMPLE: **24-057 B-6 #9 23-25'**

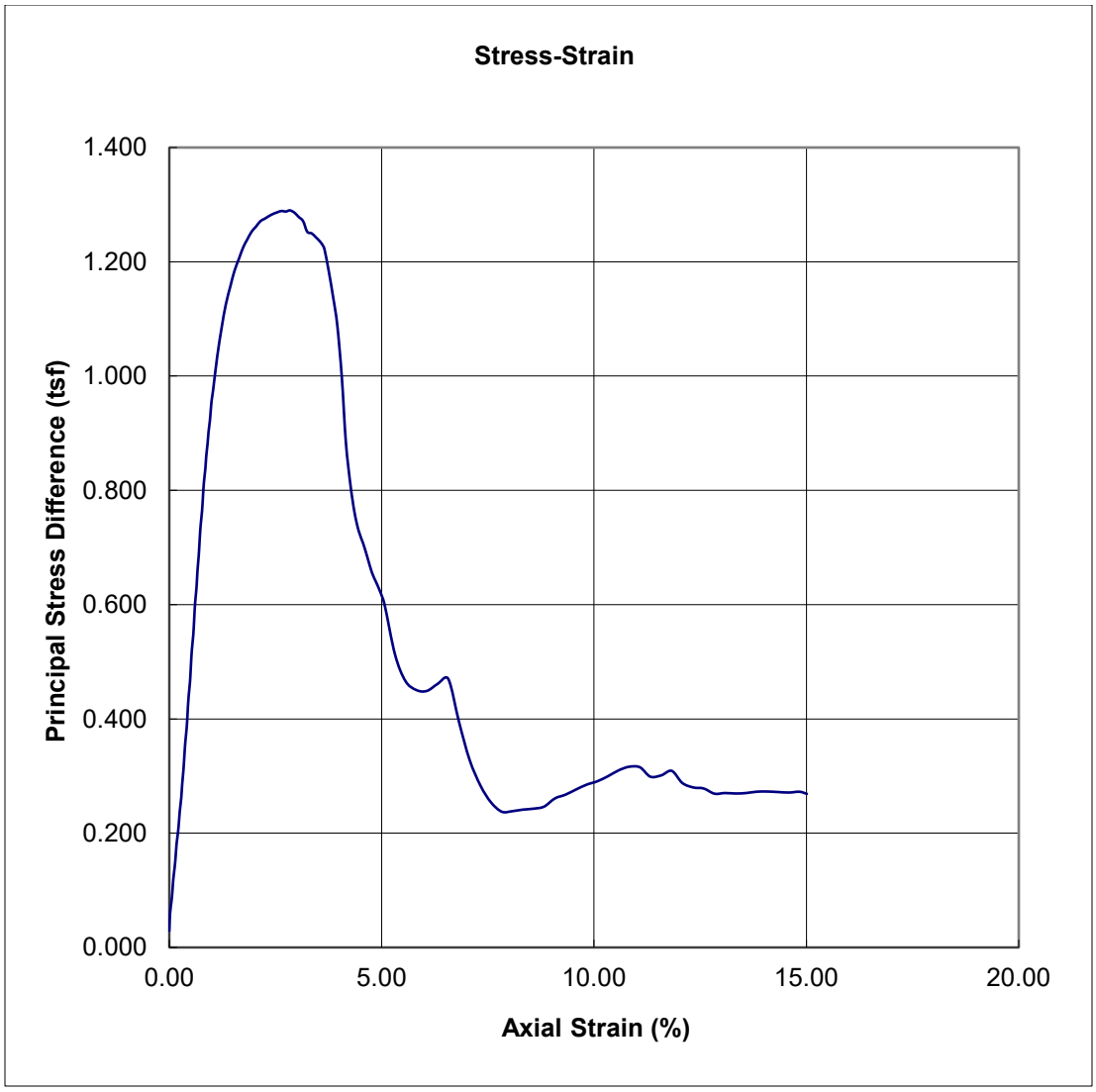
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.697 tsf**

STRAIN: **13.61%**

CONFINING PRESSURE: **13.5 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Fat Clay (CH)**



SAMPLE: **24-057 B-6 #10 28-30'**

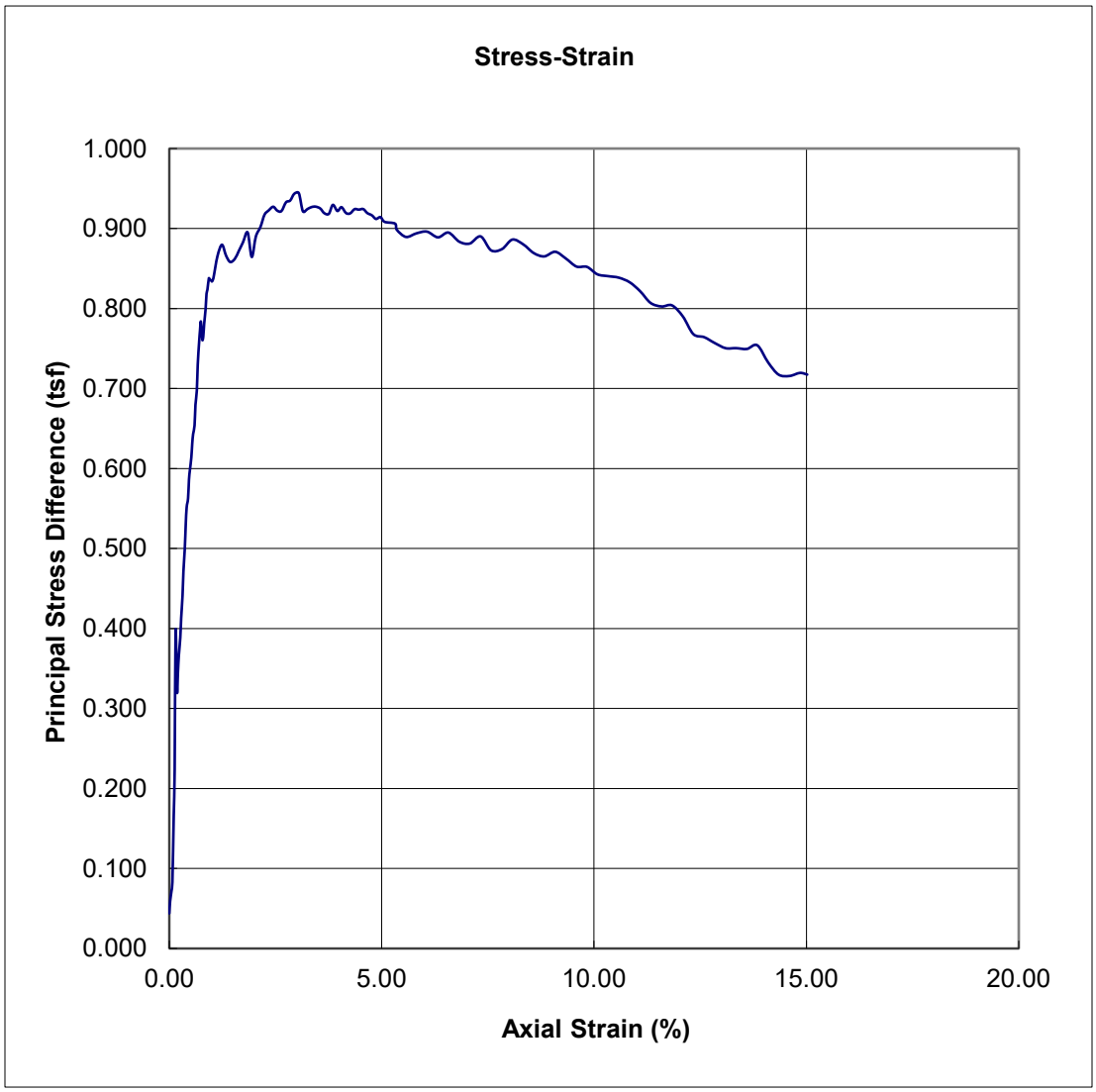
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.290 psi**

STRAIN: **2.84%**

CONFINING PRESSURE: **15.2 psi**

SAMPLE DESCRIPTION: **Stiff Gray / Tan Fat Clay (CH)**



SAMPLE: **UU 24-057 B-6 #11 33-35'**

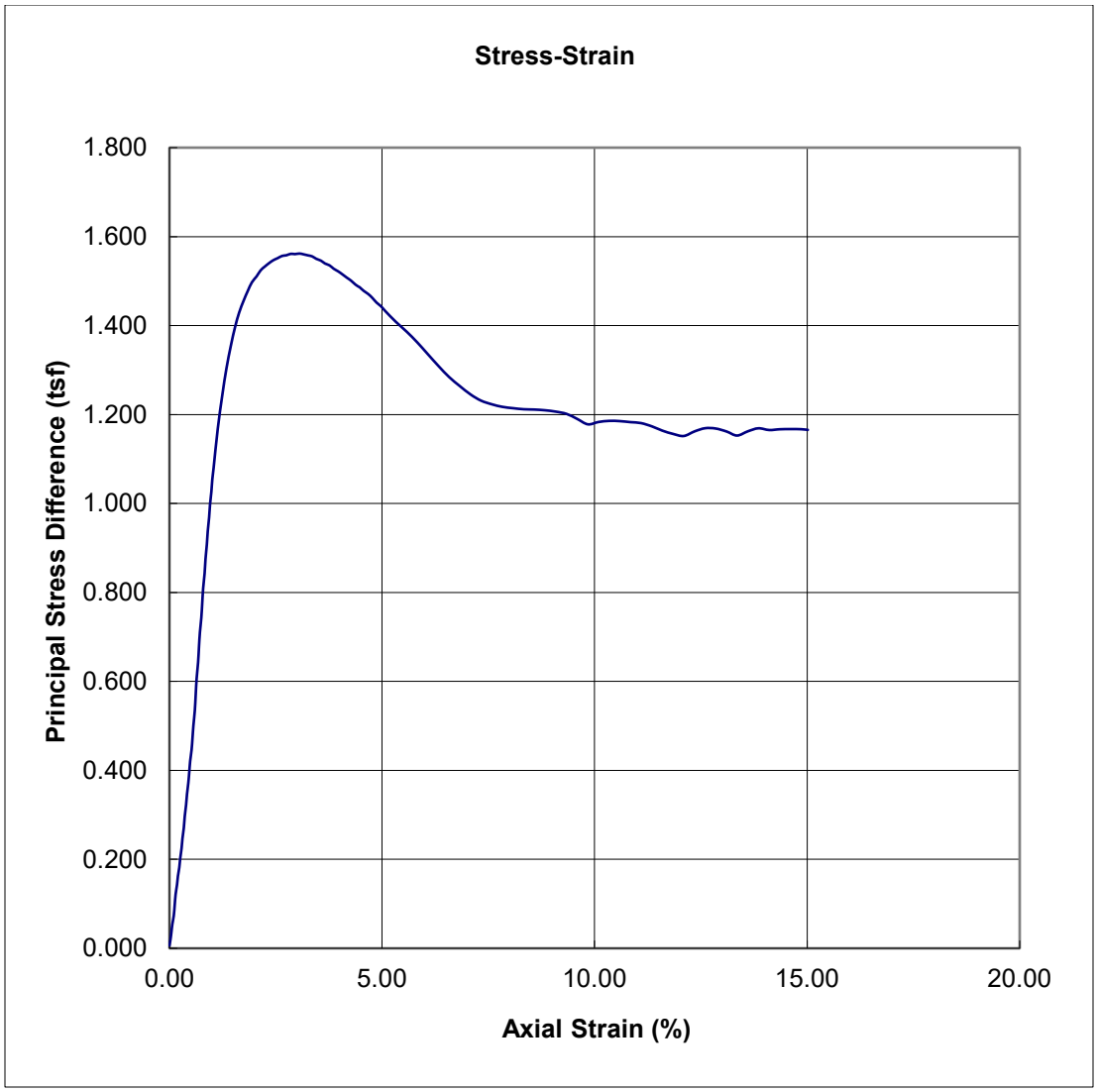
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.944 tsf**

STRAIN: **3.05%**

CONFINING PRESSURE: **16.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Tan Fat Clay (CH)**



SAMPLE: **24-057 B-6 #12 38-40'**

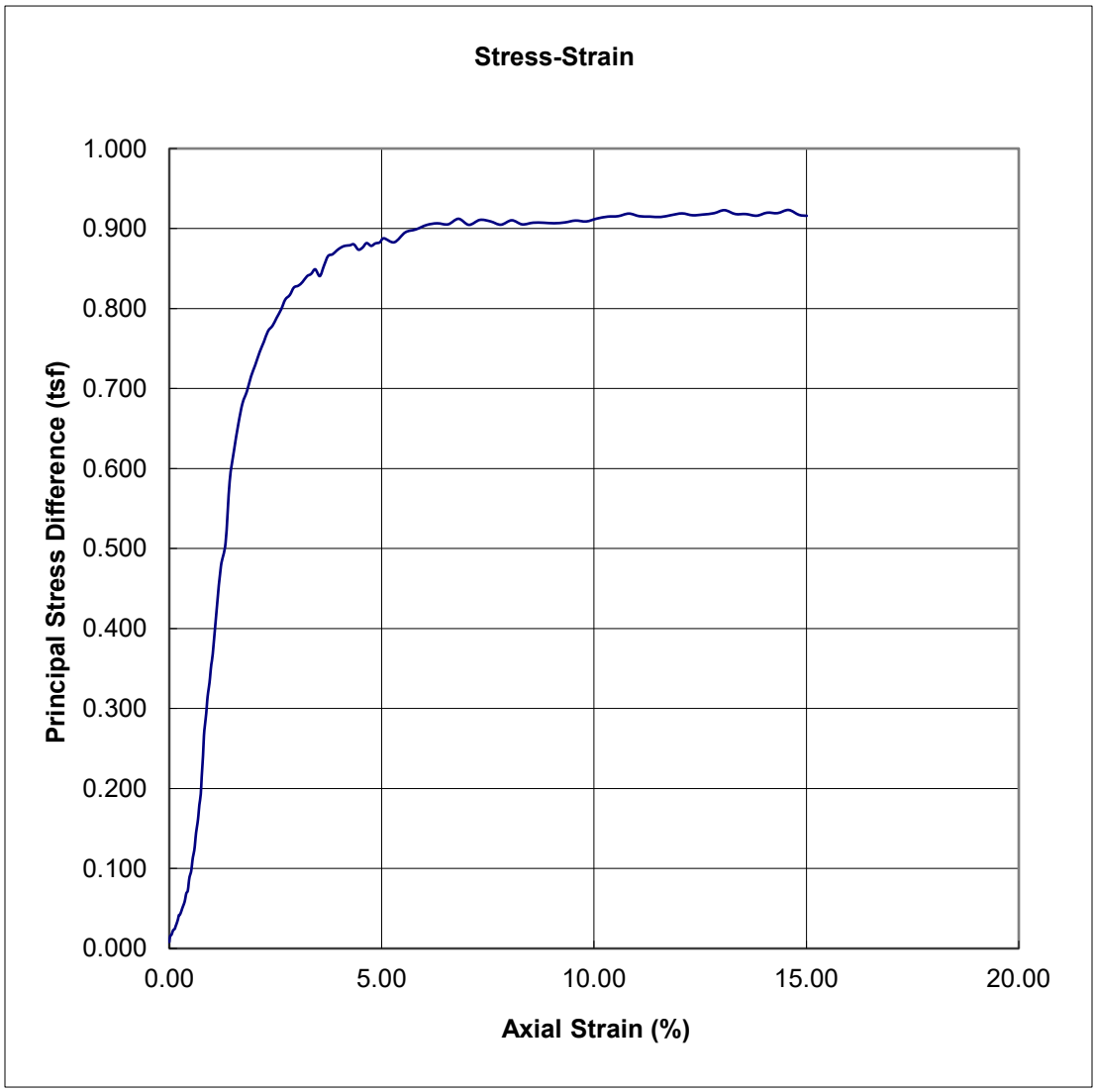
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.562 tsf**

STRAIN: **3.06%**

CONFINING PRESSURE: **18.5 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Fat Clay (CH)**



SAMPLE: **24-057 B-6 #13 43-45'**

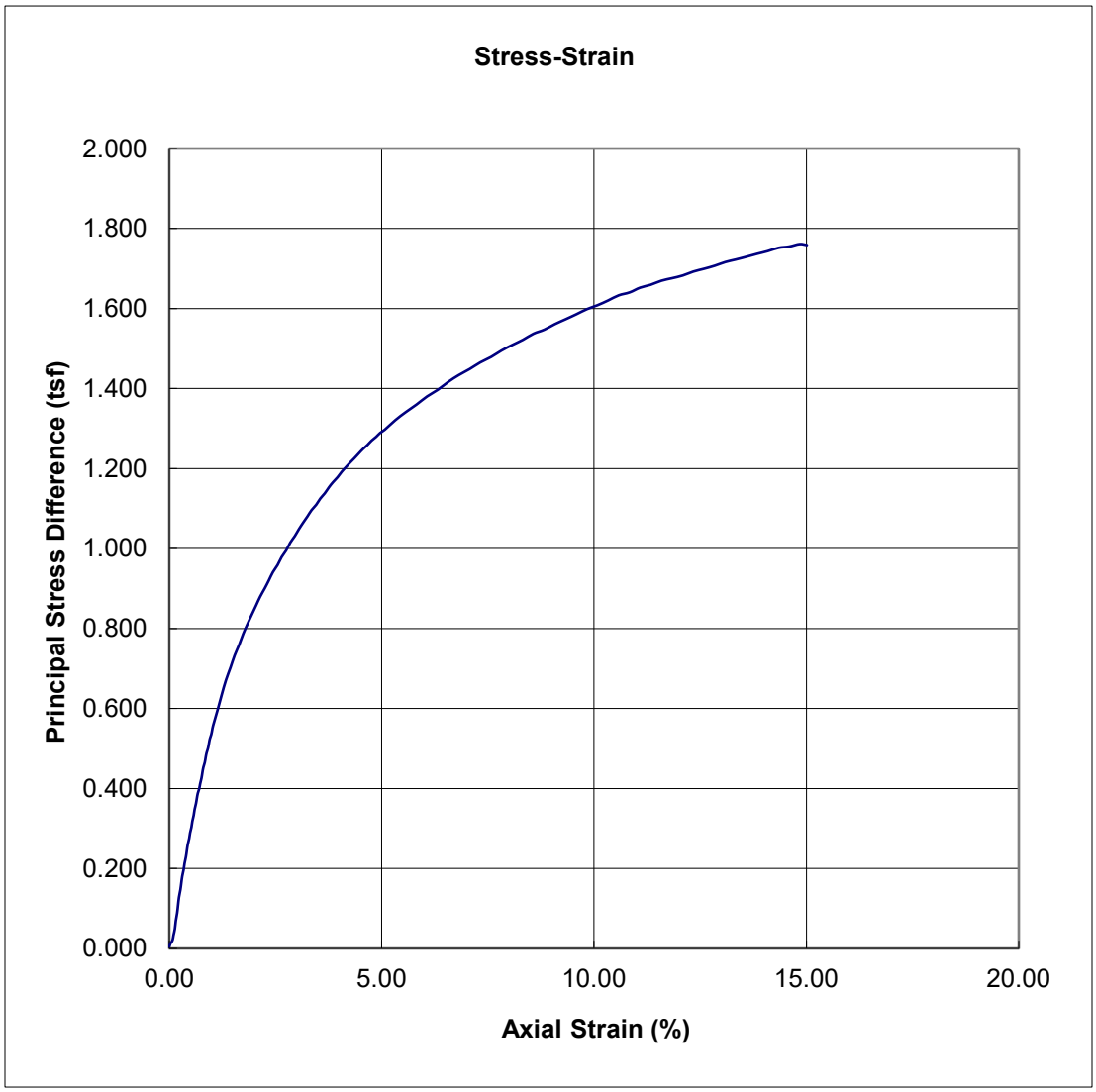
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.923 tsf**

STRAIN: **14.58%**

CONFINING PRESSURE: **20.2 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH) with wood**



SAMPLE: **24-057 B-6 #14 48-50'**

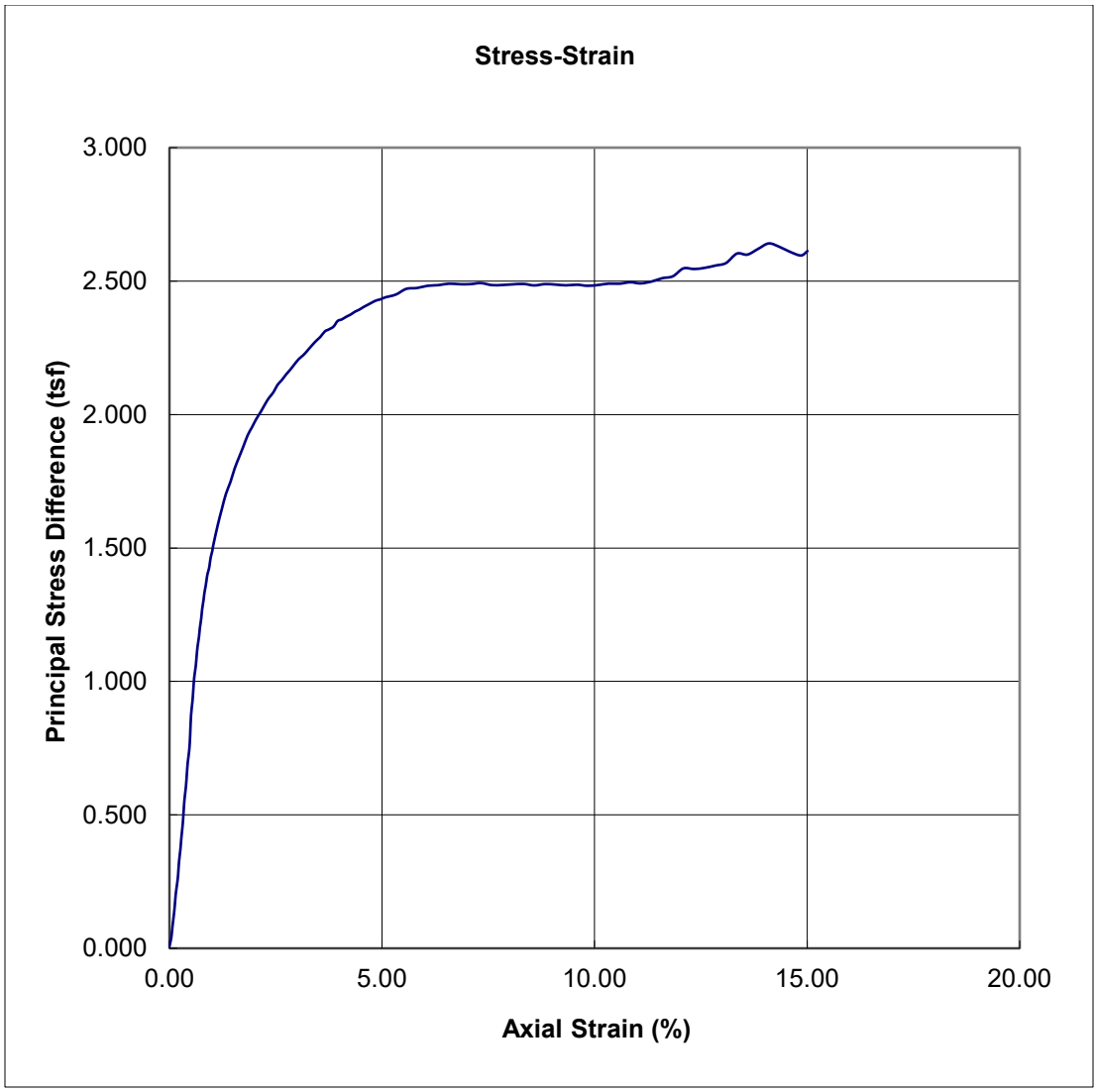
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.761 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **21.8 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-6 #15 53-55'**

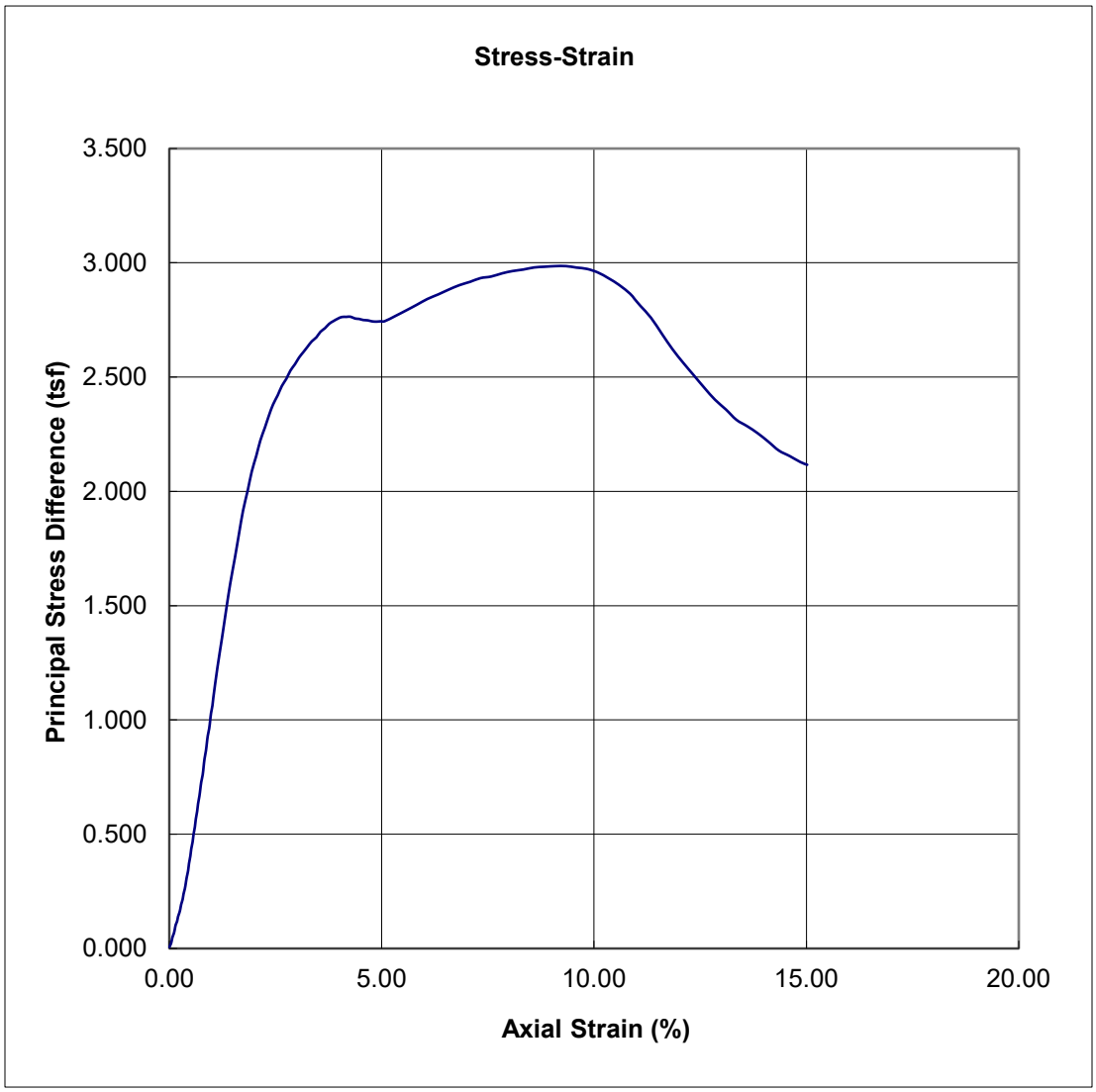
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.641 tsf**

STRAIN: **14.10%**

CONFINING PRESSURE: **23.5 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-6 #16 58-60'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.986 tsf**

STRAIN: **9.34%**

CONFINING PRESSURE: **25.2 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH)**

SAMPLE: **24-057 B-6 #17 63-65'**

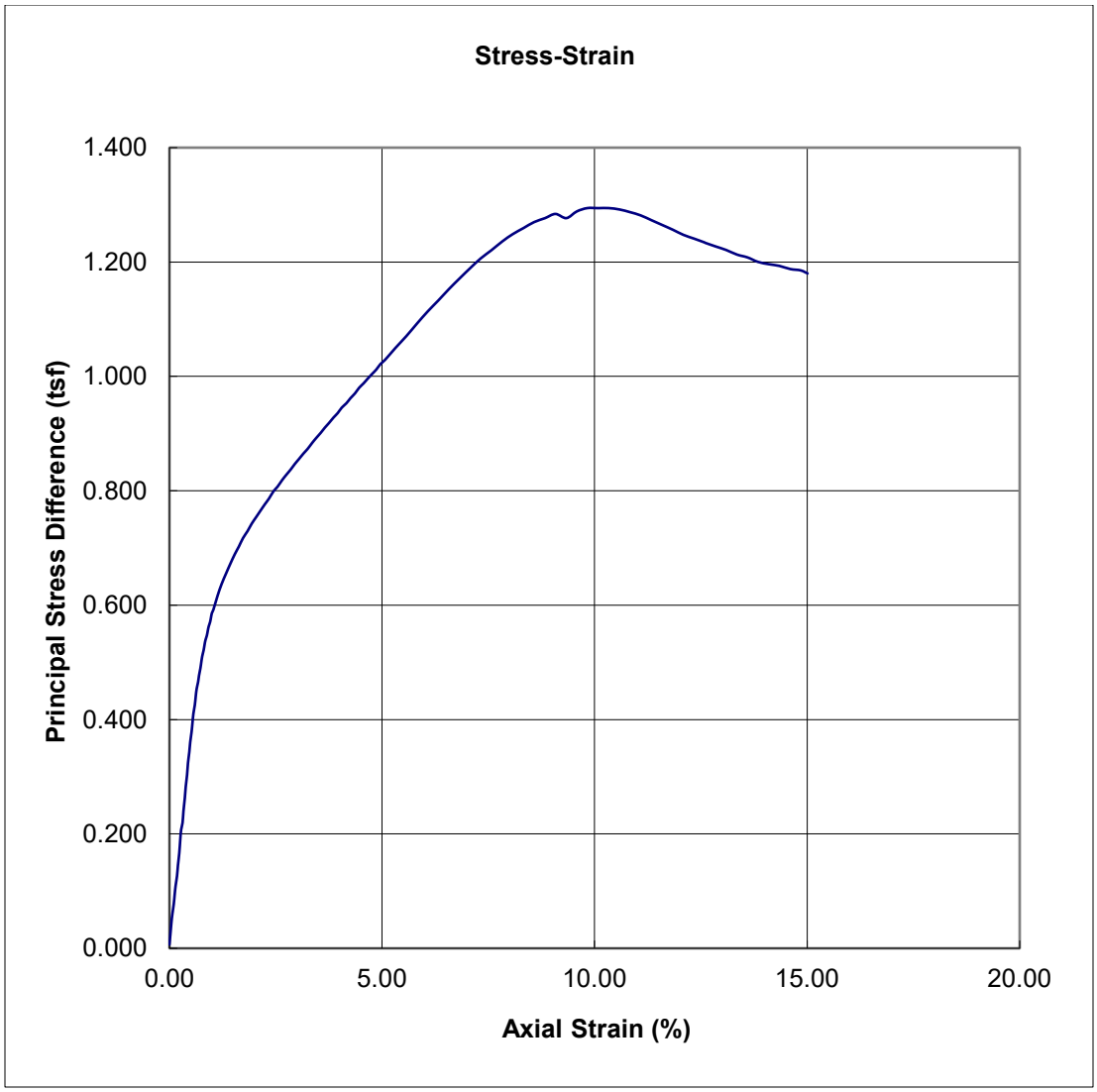
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.402 tsf**

STRAIN: **15.02%**

CONFINING PRESSURE: **26.8 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with sand layer**



SAMPLE: **24-057 B-6 #22 83-85'**

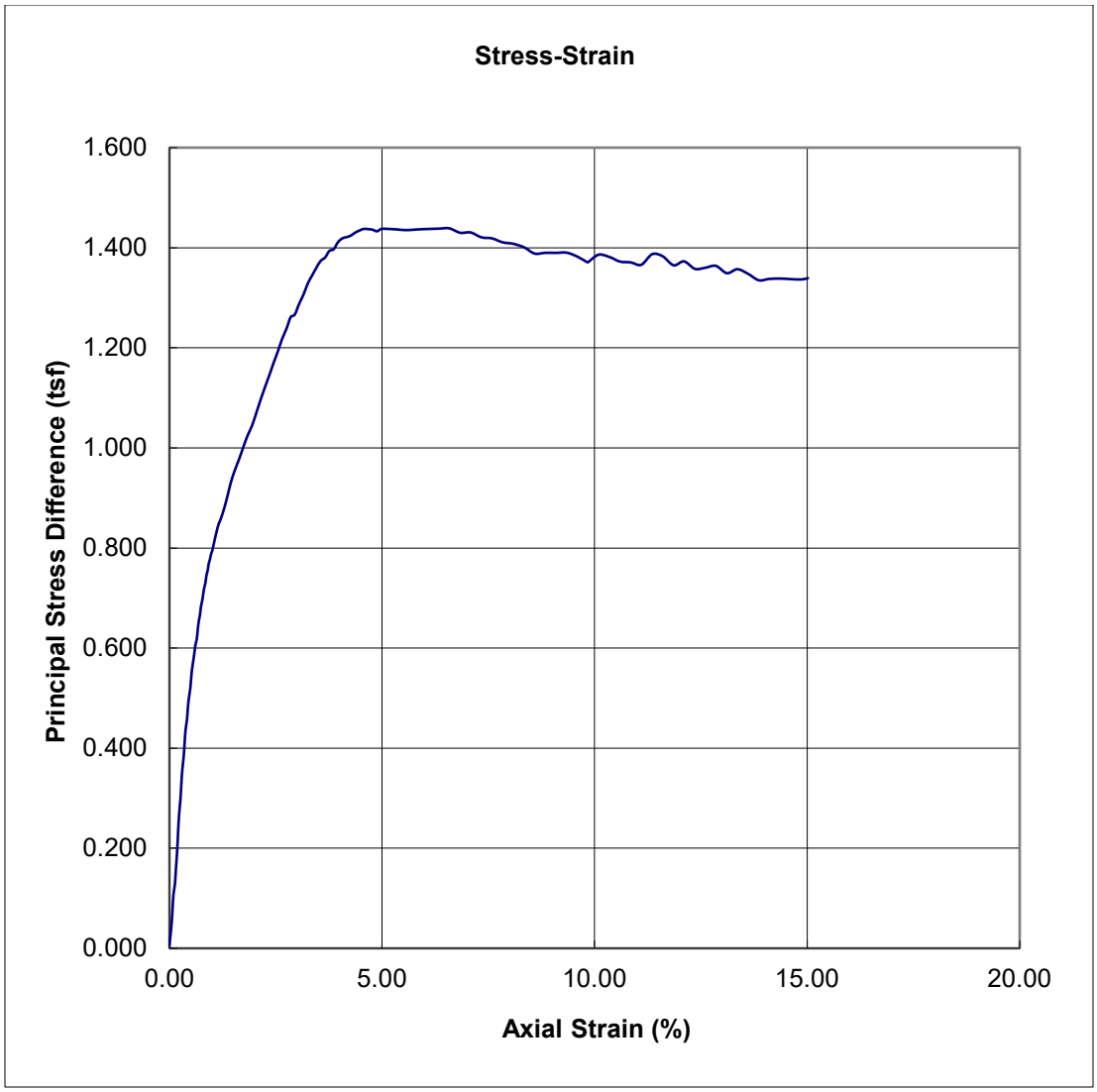
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.294 tsf**

STRAIN: **10.33%**

CONFINING PRESSURE: **33.5 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-6 #23 88-90'**

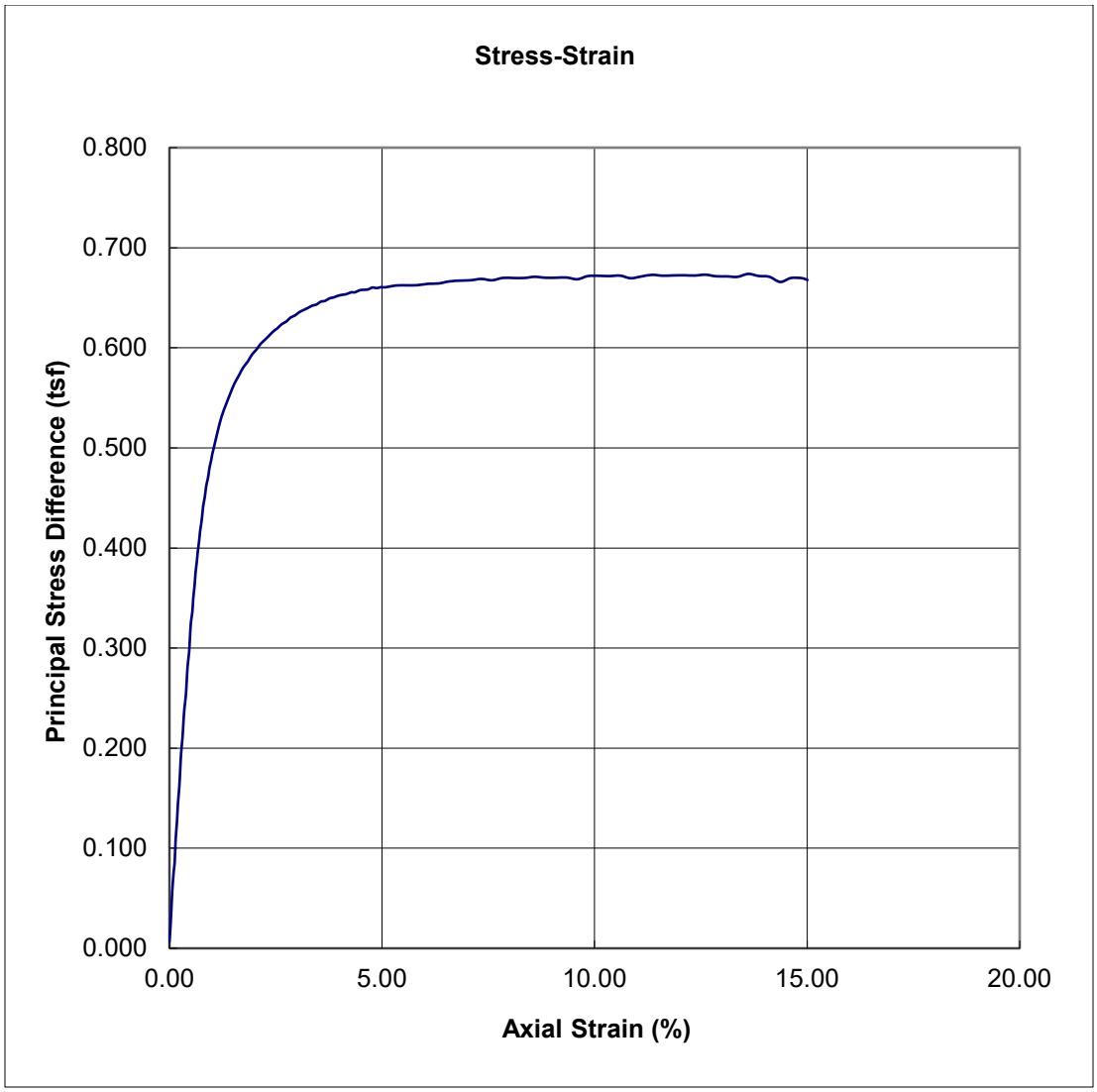
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.439 tsf**

STRAIN: **6.58%**

CONFINING PRESSURE: **35.2 psi**

SAMPLE DESCRIPTION: **Stiff Gray Clay Fat Clay (CH)**



SAMPLE: **24-057 B-6 #24 93-95'**

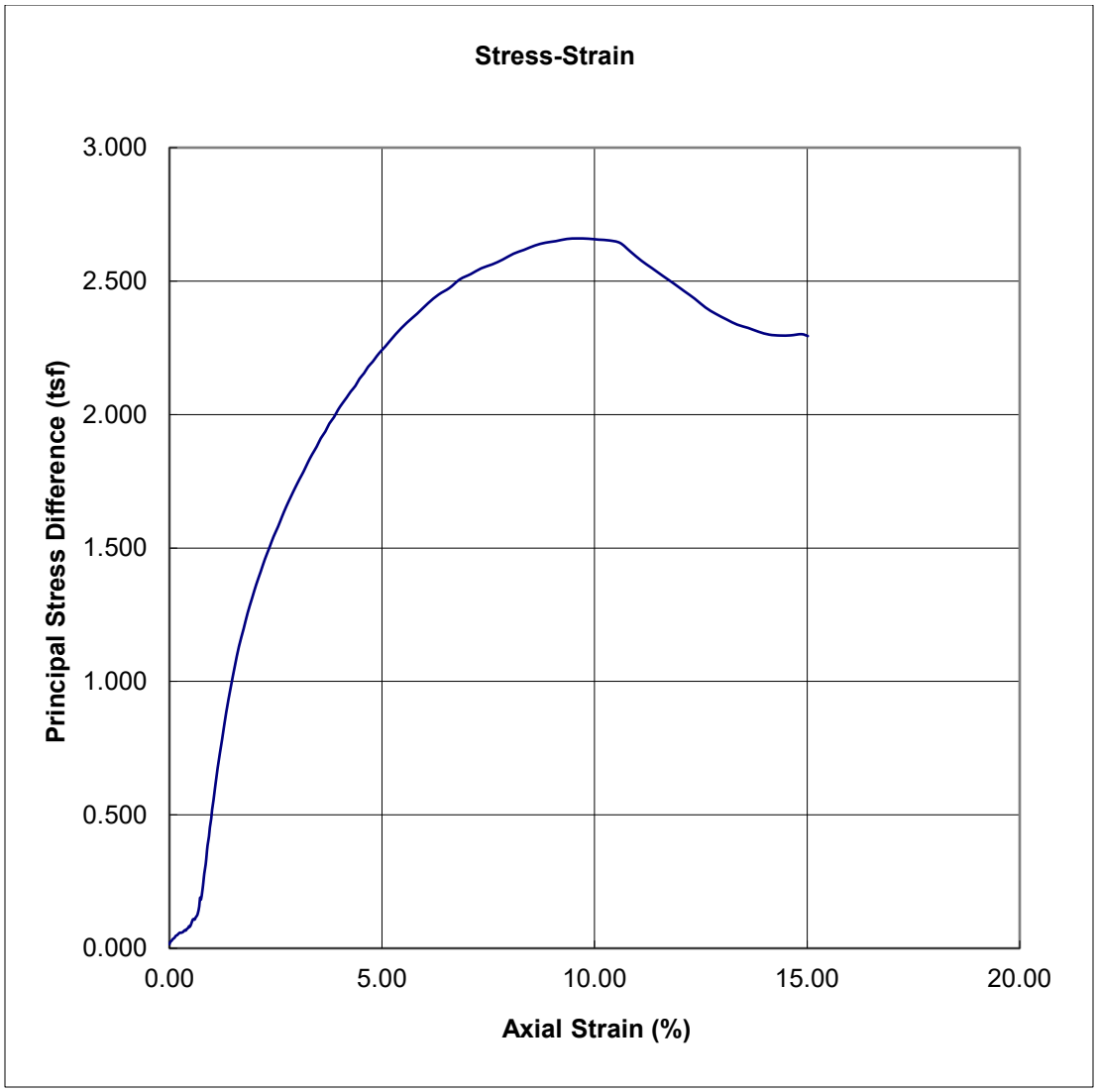
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.67 tsf**

STRAIN: **13.62%**

CONFINING PRESSURE: **36.8 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-8 #4 6-8'**

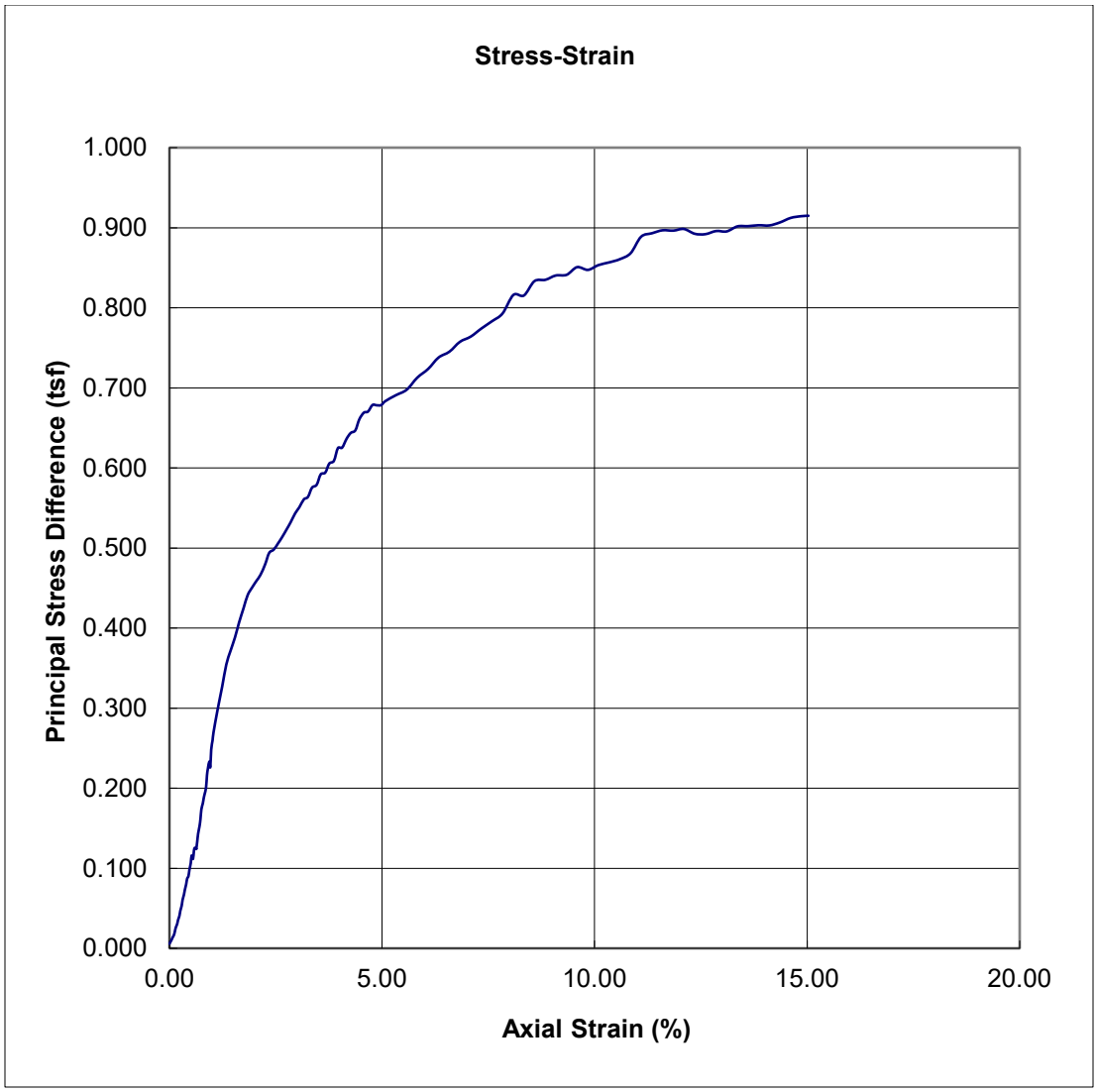
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.660 tsf**

STRAIN: **9.59%**

CONFINING PRESSURE: **2.7 psi**

SAMPLE DESCRIPTION: **Very Stiff Tan / Gray Fat Clay (CH)**



SAMPLE: **24-057 B-8 #6 10-12'**

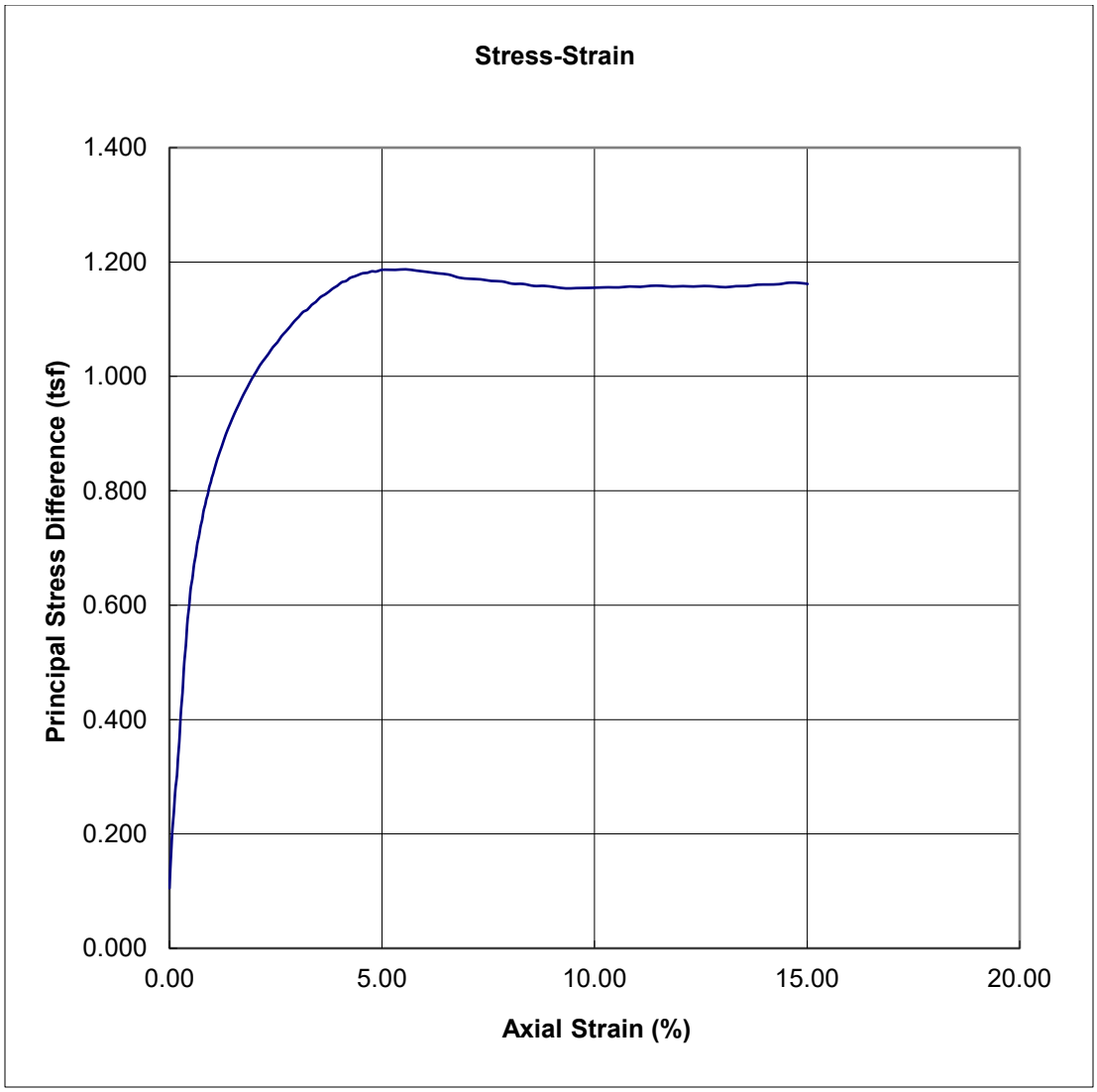
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.915 tsf**

STRAIN: **15.03%**

CONFINING PRESSURE: **4.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gay / Tan Fat Clay (CH) with sand trace red streaks**



SAMPLE: **24-057 B-8 #7 13-15'**

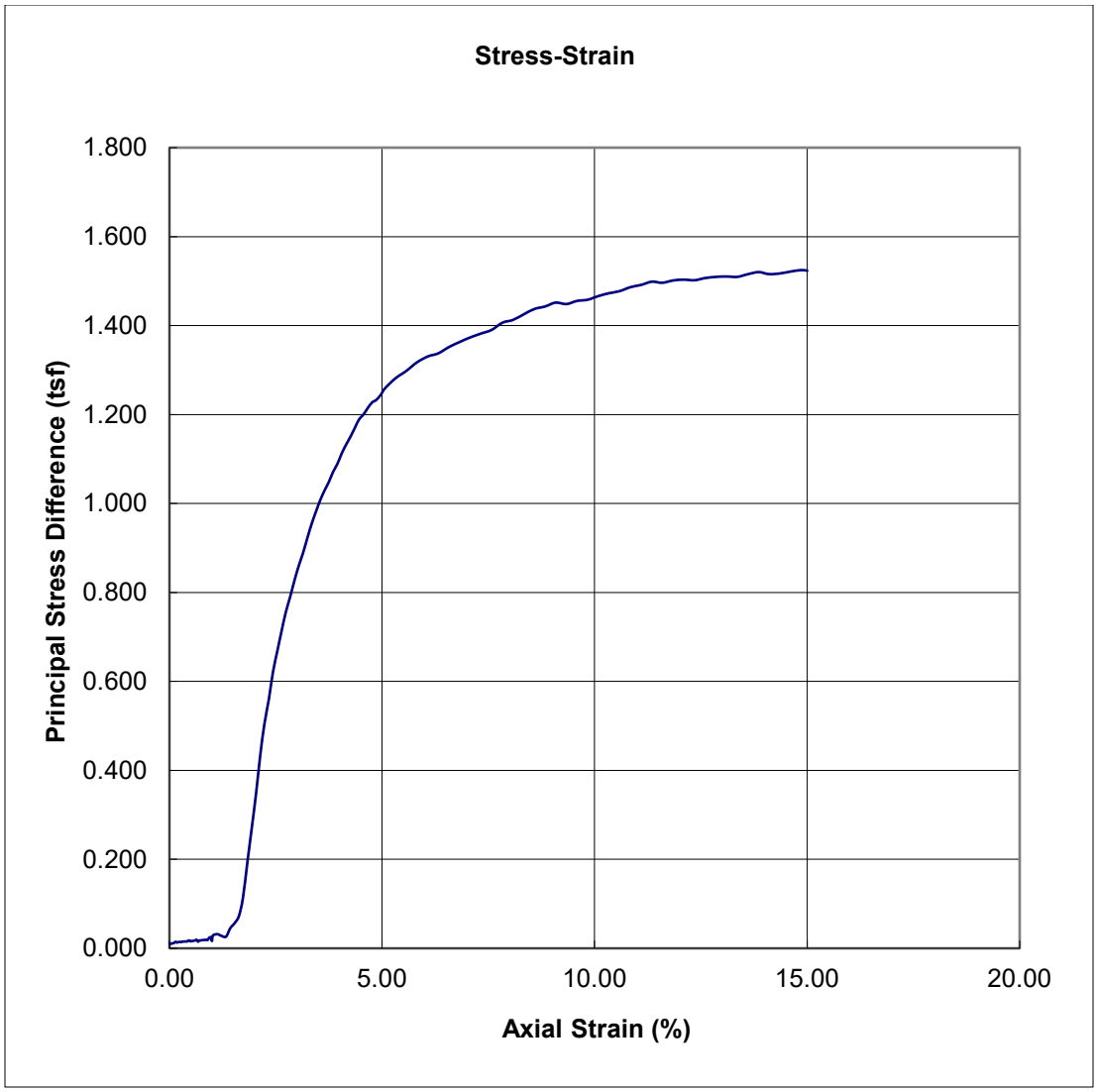
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.187 tsf**

STRAIN: **5.56%**

CONFINING PRESSURE: **5.0 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Tan Fat Clay (CH)**



SAMPLE: **24-057 B-8 #8 18-20'**

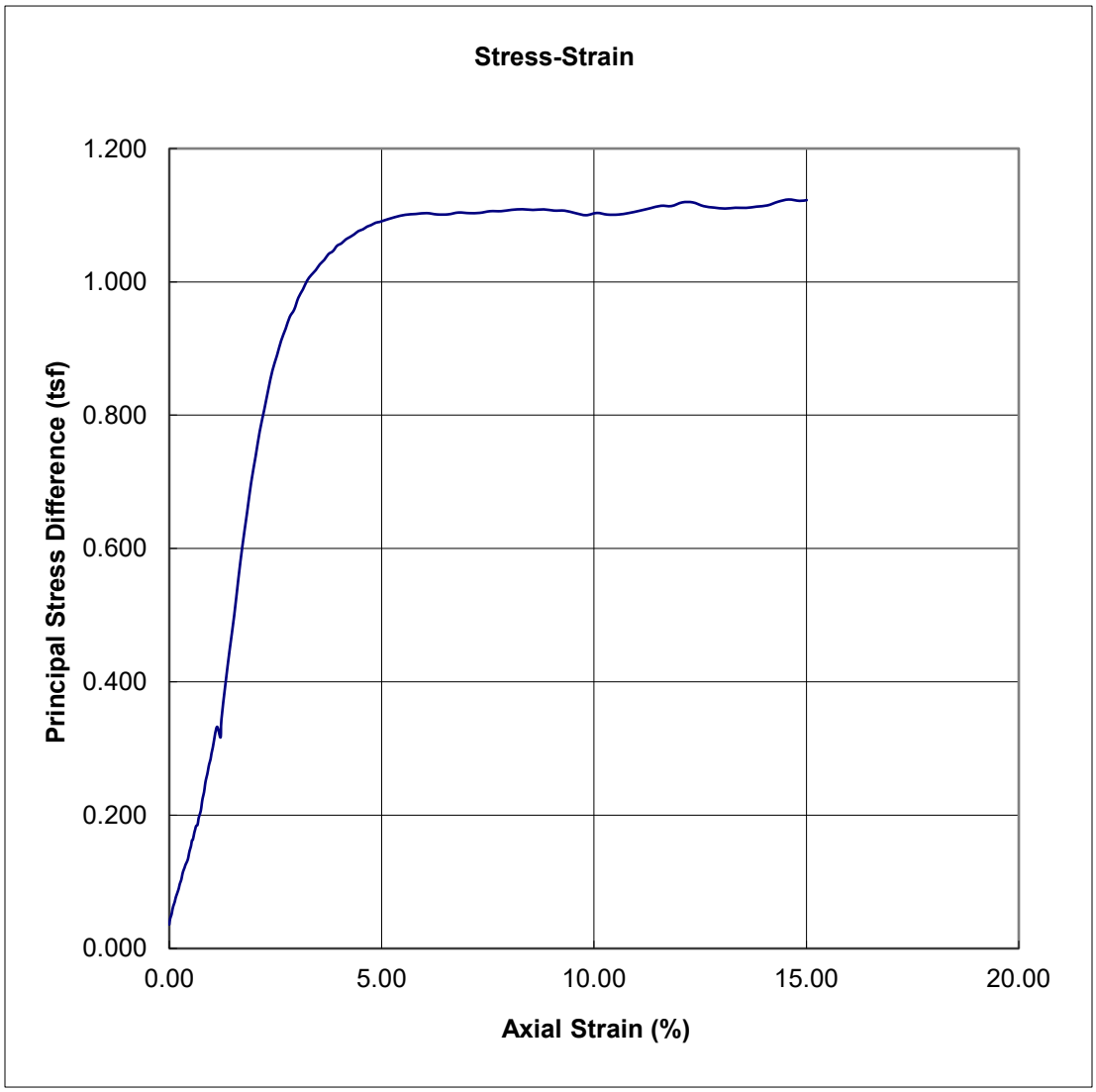
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.525 tsf**

STRAIN:**14.86%**

CONFINING PRESSURE: **6.7 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH) with tan streaks and sand**



SAMPLE: **24-057 B-8 #9 23-25'**

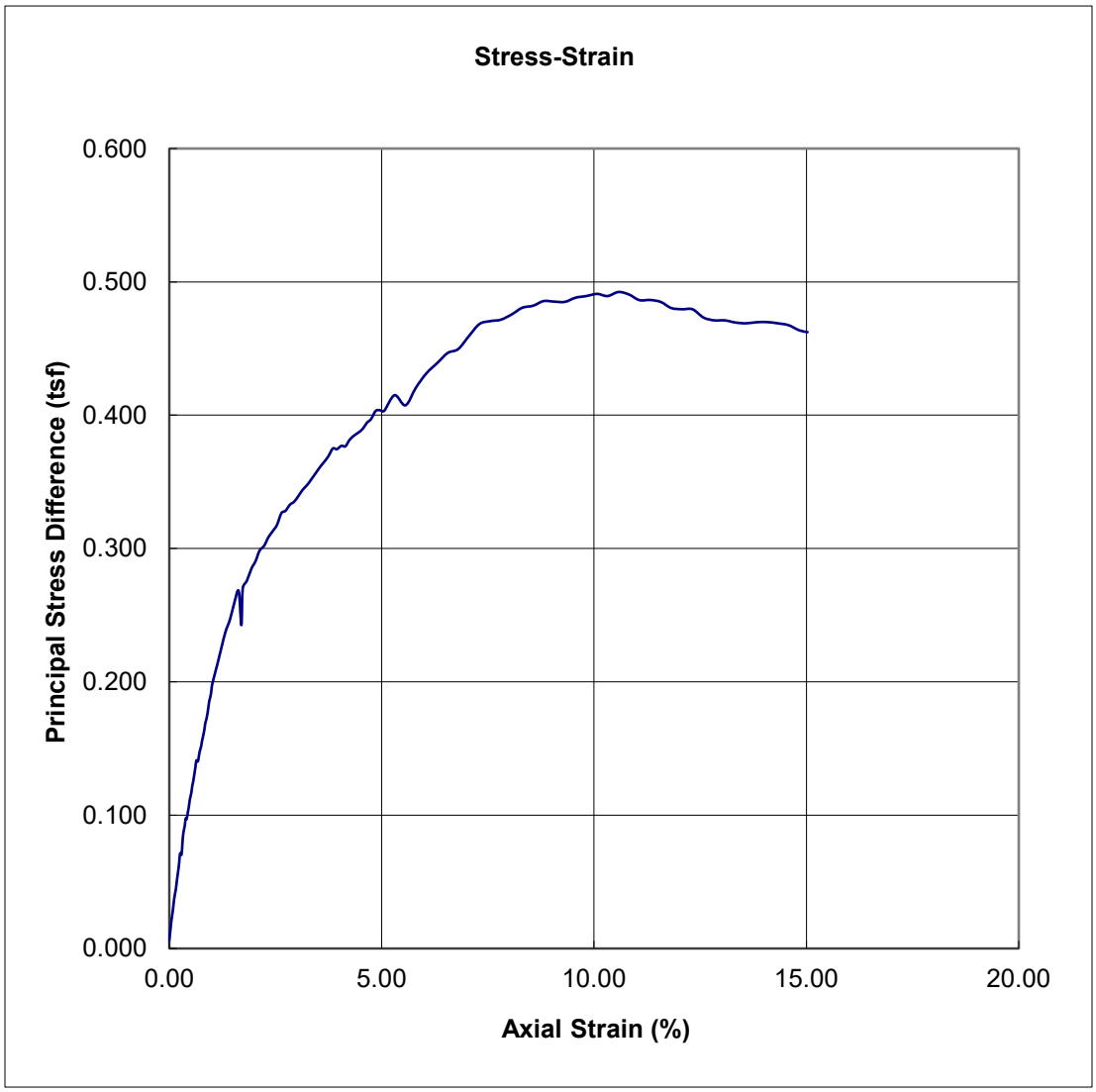
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.124 tsf**

STRAIN: **14.58%**

CONFINING PRESSURE: **8.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with tan streaks, sand trace roots**



SAMPLE: **24-057 B-8 #11 33-35'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.492 tsf**

STRAIN: **10.57%**

CONFINING PRESSURE: **11.7 psi**

SAMPLE DESCRIPTION: **Soft Dark Gray Fat Clay (CH) with sand**

SAMPLE: **24-057 B-8 #12 38-40'**

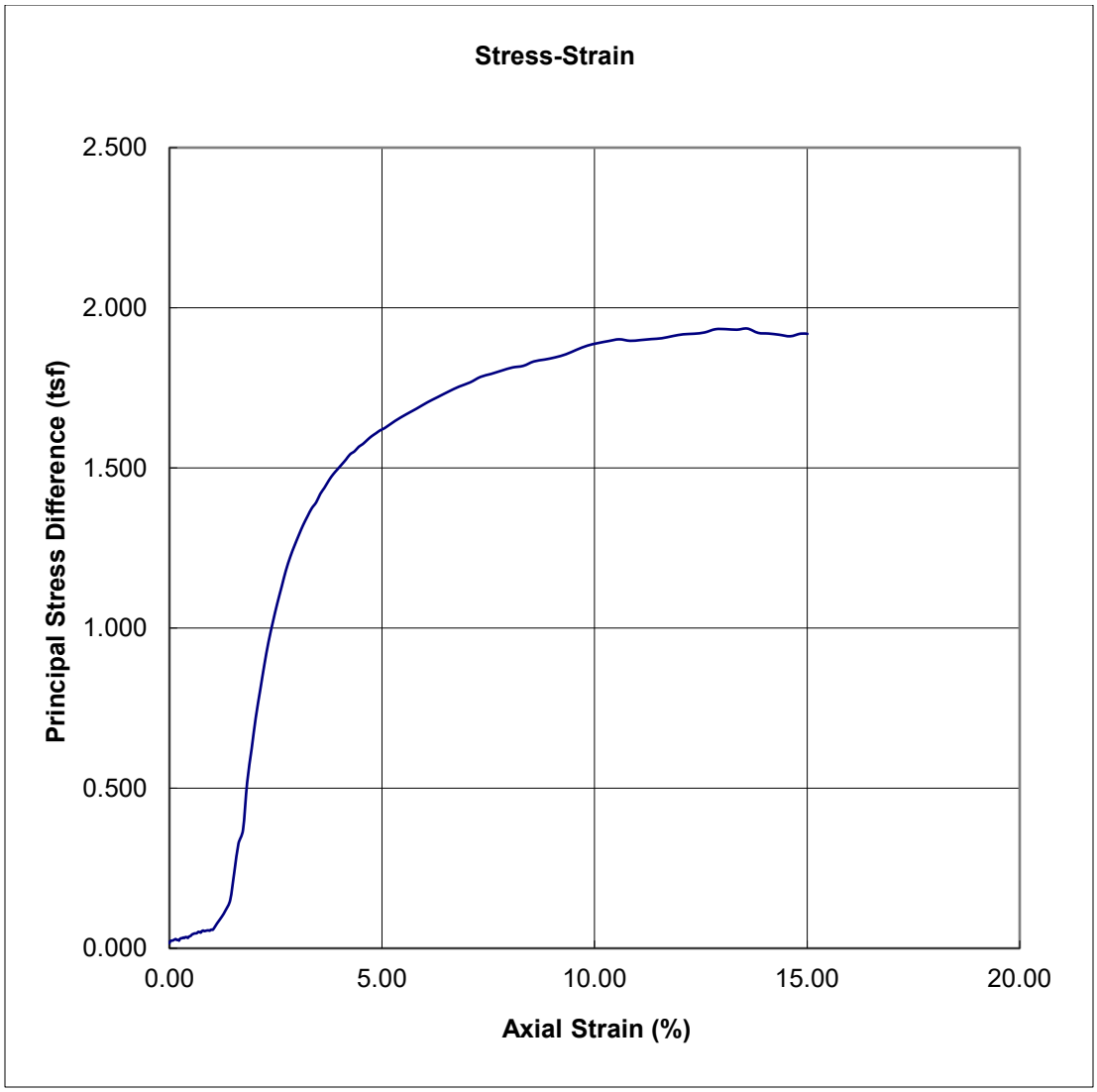
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.672 tsf**

STRAIN: **15.02%**

CONFINING PRESSURE: **13.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-8 #13 43-45'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.935 tsf**

STRAIN: **13.59%**

CONFINING PRESSURE: **15.0 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with trace shell**

SAMPLE: **24-057 B-8 #14 48-50'**

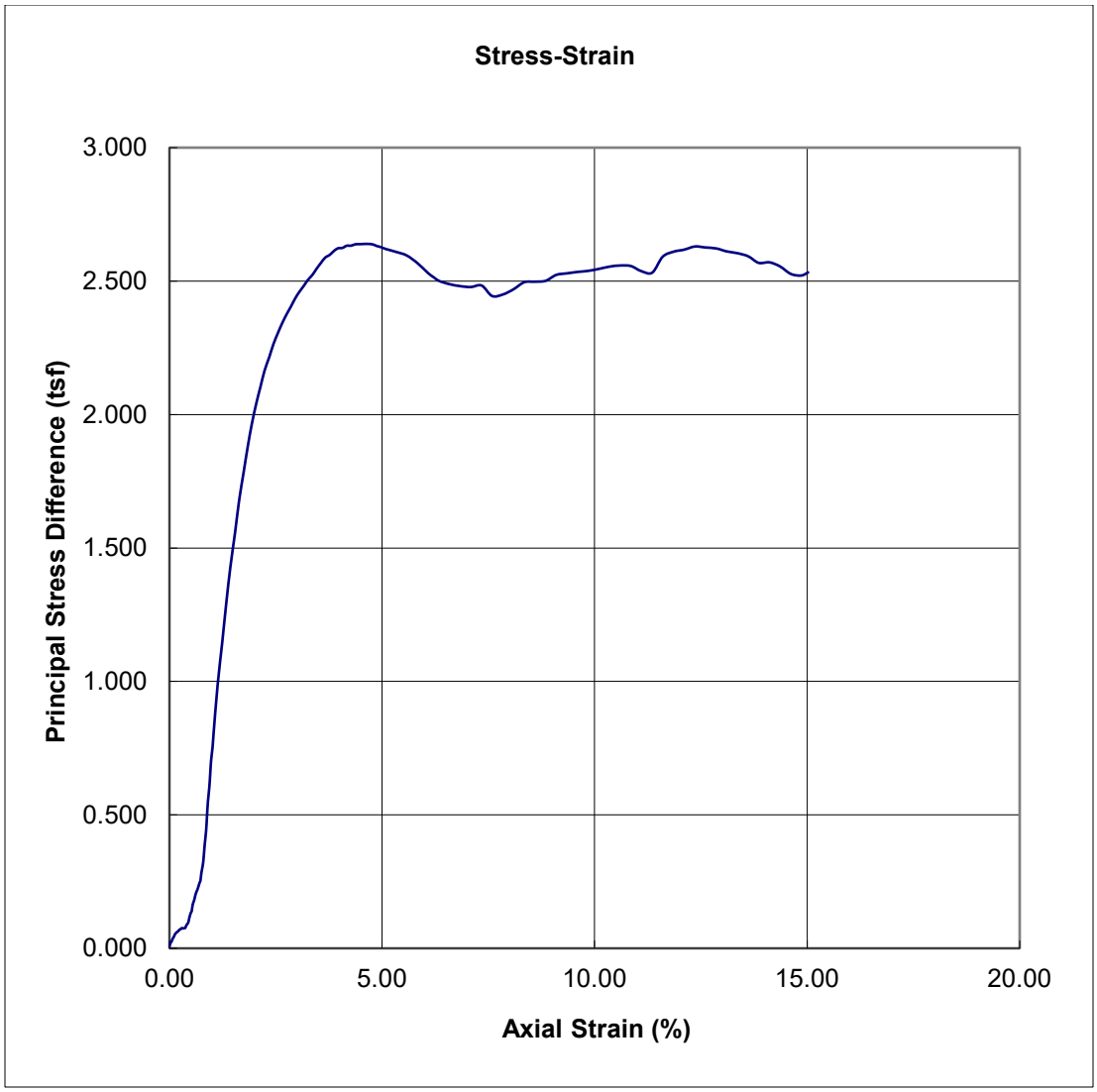
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.907 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **16.7 psi**

SAMPLE DESCRIPTION: **Medium Stiff Sandy Clay (CL) with calcium deposits**



SAMPLE: **24-057 B-8 #16 58-60'**

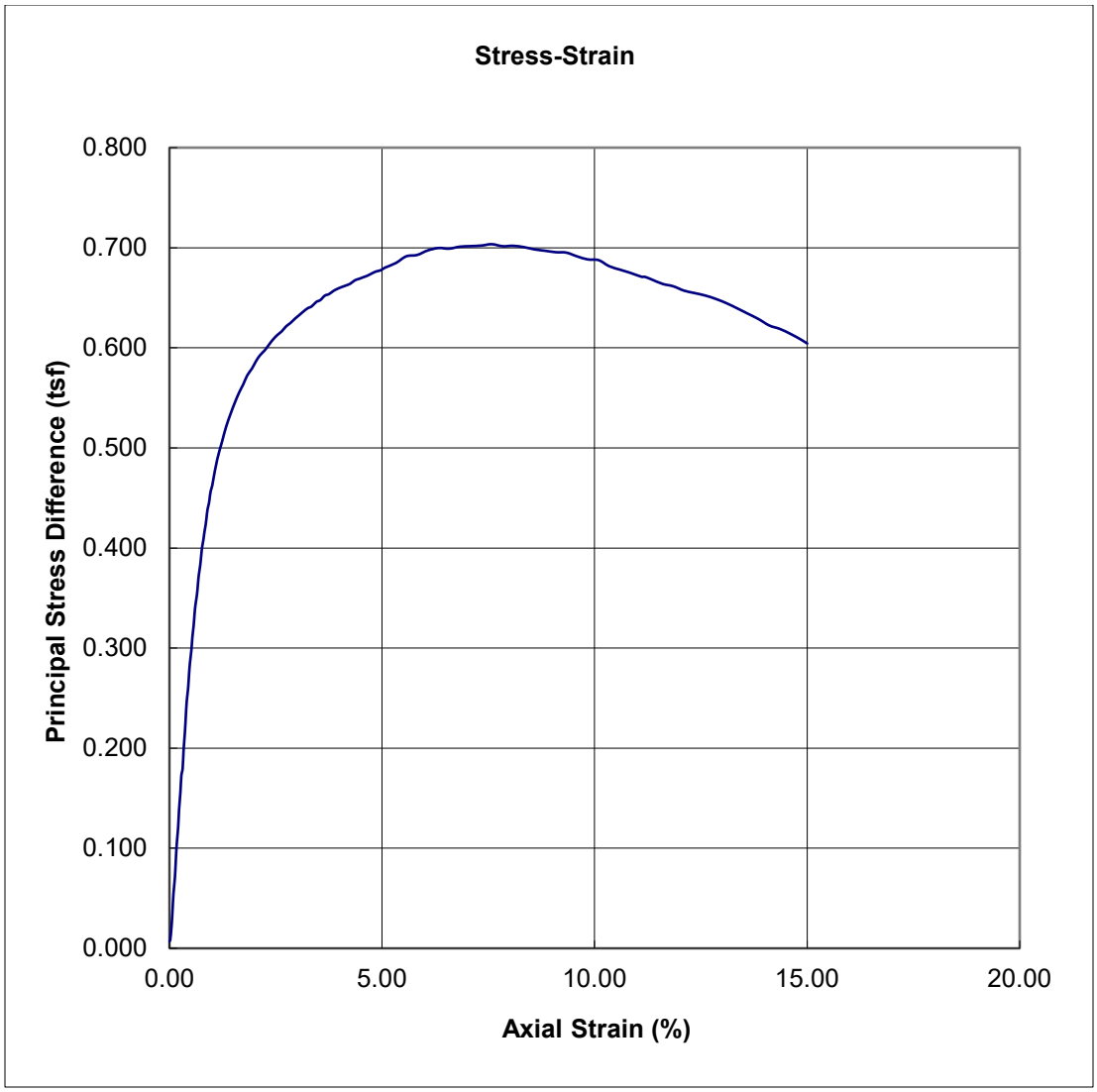
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.639 psi**

STRAIN: **4.67%**

CONFINING PRESSURE: **20.0 psi**

SAMPLE DESCRIPTION: **Very Stiff Bluish Gray Fat Clay (CH) with tan sand and shell**



SAMPLE: **24-057 B-8 #22 83-85'**

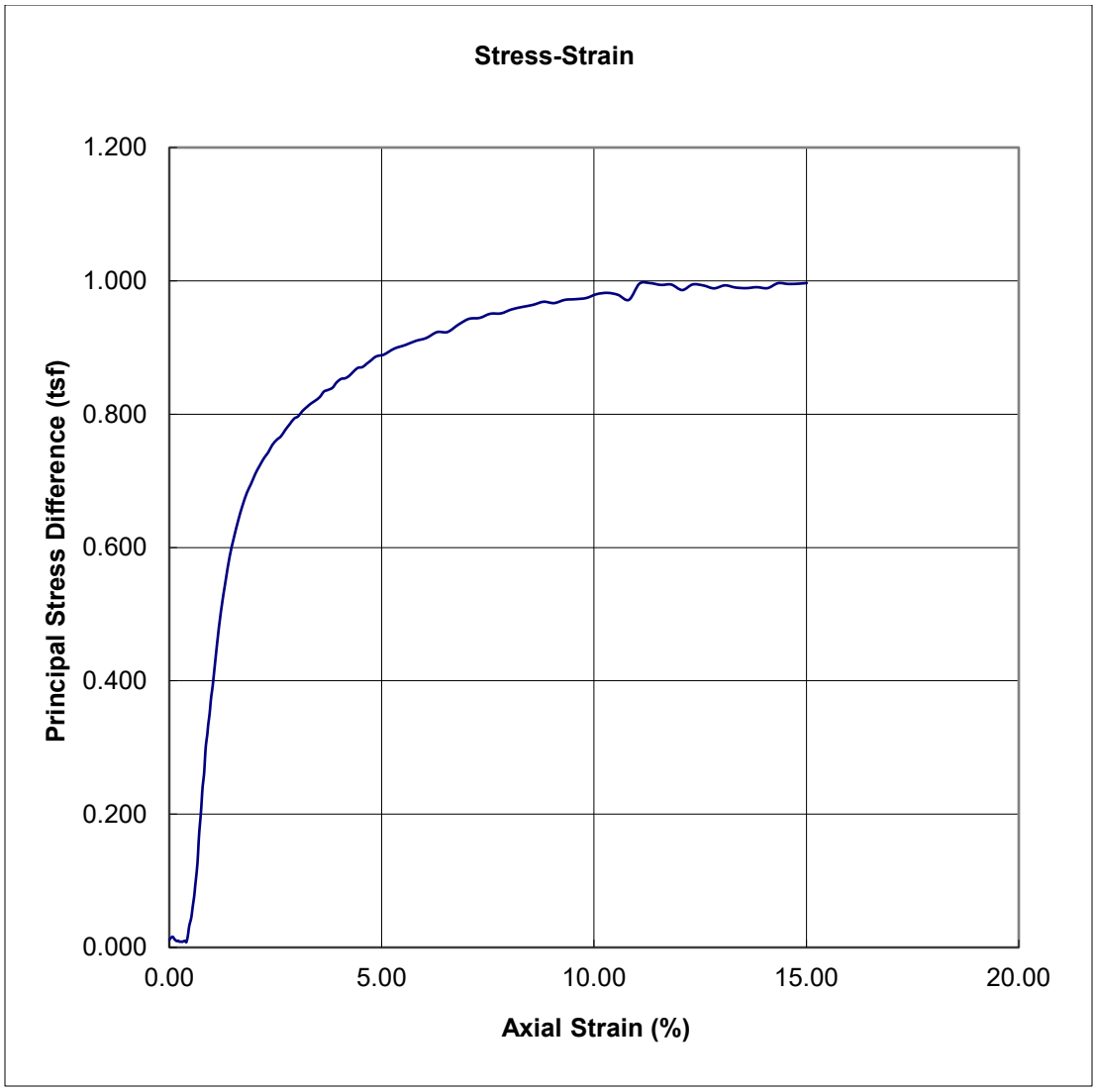
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.704 tsf**

STRAIN: **7.58%**

CONFINING PRESSURE: **28.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-8 #23 88-90'**

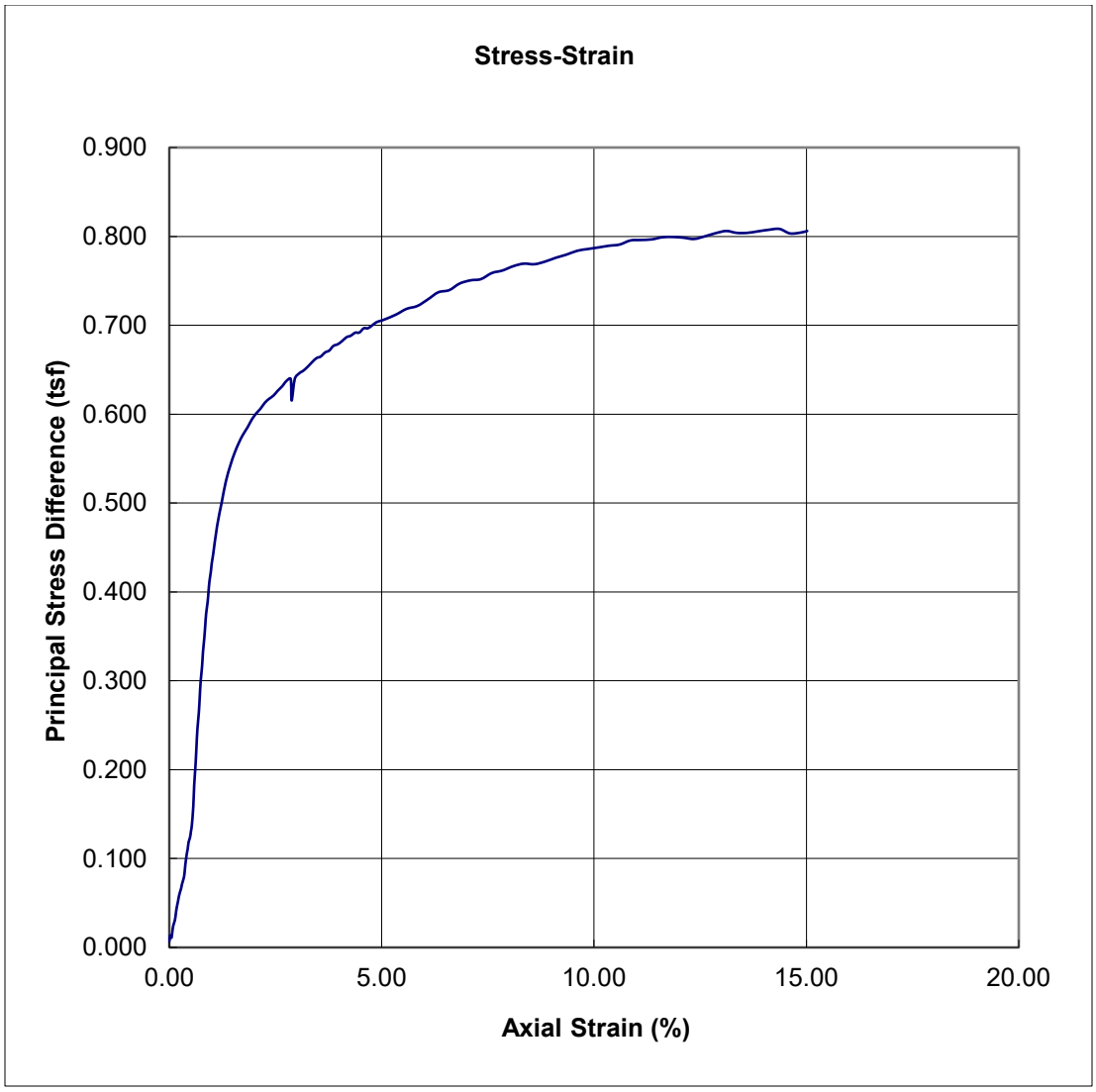
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.997 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **30.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-8 #24 93-95'**

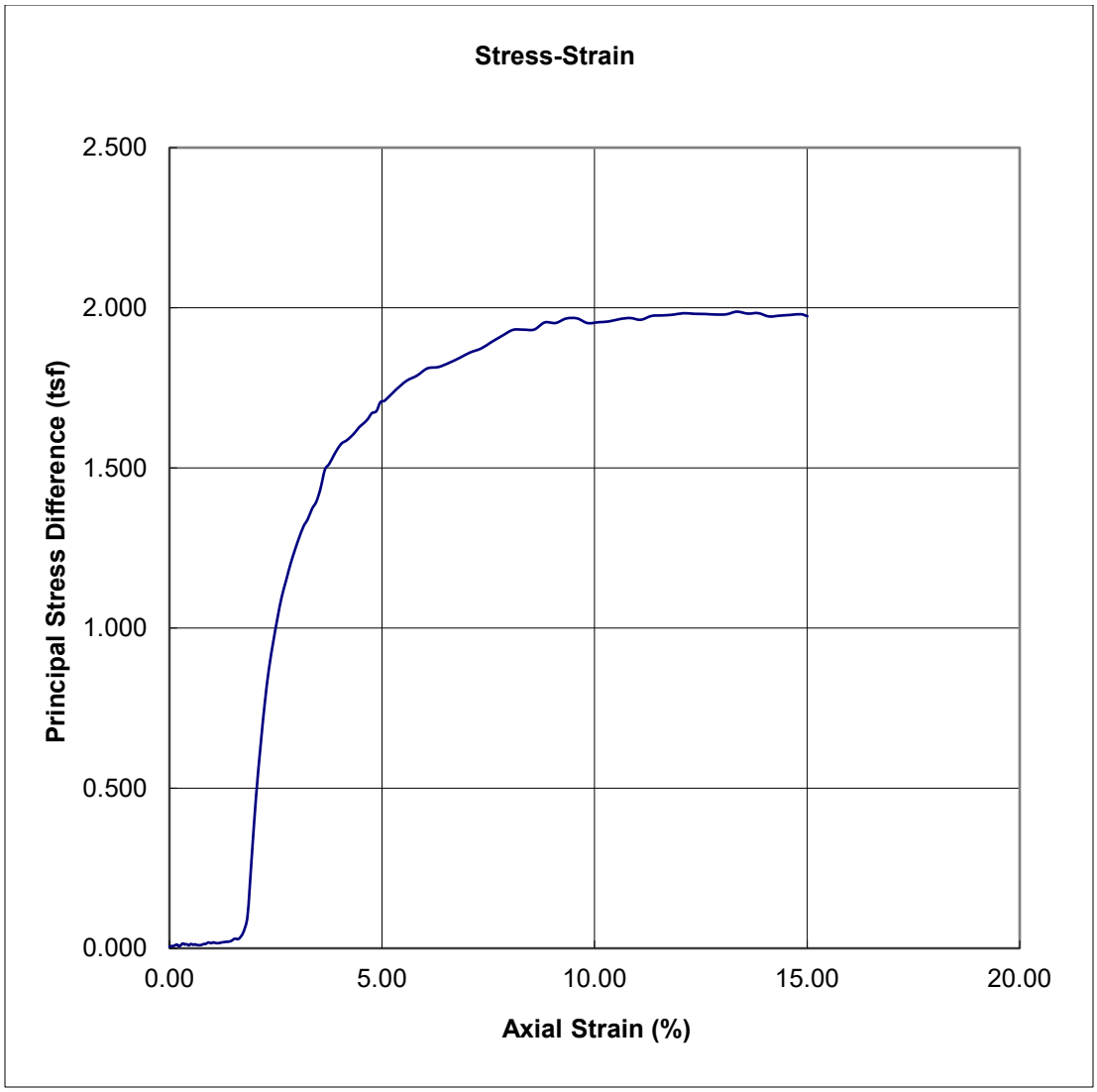
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.808 tsf**

STRAIN: **14.37%**

CONFINING PRESSURE: **31.7 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-8 #25 98-100'**

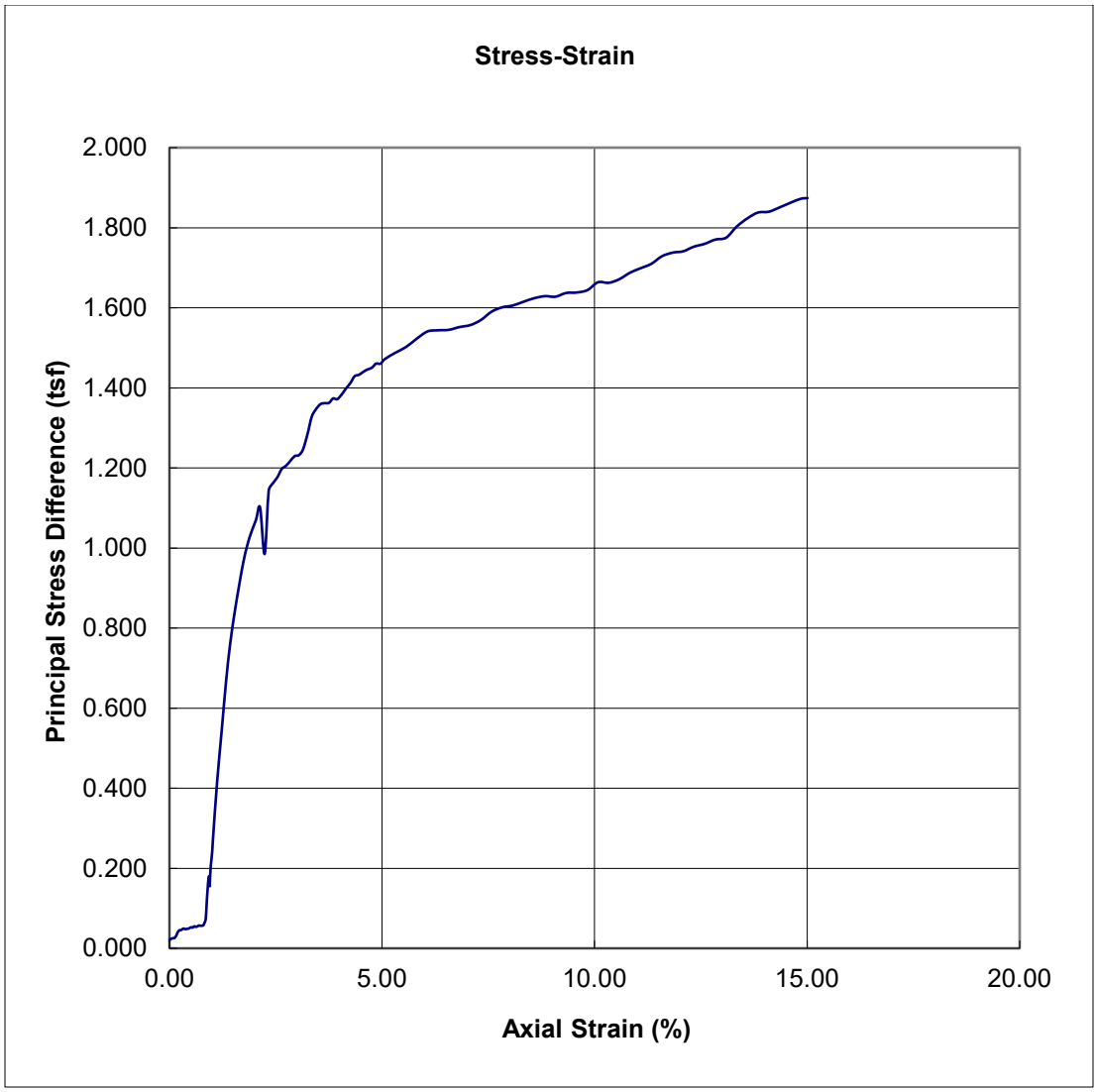
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.988 psi**

STRAIN: **13.35%**

CONFINING PRESSURE: **33.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) trace sand**



SAMPLE: **24-057 B-9 #3 4-6'**

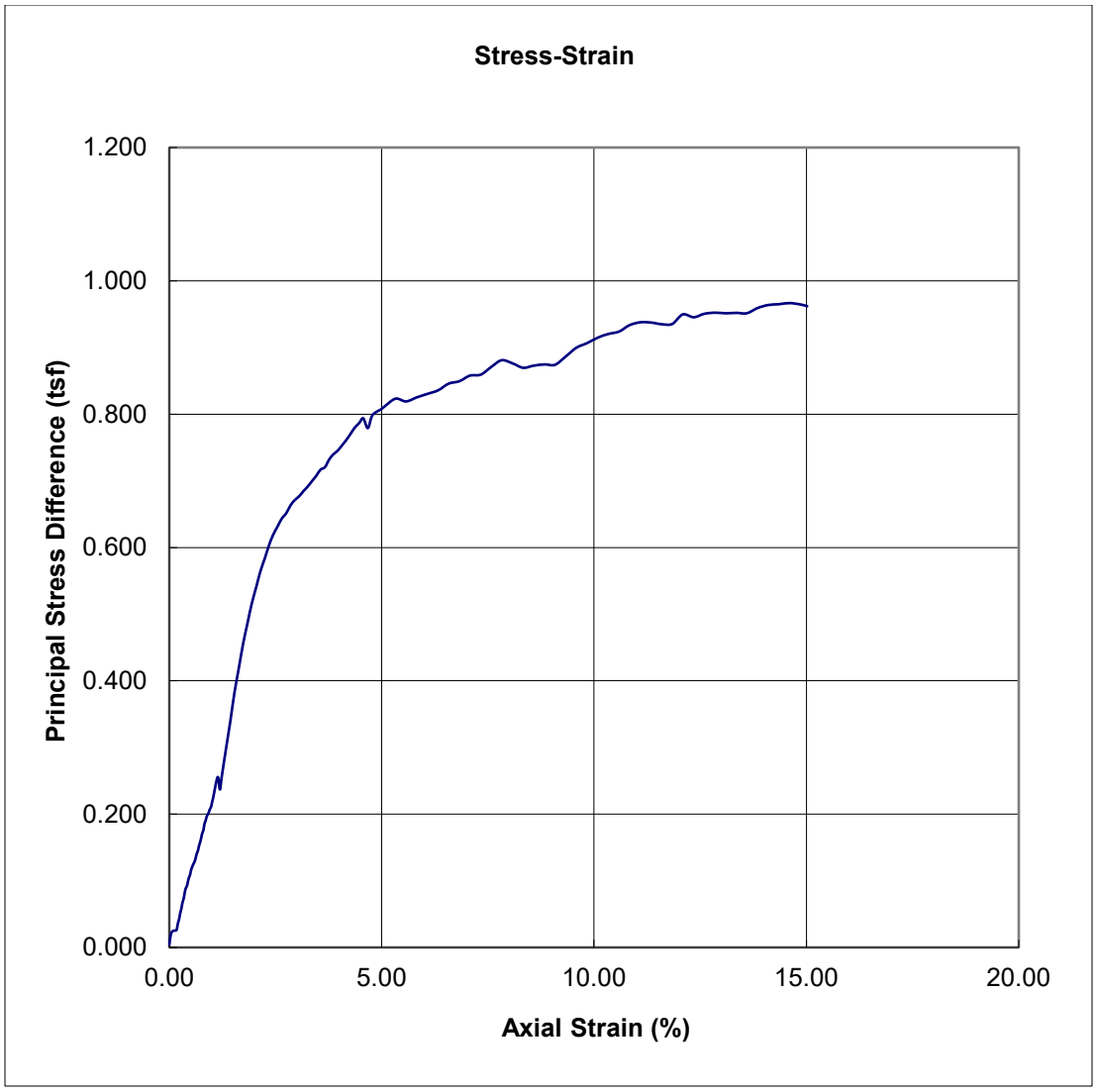
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.874 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **7.6 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Sandy Clay (CL)**



SAMPLE: **24-057 B-9 #4 6-8'**

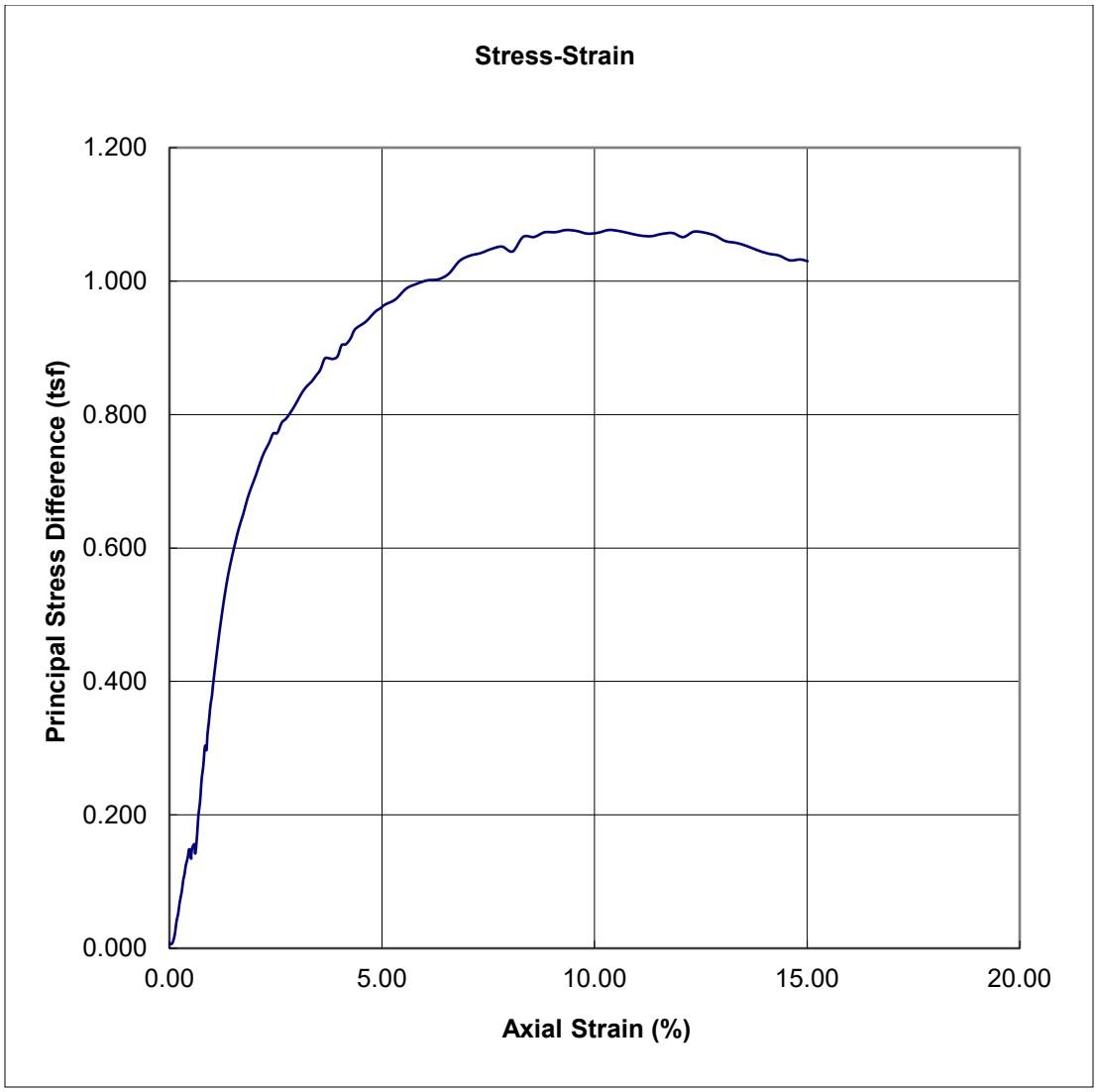
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.967 tsf**

STRAIN: **14.60%**

CONFINING PRESSURE: **8.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Tan / Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-9 #5 8-10'**

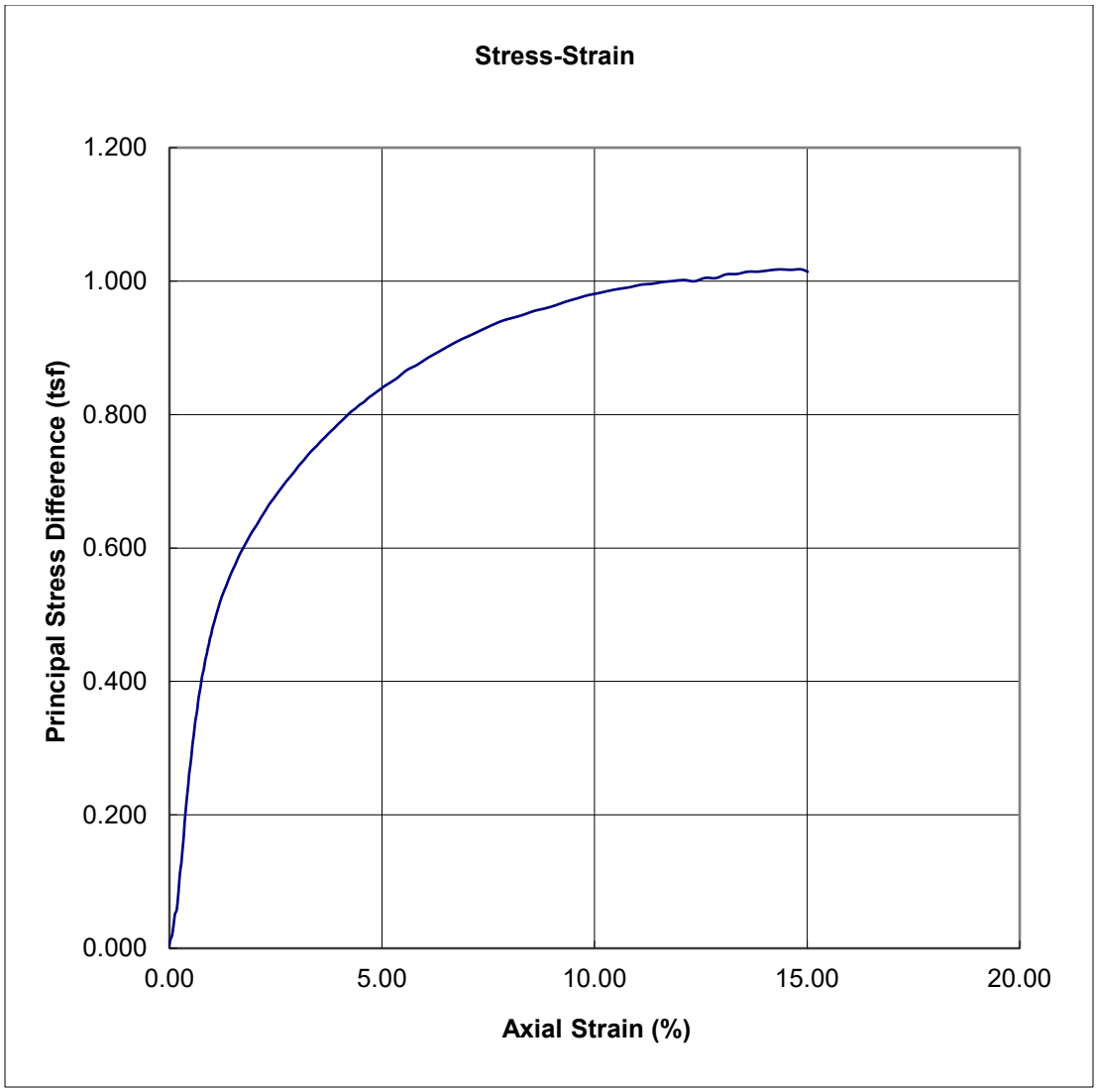
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.077 tsf**

STRAIN: **10.33%**

CONFINING PRESSURE: **8.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with tan spots and sand**



SAMPLE: **24-057 B-9 #6 10-12'**

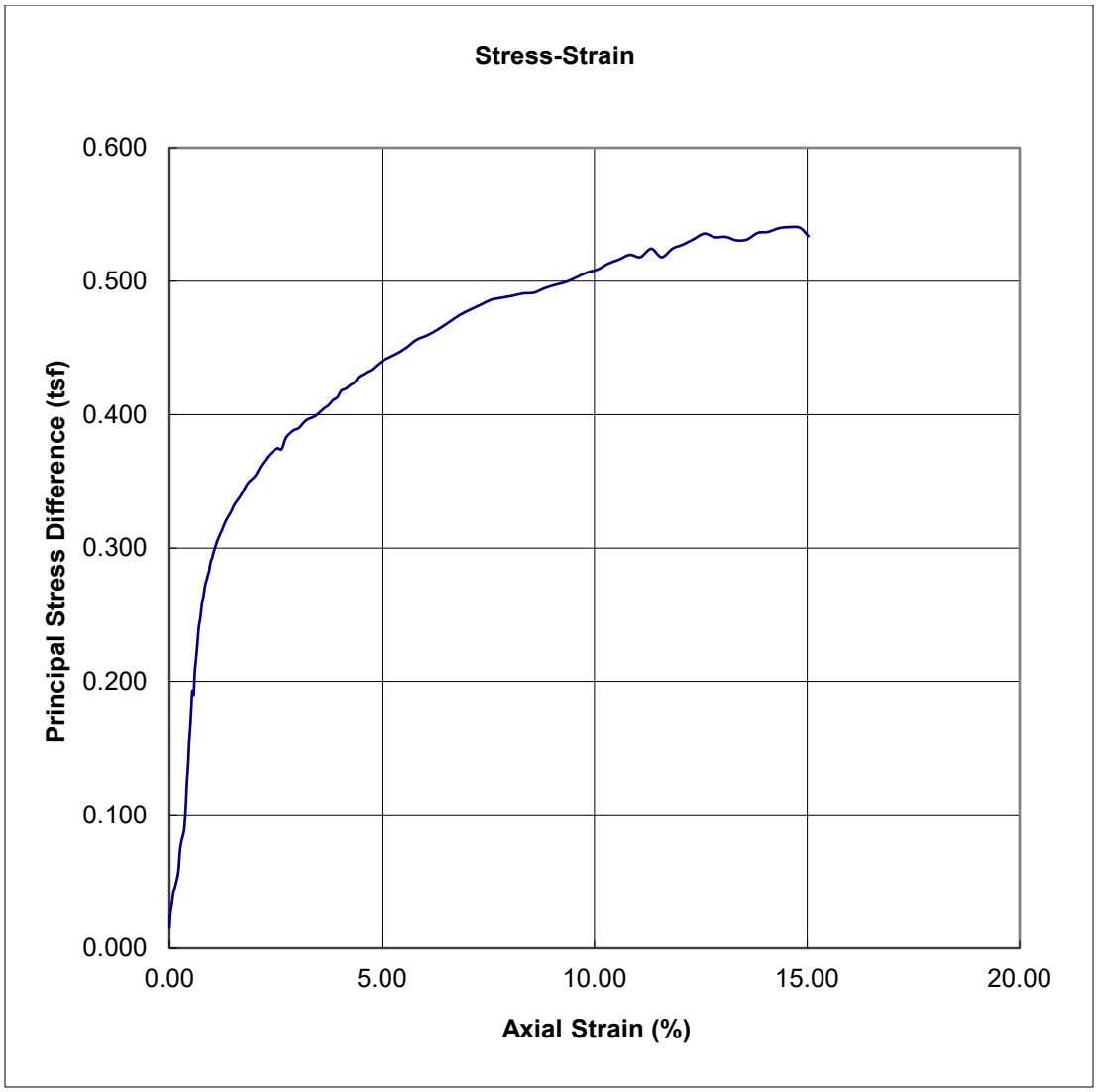
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.018 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **9.6 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with tan streaks and sand**



SAMPLE: **24-057 B-9 #7 13-15'**

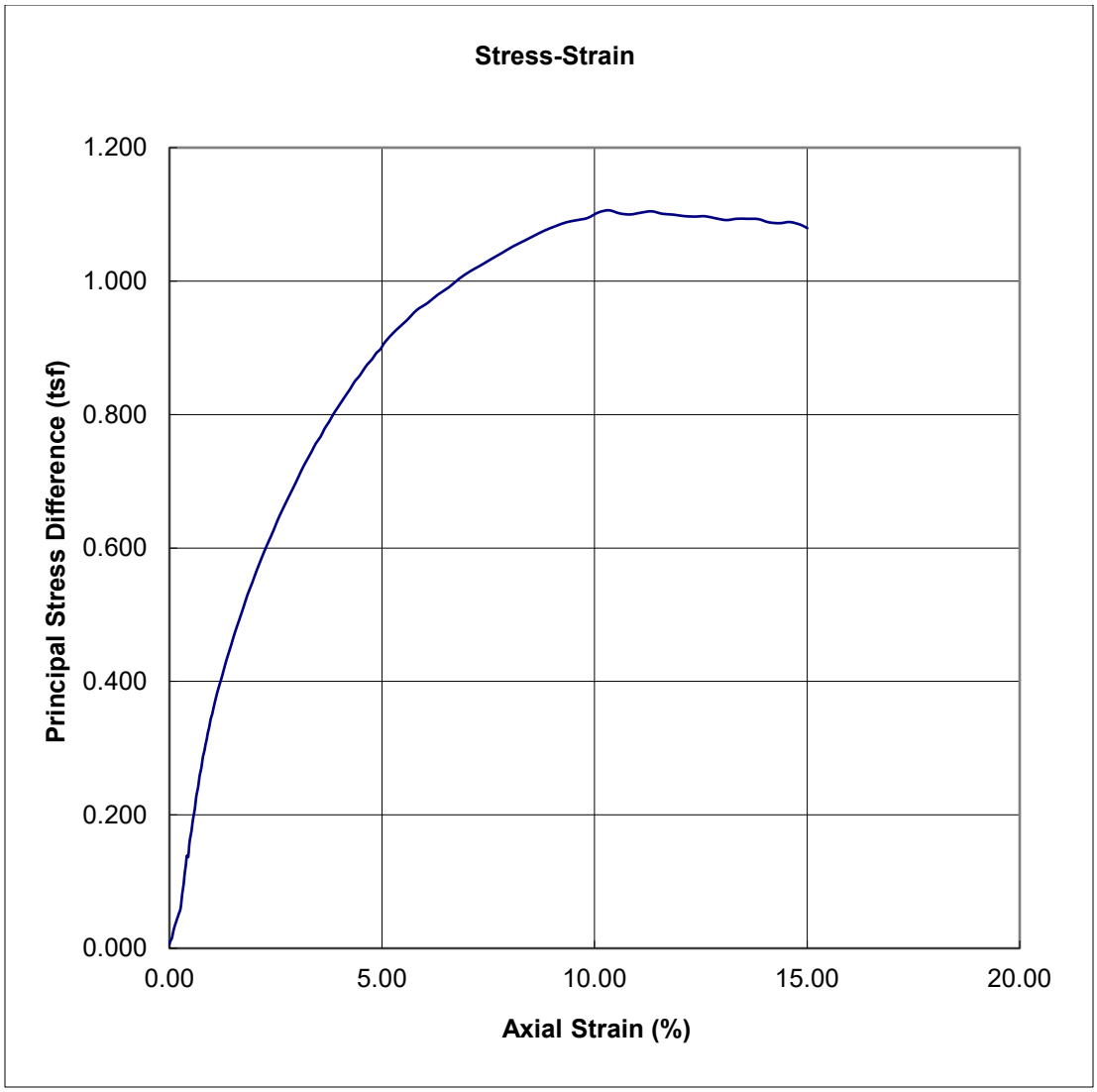
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.541 tsf**

STRAIN: **14.59%**

CONFINING PRESSURE: **10.6 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Tan Silty Clay (CL) with sand**



SAMPLE: **24-057 B-9 #8 18-20'**

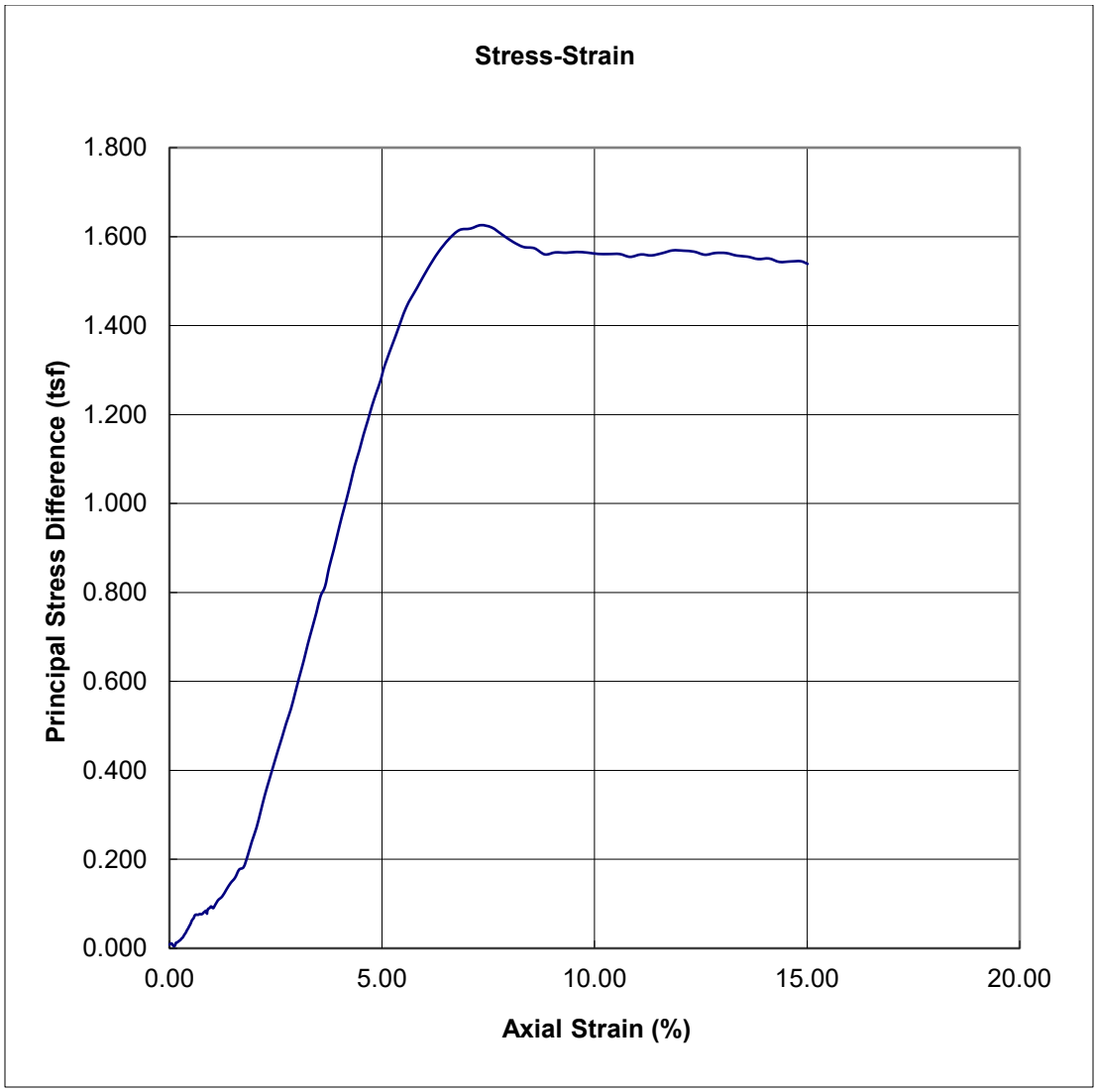
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.106 tsf**

STRAIN: **10.34%**

CONFINING PRESSURE: **12.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-9 #10 28-30'**

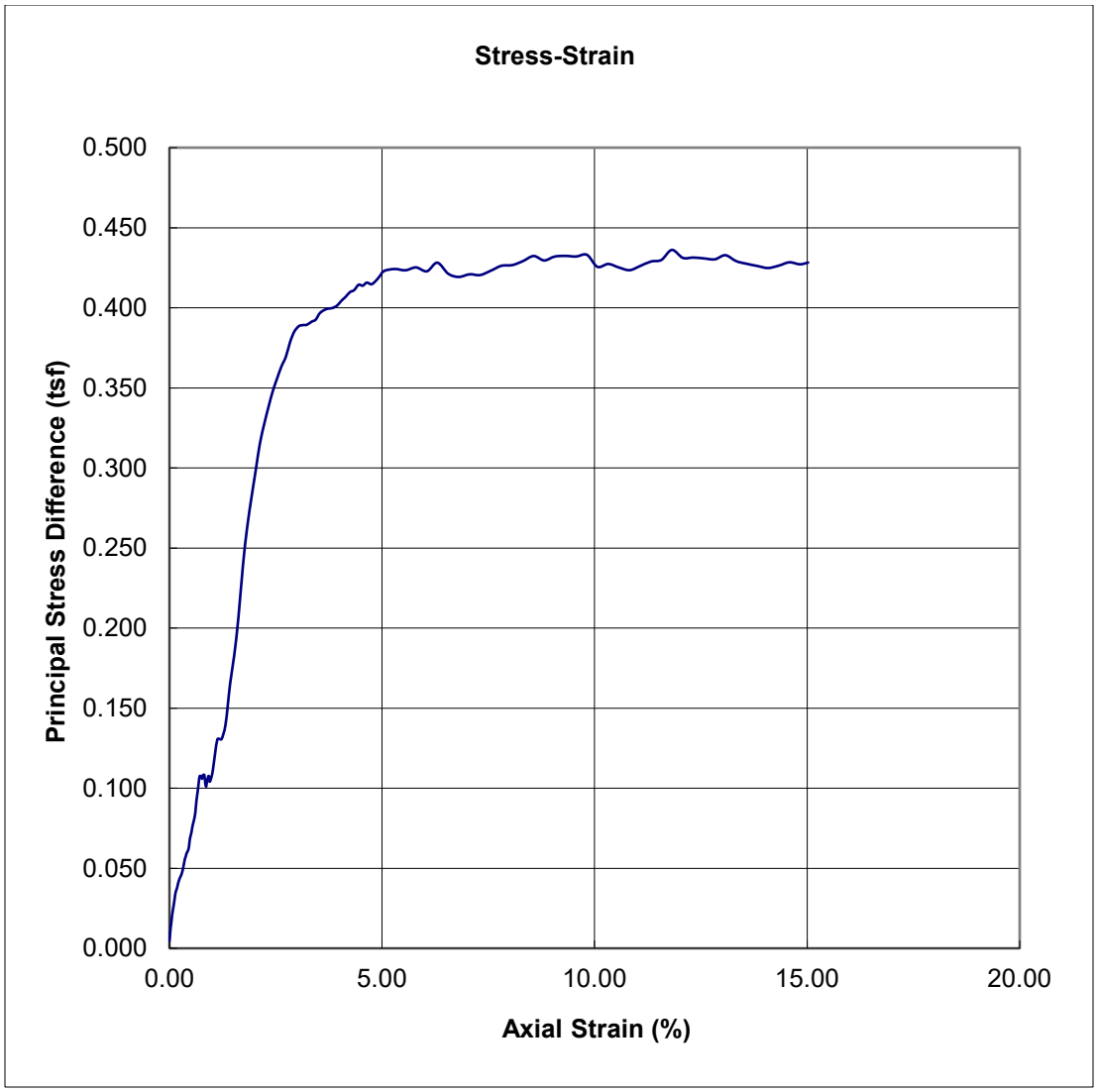
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.626 tsf**

STRAIN: **7.32%**

CONFINING PRESSURE: **15.6 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-9 #11 33-35'**

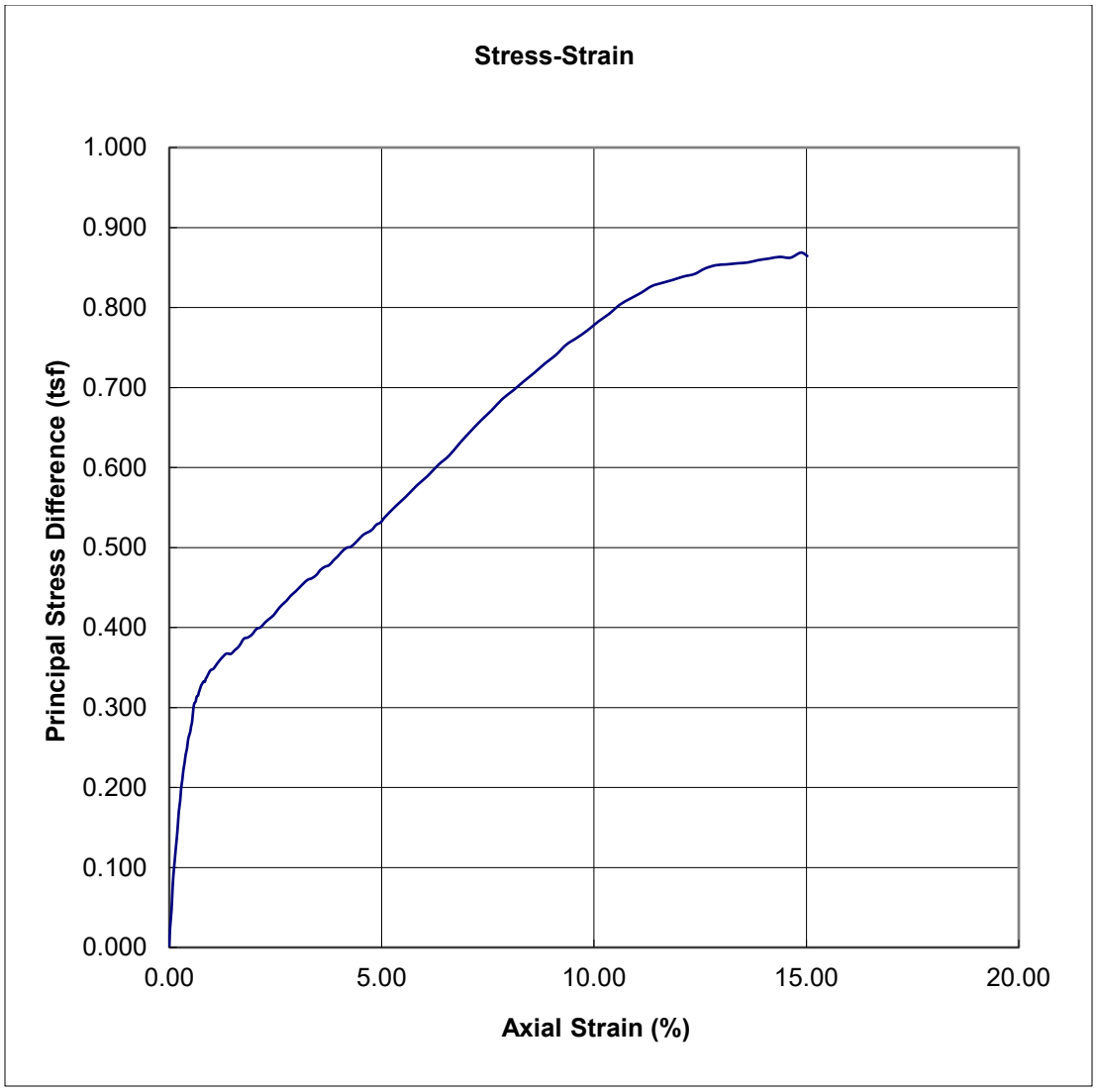
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.436 tsf**

STRAIN: **11.82%**

CONFINING PRESSURE: **17.3 psi**

SAMPLE DESCRIPTION: **Soft Gray Fat Clay (CH) with wood**



SAMPLE: **24-057 B-9 #12 38-40'**

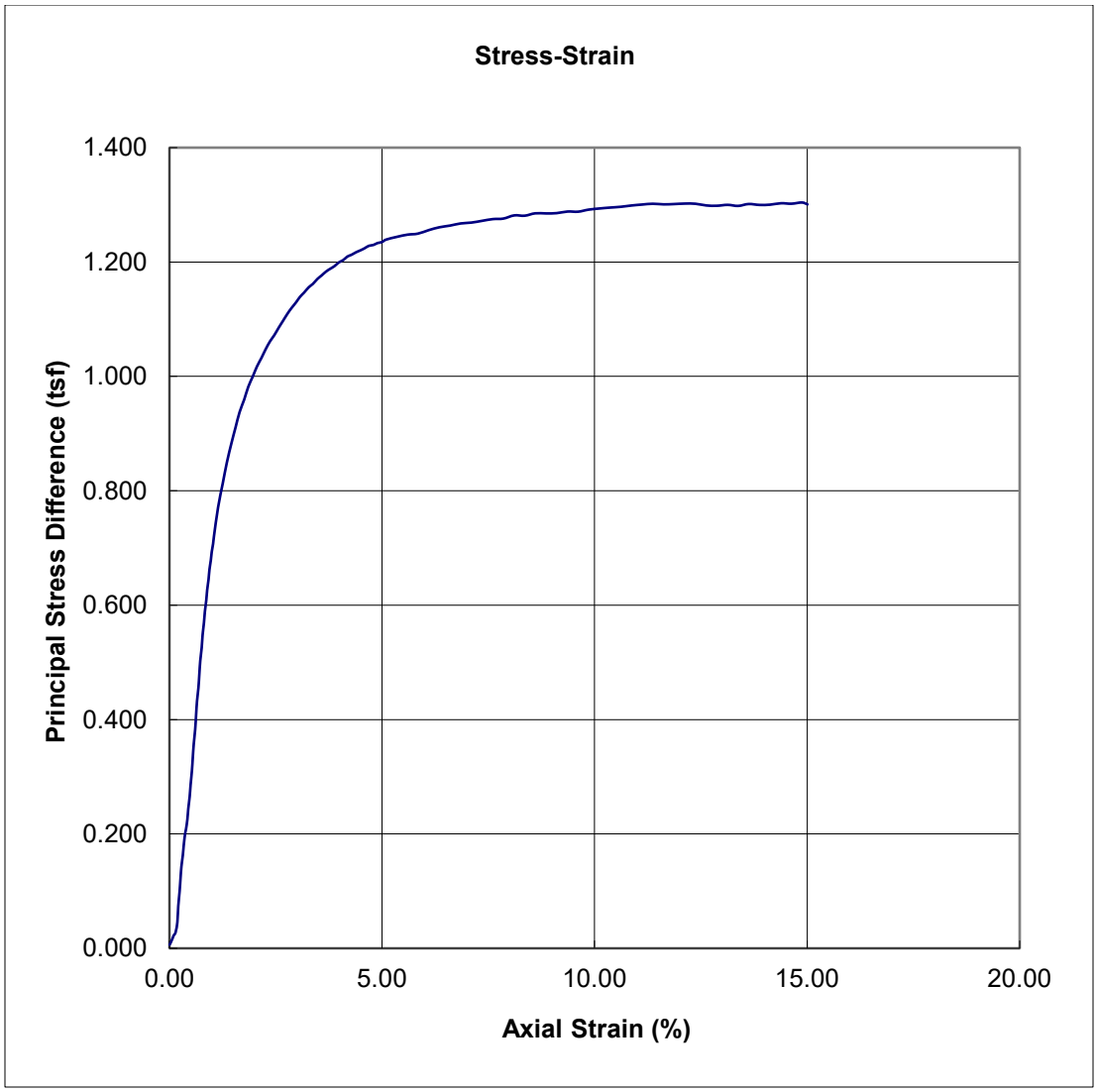
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.869 tsf**

STRAIN: **14.87%**

CONFINING PRESSURE: **18.9 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-9 #13 43-45'**

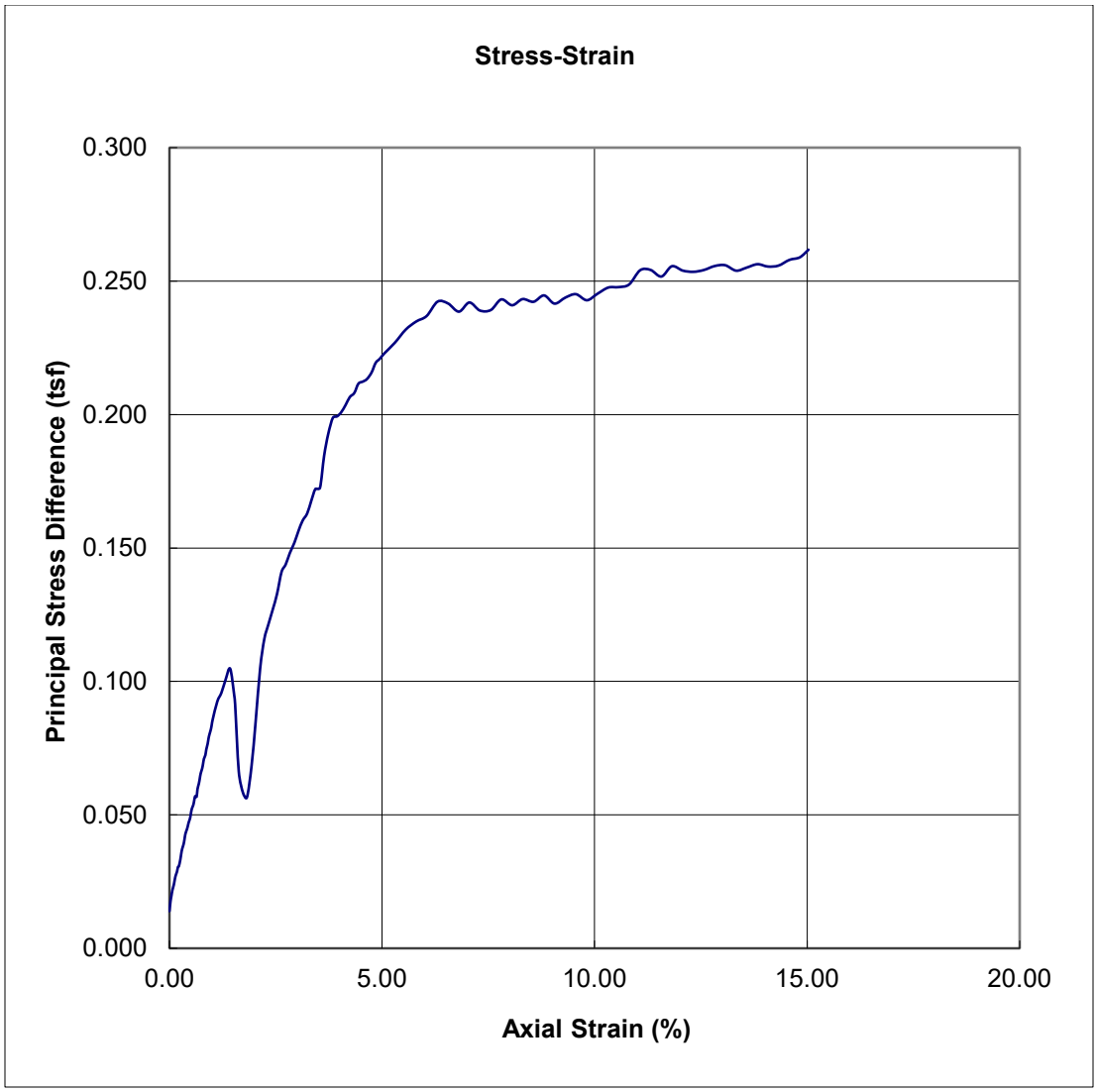
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.304 tsf**

STRAIN: **14.88%**

CONFINING PRESSURE: **20.6 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-9 #15 53-55'**

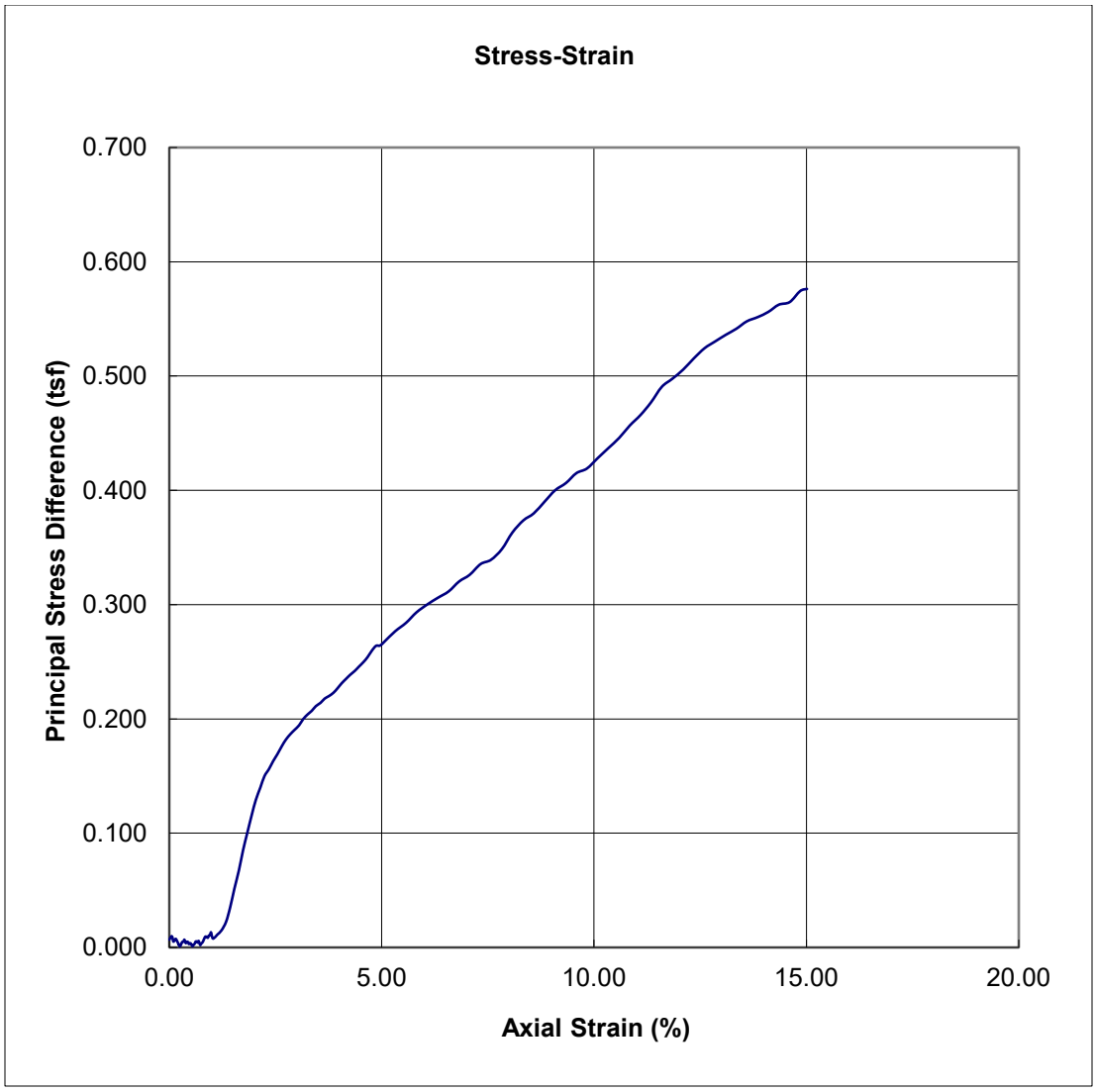
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.262 tsf**

STRAIN: **15.03%**

CONFINING PRESSURE: **23.9 psi**

SAMPLE DESCRIPTION: **Soft Tan Sand with bluish gray clay**



SAMPLE: **24-057 B-9 #17 63-65'**

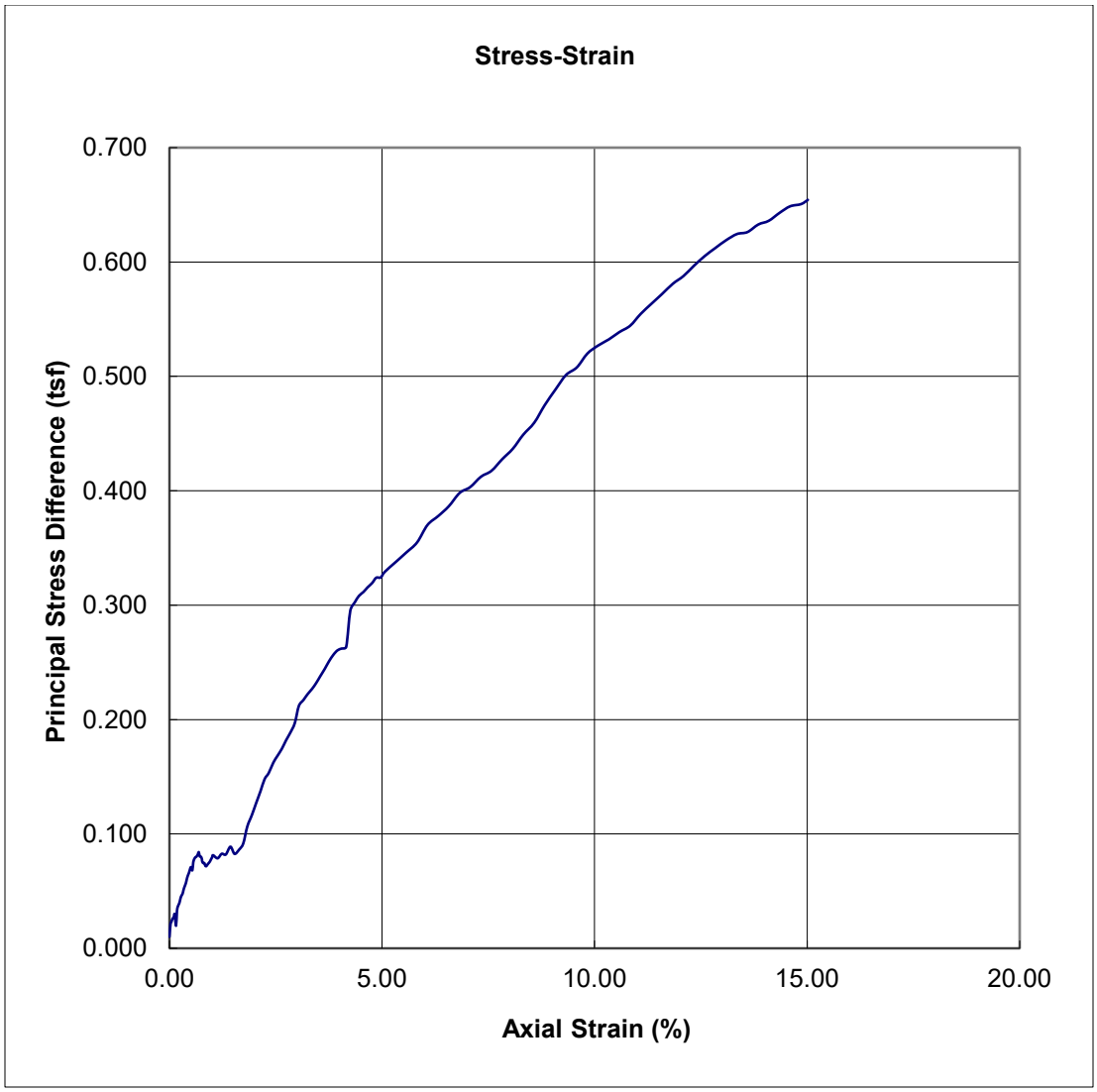
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.576 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **27.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-9 #19 73-75'**

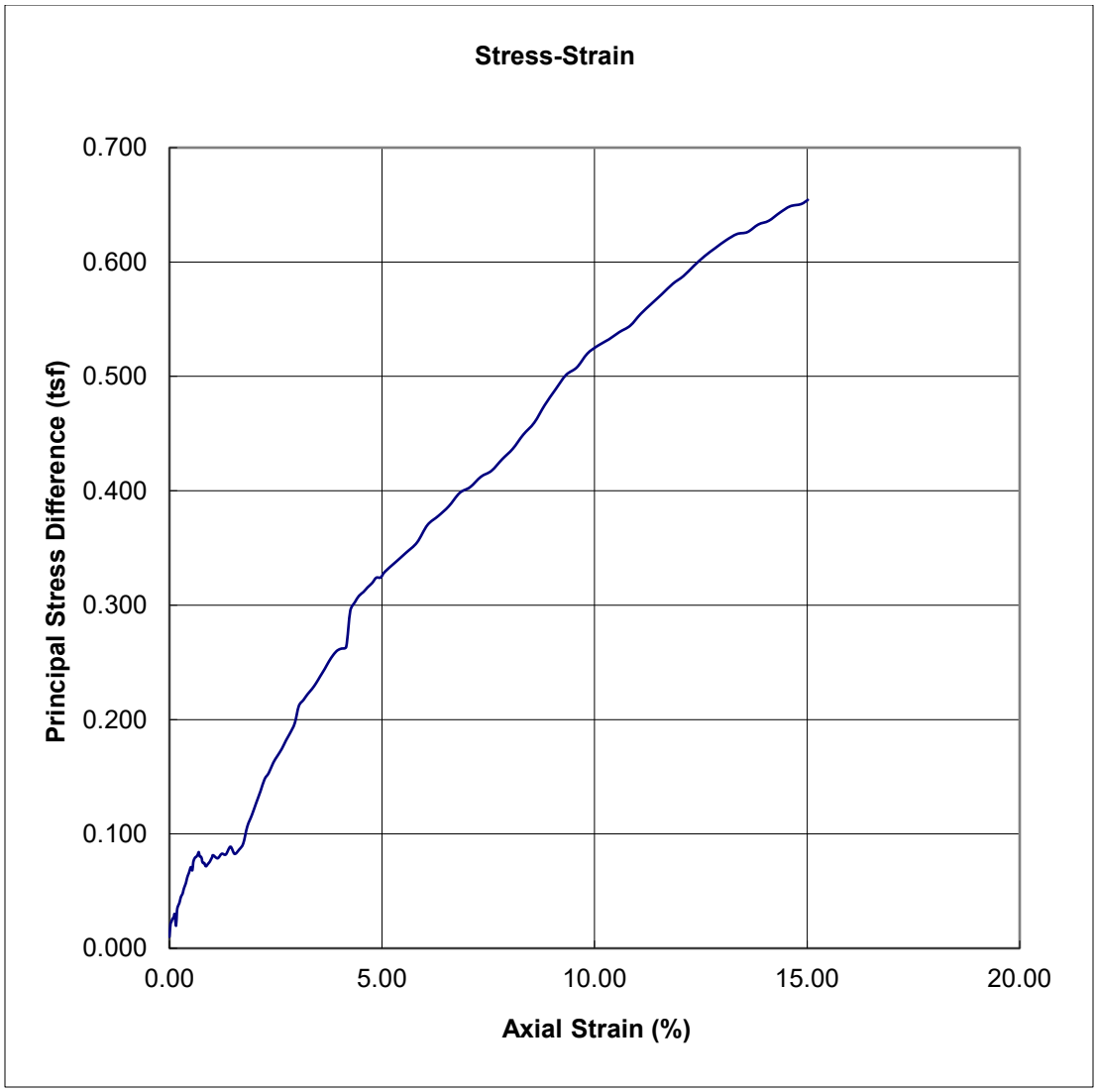
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.654 tsf**

STRAIN: **15.02%**

CONFINING PRESSURE: **25.0 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Bluish Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-10 #2 2-4'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.935 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **6.9 psi**

SAMPLE DESCRIPTION: **Medium Stiff Tan / Gray Sandy Clay (CL)**

SAMPLE: **24-057 B-10 #3 4-6'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.686 tsf**

STRAIN: **15.04%**

CONFINING PRESSURE: **7.6 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray / Tan Fat Clay (CH) with sand**

SAMPLE: **24-057 B-10 #4 6-8'**

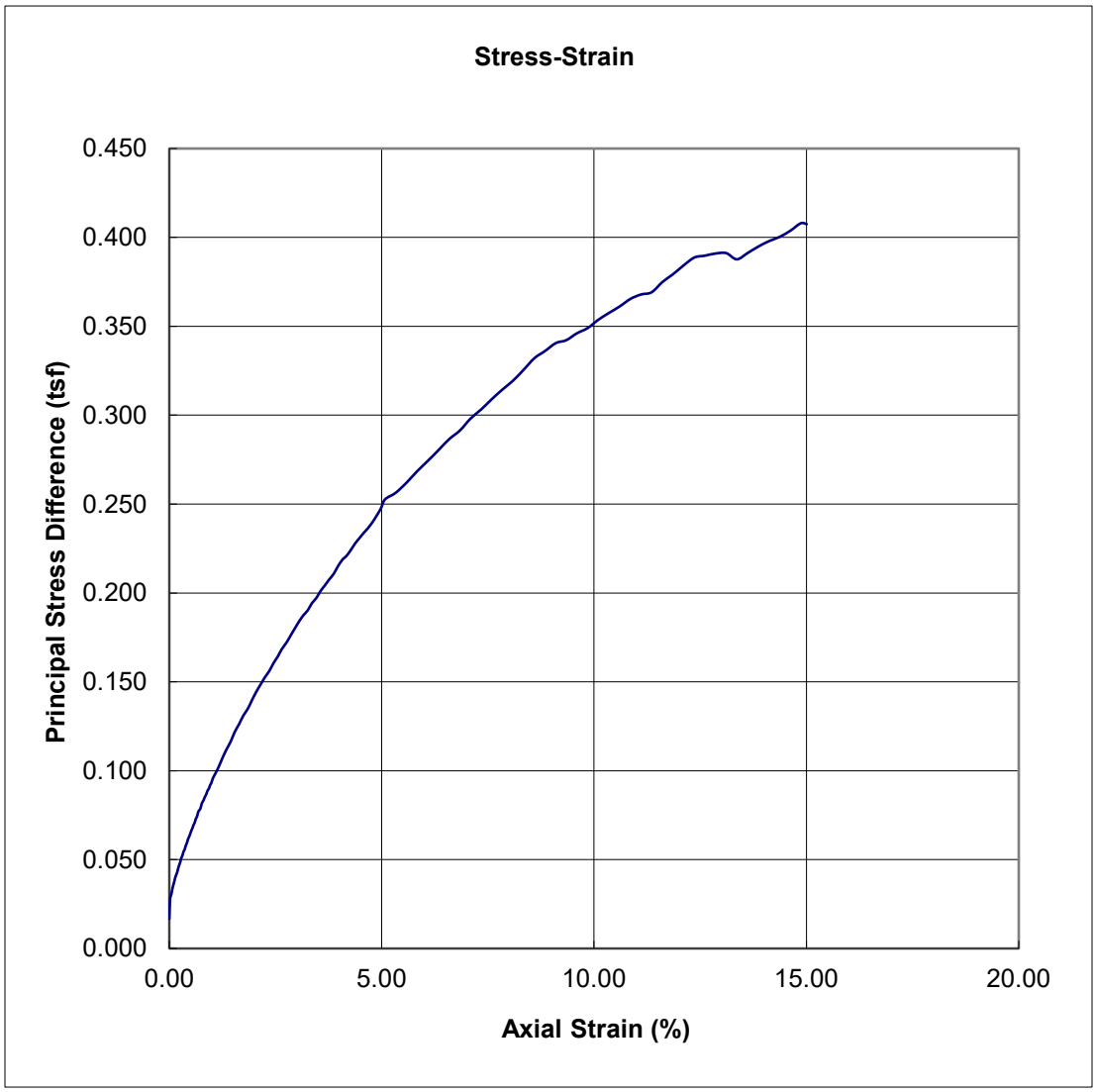
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.426 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **8.3 psi**

SAMPLE DESCRIPTION: **Soft Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-10 #5 8-10'**

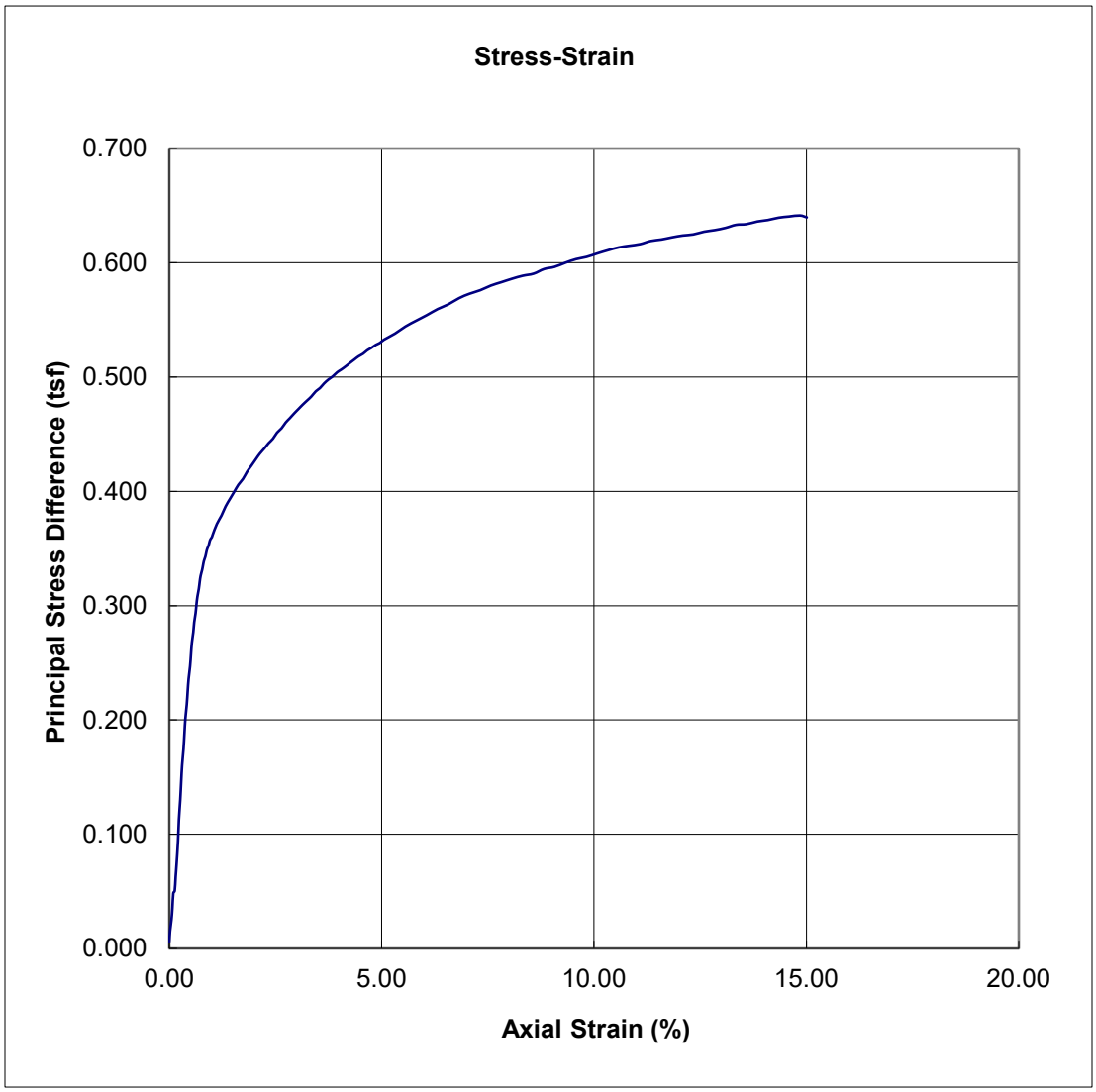
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.408 tsf**

STRAIN: **14.87%**

CONFINING PRESSURE: **8.9 psi**

SAMPLE DESCRIPTION: **Soft Gray Sandy Clay (CL)**



SAMPLE: **24-057 B-10 #7 13-15'**

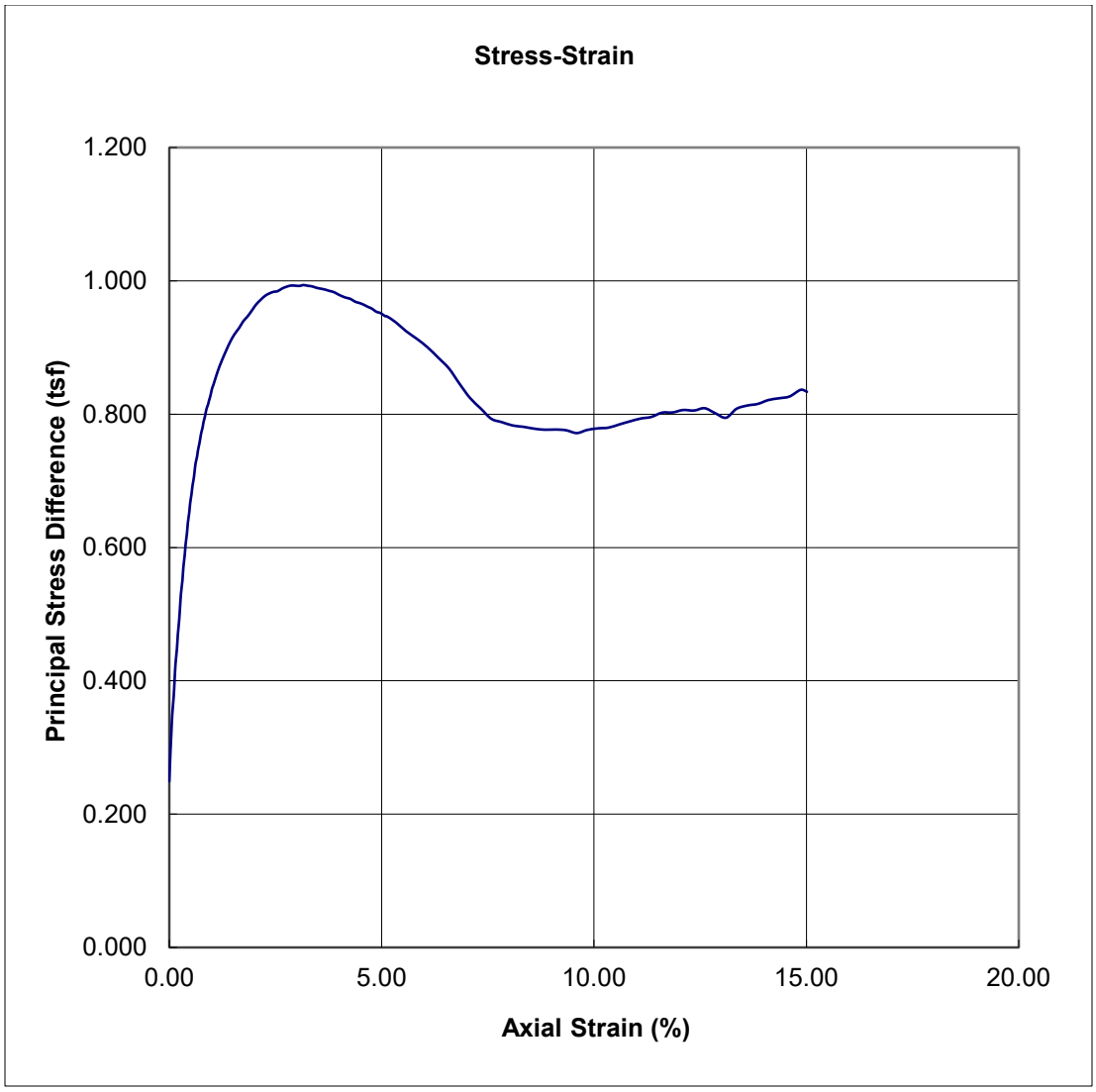
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.641 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **10.6 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-10 #8 18-20'**

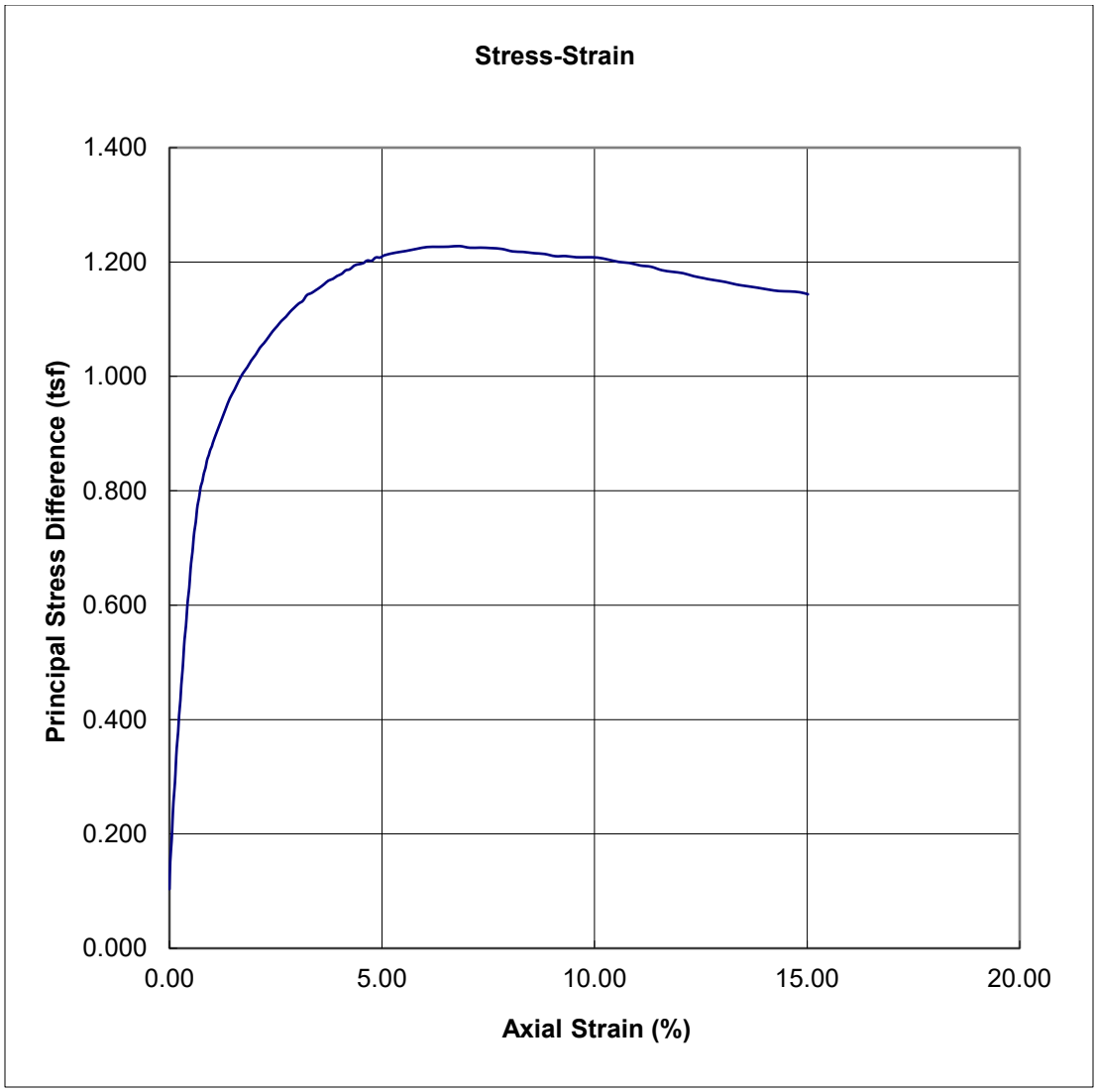
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.994 tsf**

STRAIN: **3.16%**

CONFINING PRESSURE: **12.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH) with tans streaks and sand**



SAMPLE: **24-057 B-10 #9 23-25'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.228 tsf**

STRAIN: **6.82%**

CONFINING PRESSURE: **13.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH)**

SAMPLE: **24-057 B-10 #11 33-35'**

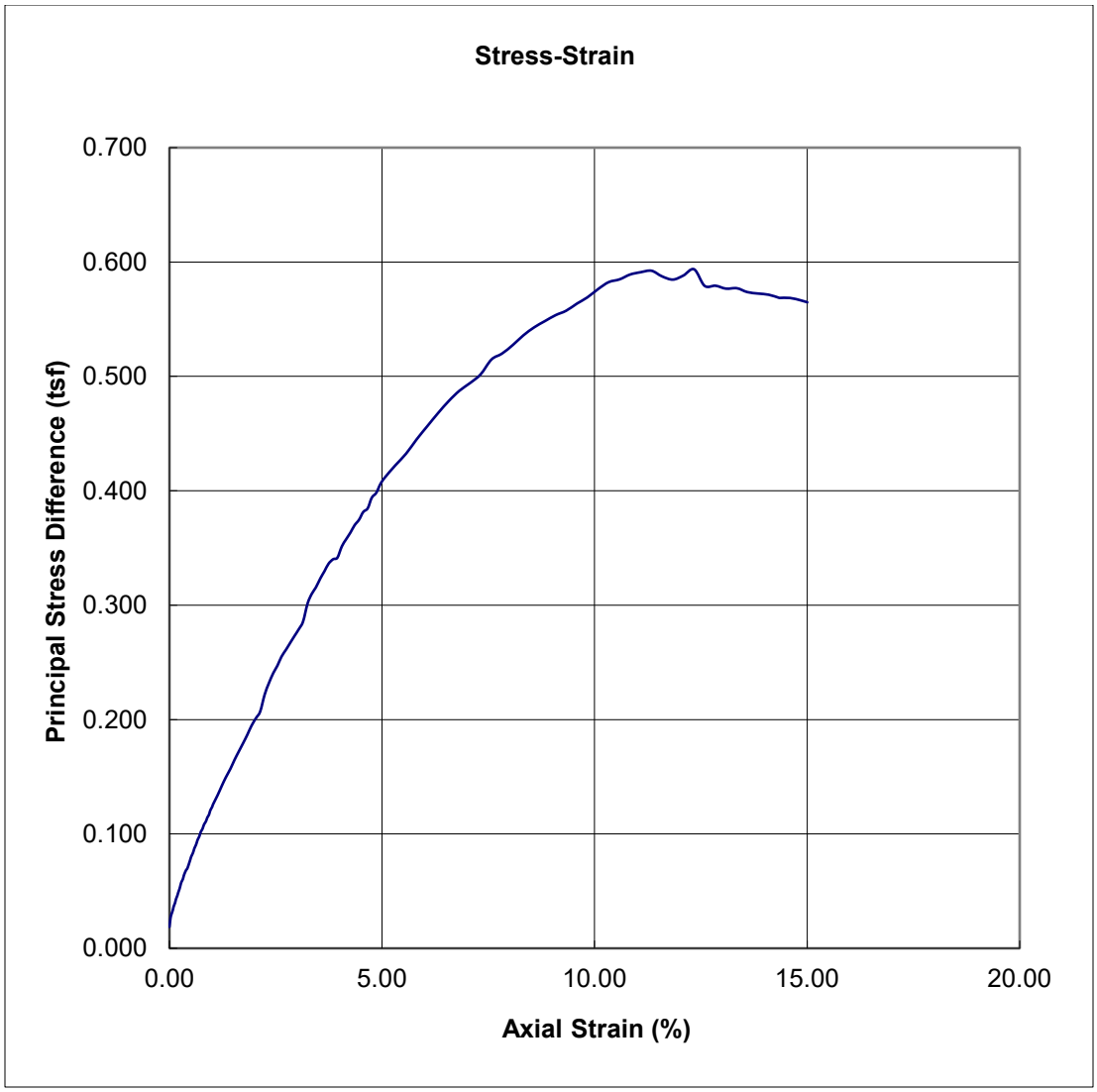
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.687 tsf**

STRAIN: **15.00%**

CONFINING PRESSURE: **17.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Dark Bluish Gray Silty Clay (CL)**



SAMPLE: **24-057 B-10 #12 38-40'**

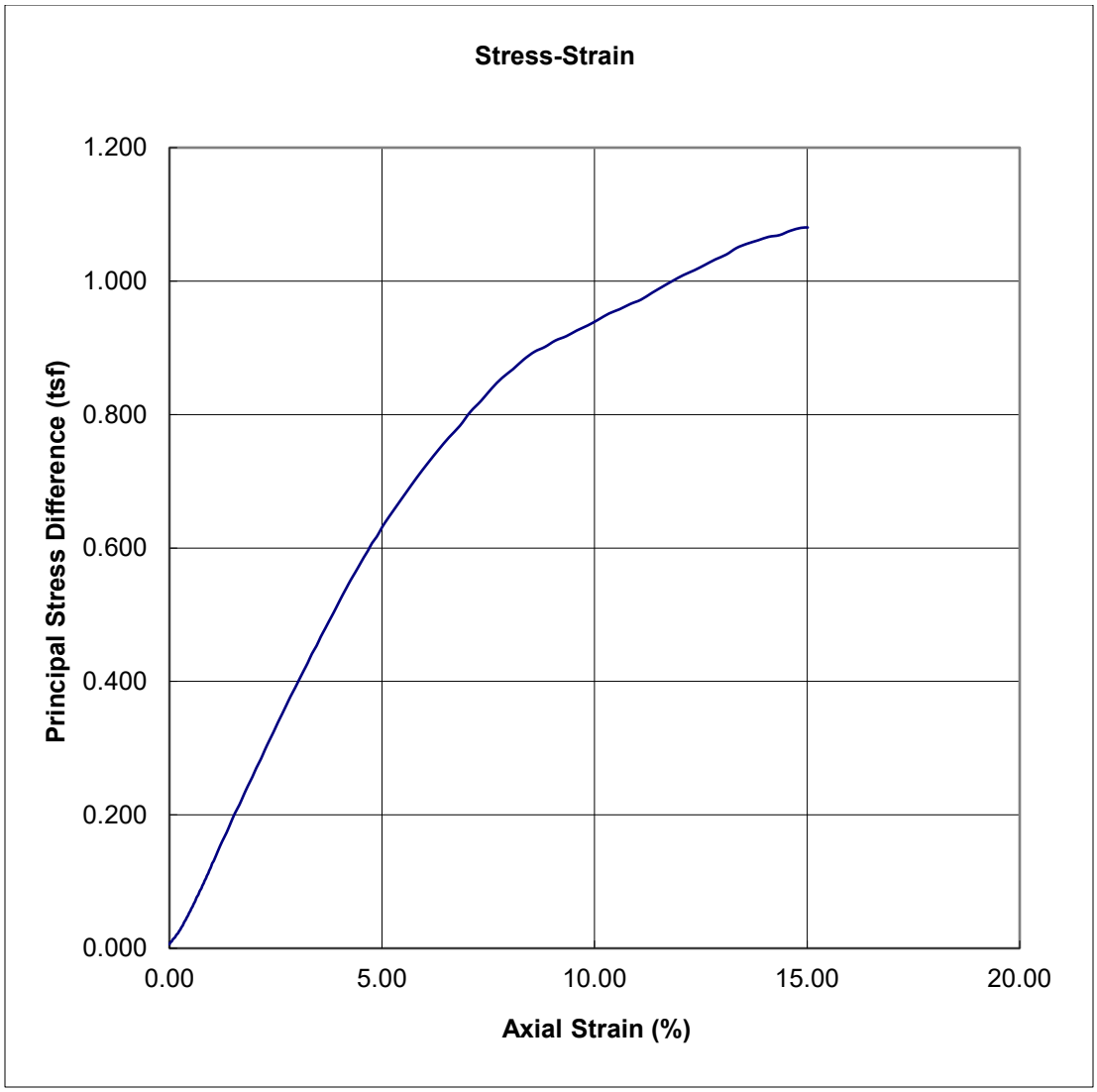
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.594 tsf**

STRAIN: **12.34%**

CONFINING PRESSURE: **18.9 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-10 #14 48-50'**

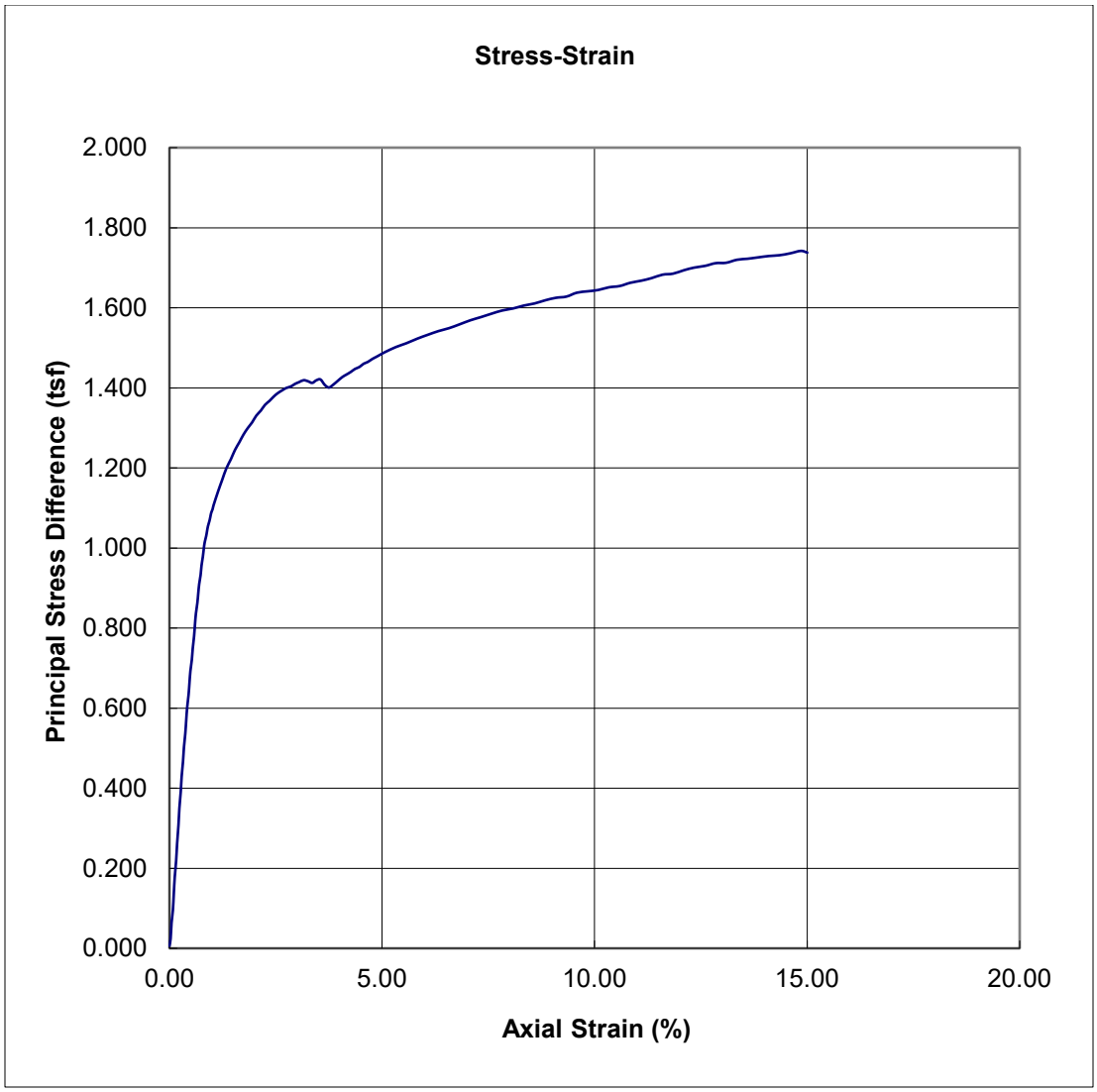
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.080 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **22.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Sandy Clay (CL)**



SAMPLE: **24-057 B-10 #15 53-55'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.742 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **23.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gay Fat Clay (CH)**

SAMPLE: **24-057 B-10 #16 58-60'**

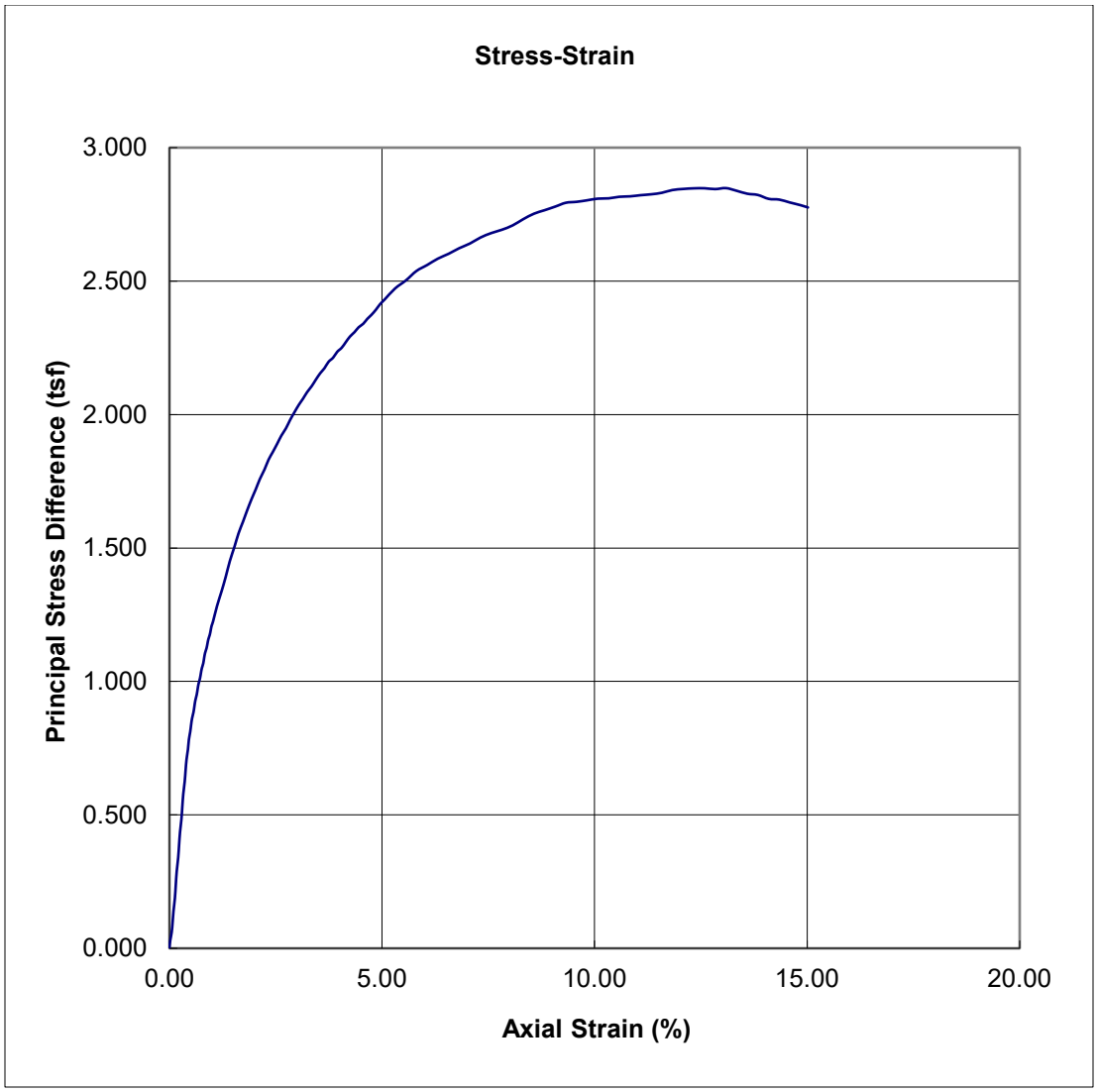
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.419 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **25.6 psi**

SAMPLE DESCRIPTION: **Soft Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-11 #2 2-4'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.848 tsf**

STRAIN: **13.09%**

CONFINING PRESSURE: **6.9 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray / Tan Fat Clay (CH)**

SAMPLE: **24-057 B-11 #4 6-8'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.774 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **8.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Black Silty Clay (CL) with gravel and sand**

SAMPLE: **24-057 B-11 #5 8-10'**

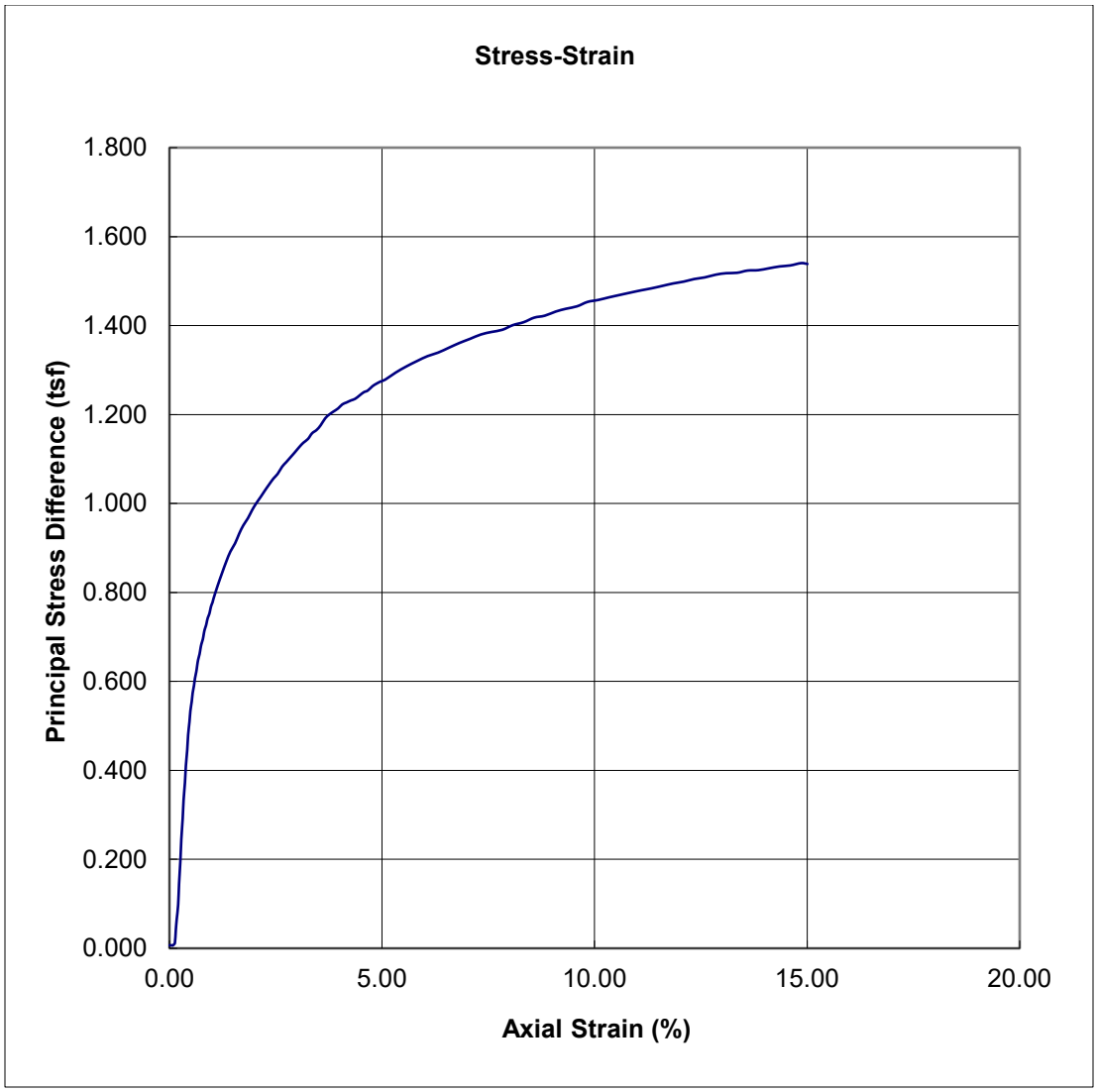
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.698 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **8.9 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Fat Clay (CH) with trace roots**



SAMPLE: **24-057 B-11 #7 13-15'**

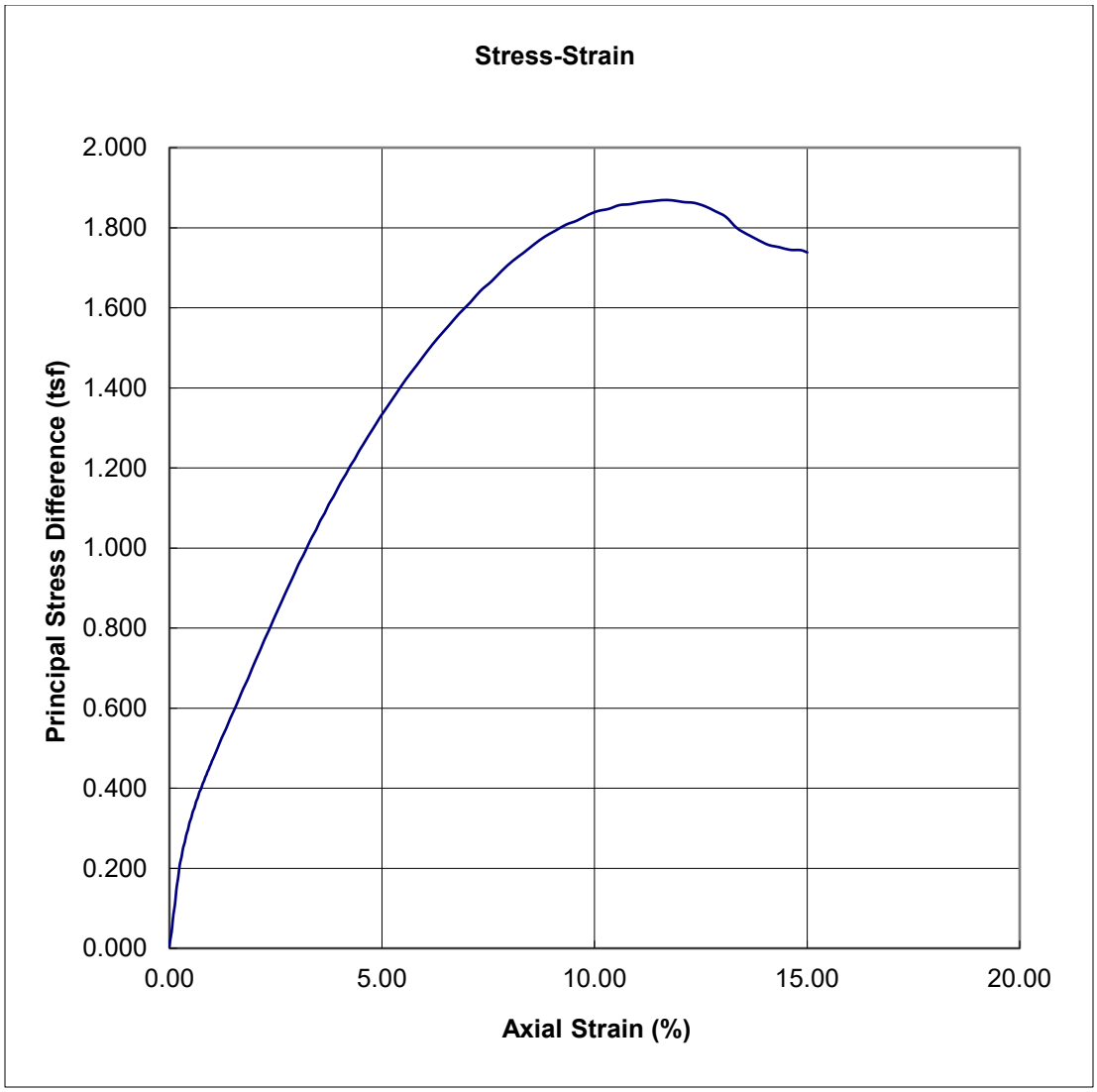
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.540 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **10.6 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL)**



SAMPLE: **24-057 B-11 #8 18-20'**

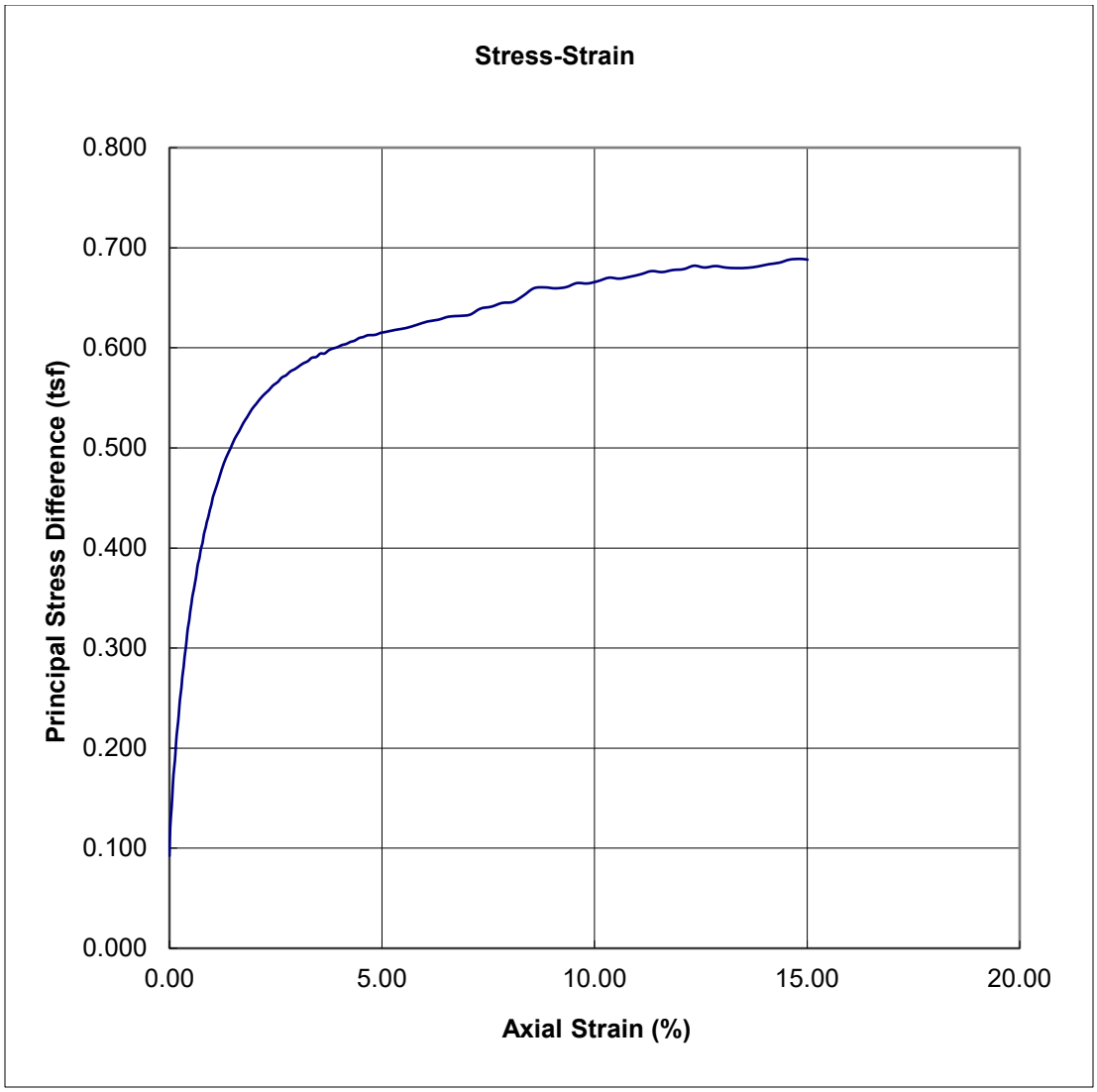
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.869 tsf**

STRAIN: **11.58%**

CONFINING PRESSURE: **12.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL)**



SAMPLE: **24-057 B-11 #8 18-20'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.869 tsf**

STRAIN: **11.58%**

CONFINING PRESSURE: **12.3 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL) with sand**

SAMPLE: **24-057 B-11 #10 28-30'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.689 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **15.6 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with sand**

SAMPLE: **24-057 B-11 #11 33-35'**

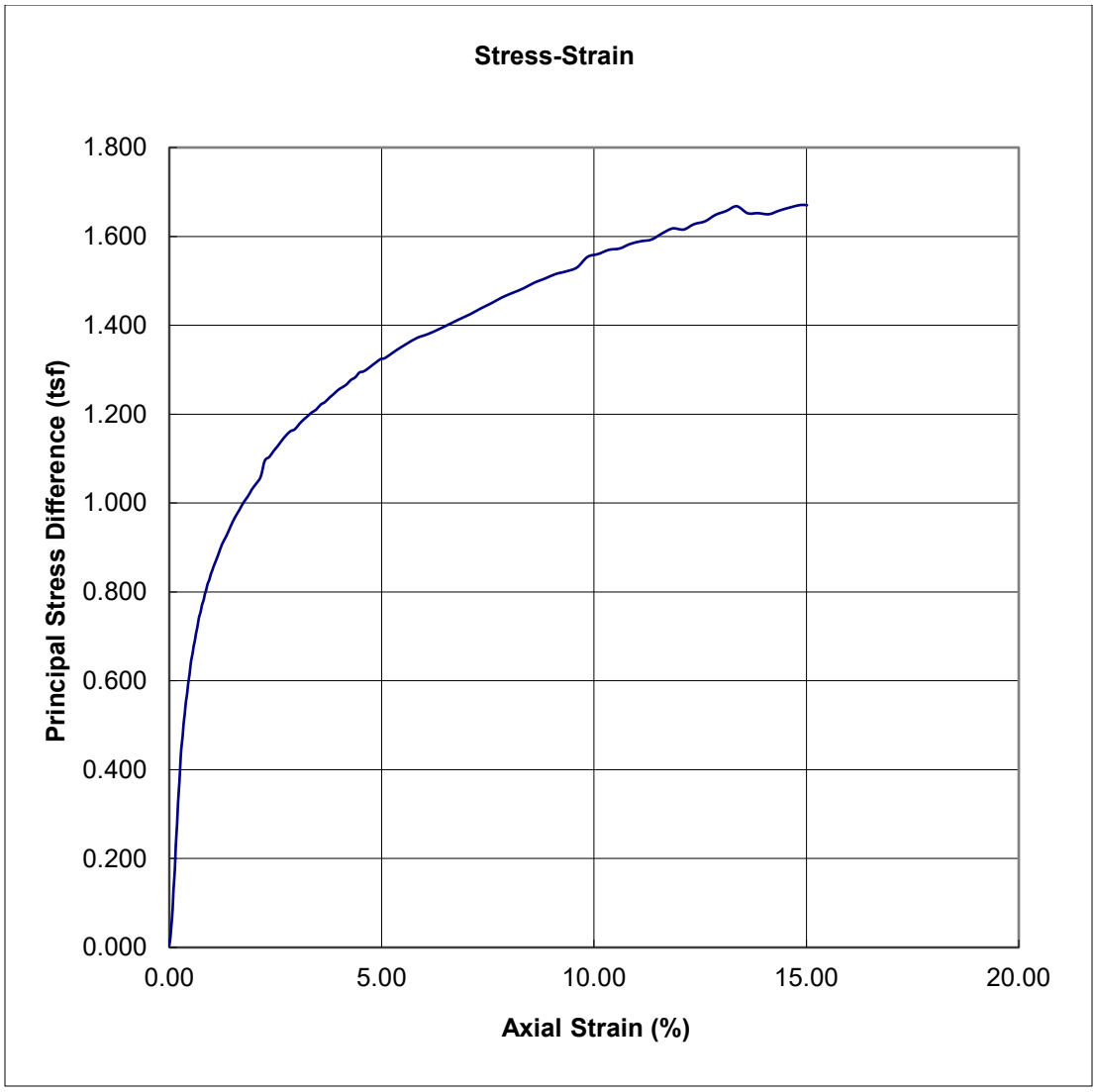
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.499 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **17.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Sandy Clay (CL)**



SAMPLE: **24-057 B-11 #18 63-65'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.671 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **28.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL) with tan spots and sand**

SAMPLE: **24-057 B-11 #19 68-70'**

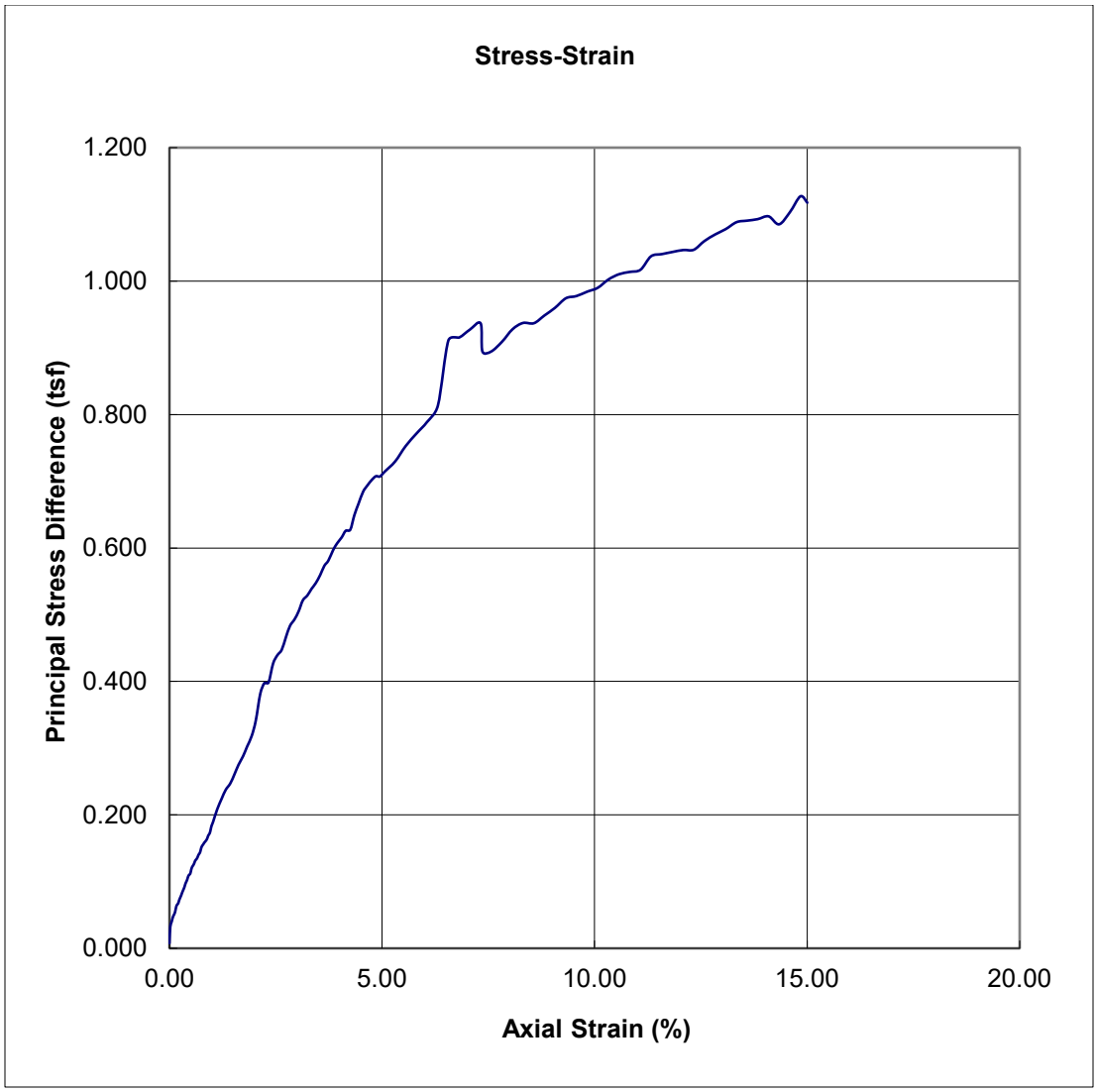
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.479 tsf**

STRAIN: **10.84%**

CONFINING PRESSURE: **23.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Sandy Clay (CL)**



SAMPLE: **24-057 B-11 #21 78-80'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.127 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **26.7 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with sand pockets**

SAMPLE: **24-057 B-11 #22 83-85'**

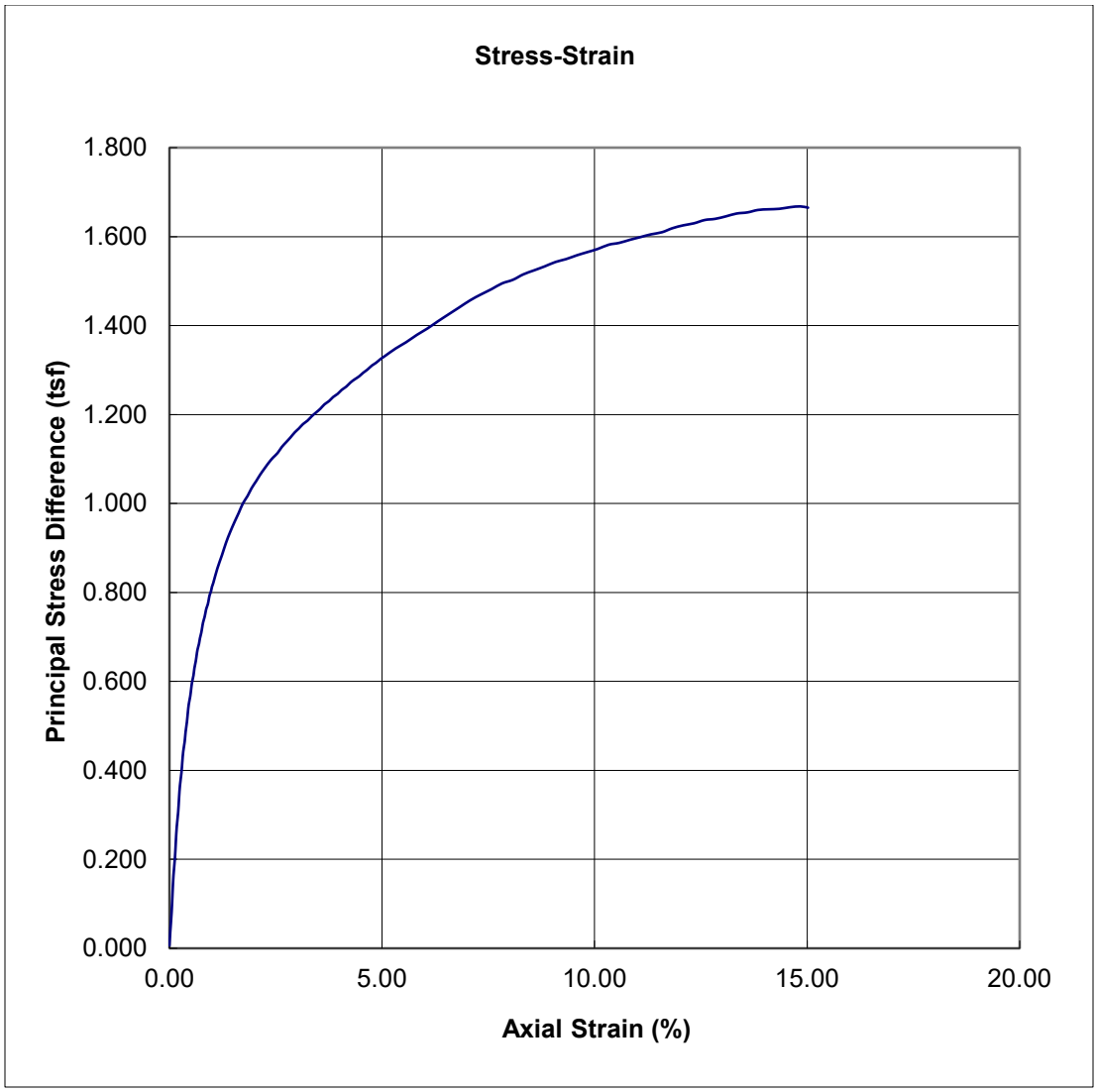
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.532 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **28.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with trace sand**



SAMPLE: **24-057 B-11 #23 88-90'**

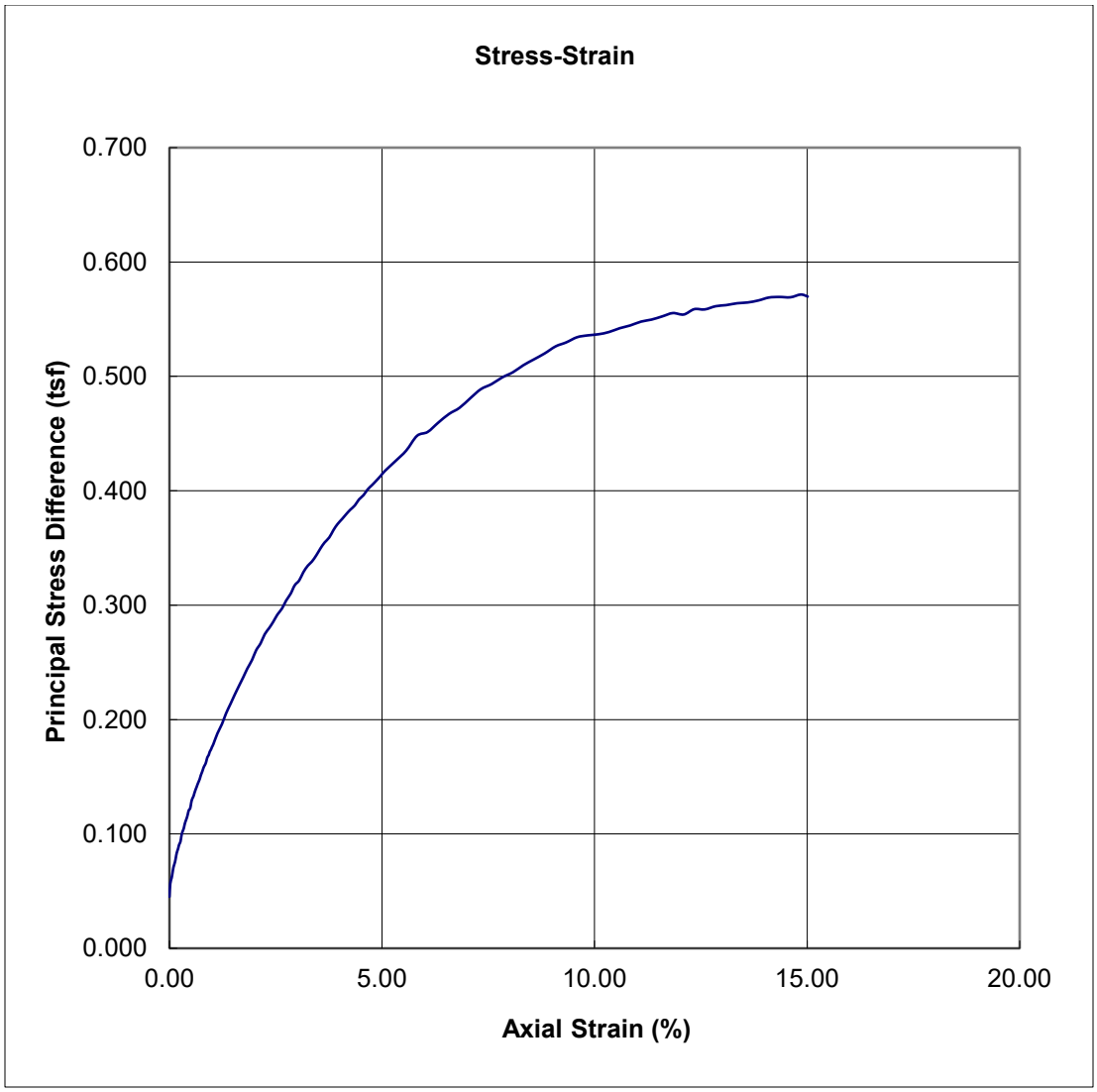
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.668 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **30.0 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-11 #25 98-100'**

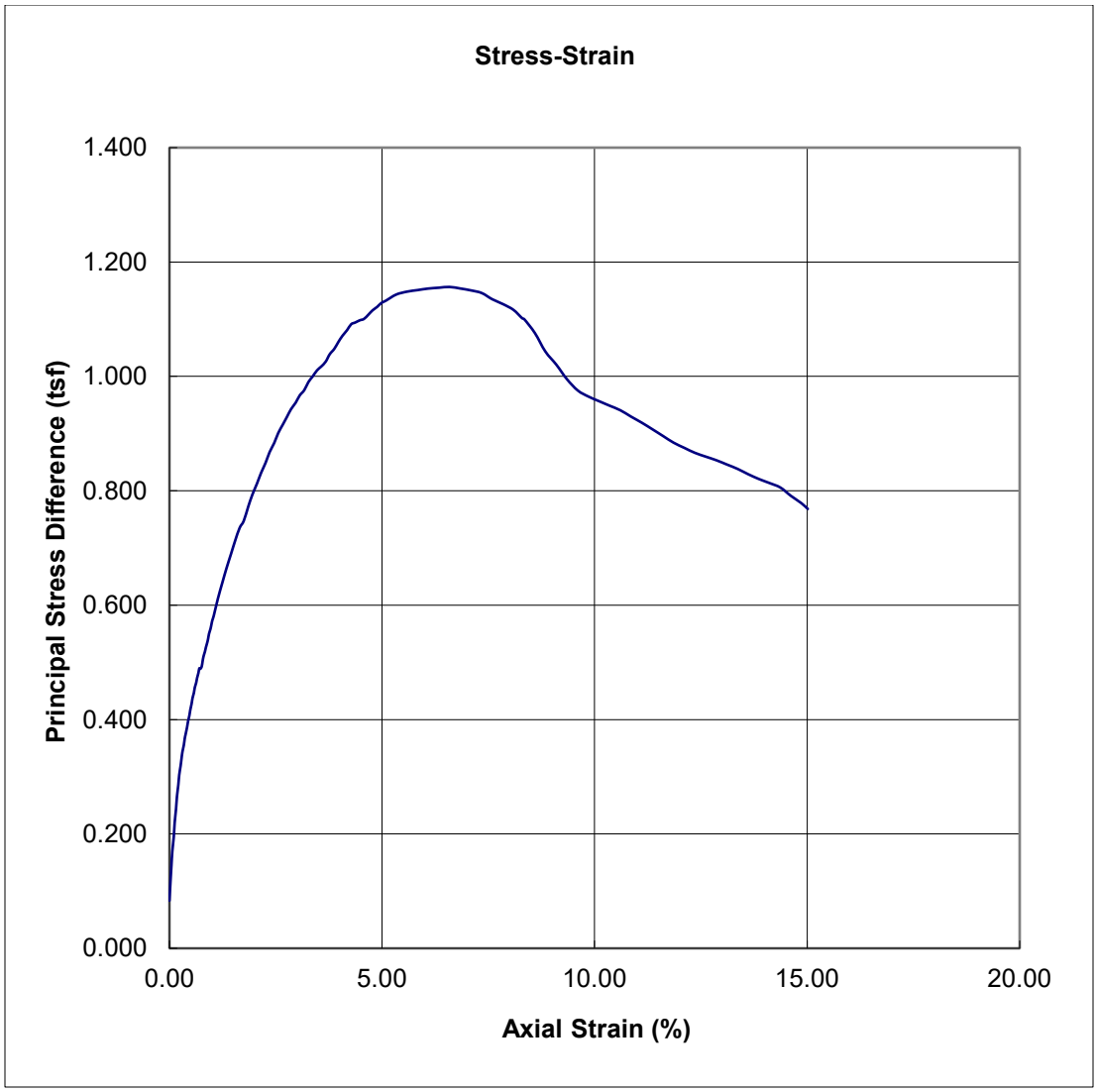
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.572 tsf**

STRAIN: **14.85%**

CONFINING PRESSURE: **33.3 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH) with sand**



SAMPLE: **24-057 B-12 #2 2-4'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.156 tsf**

STRAIN: **6.59%**

CONFINING PRESSURE: **8.2 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Gray Fat Clay (CH) with trace wood and sand**

SAMPLE: **24-057 B-12 #4 6-8'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **2.532 tsf**

STRAIN: **14.86%**

CONFINING PRESSURE: **9.6 psi**

SAMPLE DESCRIPTION: **Very Stiff Gray / Tan Fat Clay (CH) with black organics and gravel**

SAMPLE: **24-057 B-12 #6 10-12'**

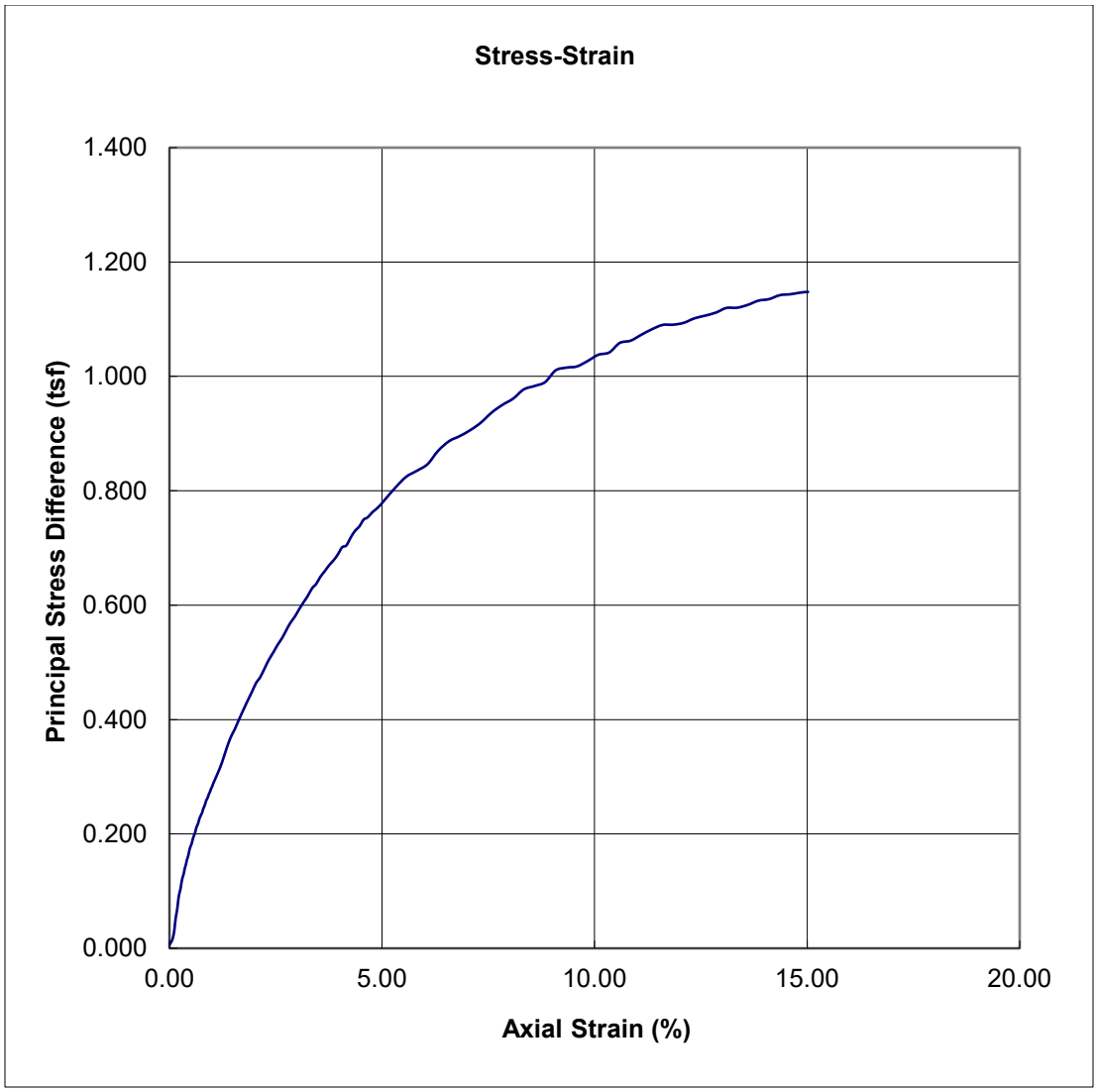
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.485 tsf**

STRAIN: **14.87%**

CONFINING PRESSURE: **10.9 psi**

SAMPLE DESCRIPTION: **Stiff Gray Silty Clay (CL) with sand**



SAMPLE: **24-057 B-12 #7 13-15'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.148 tsf**

STRAIN: **15.02%**

CONFINING PRESSURE: **11.9 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray / Gray Silty Clay (CL)**

SAMPLE: **24-057 B-12 #8 18-20'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.559 tsf**

STRAIN: **14.84%**

CONFINING PRESSURE: **13.6 psi**

SAMPLE DESCRIPTION: **Stiff Gray Fat Clay (CH)**

SAMPLE: **24-057 B-12 B#9 23-25'**

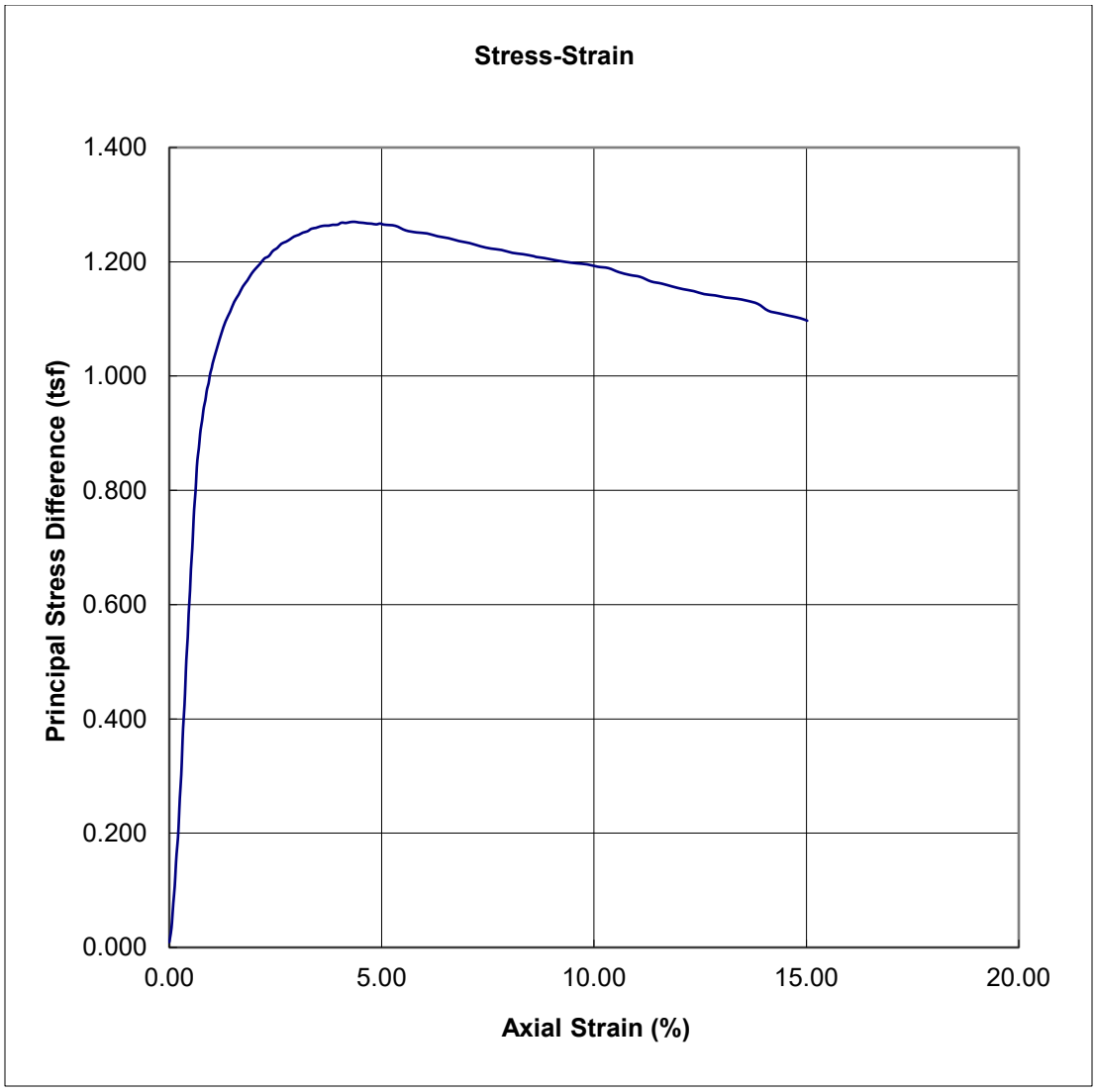
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.879 tsf**

STRAIN: **15.03%**

CONFINING PRESSURE: **15.2 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-12 #10 28-30'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.270 tsf**

STRAIN: **4.36%**

CONFINING PRESSURE: **16.9 psi**

SAMPLE DESCRIPTION: **Stiff Tan / Bluish Gray Fat Clay (CH) with trace sand**

SAMPLE: **24-057 B-12 #19 63-65'**

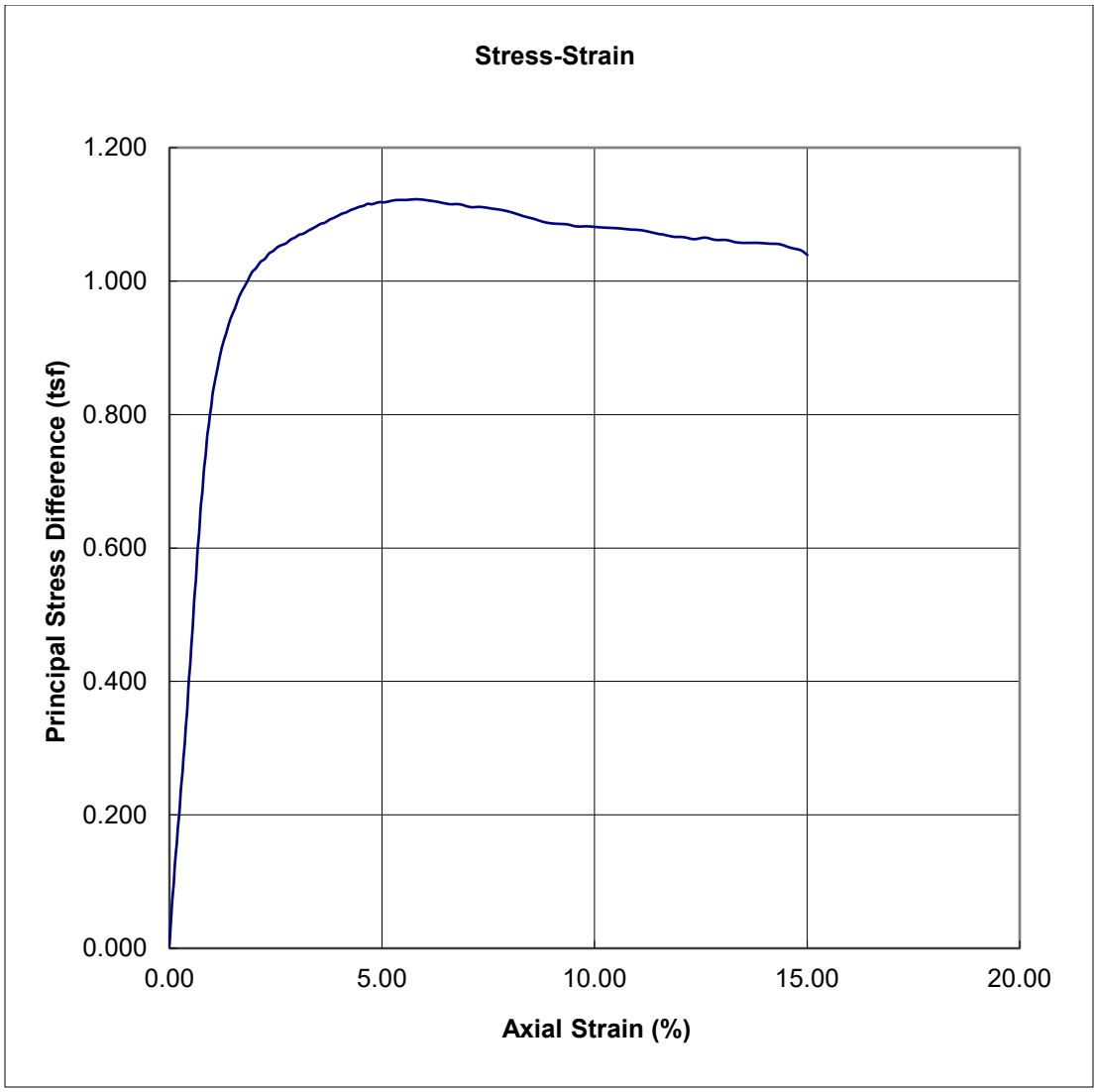
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.625 tsf**

STRAIN: **10.84%**

CONFINING PRESSURE: **21.7 psi**

SAMPLE DESCRIPTION: **Medium Stiff Gray Fat Clay (CH)**



SAMPLE: **24-057 B-12 #21 73-75'**

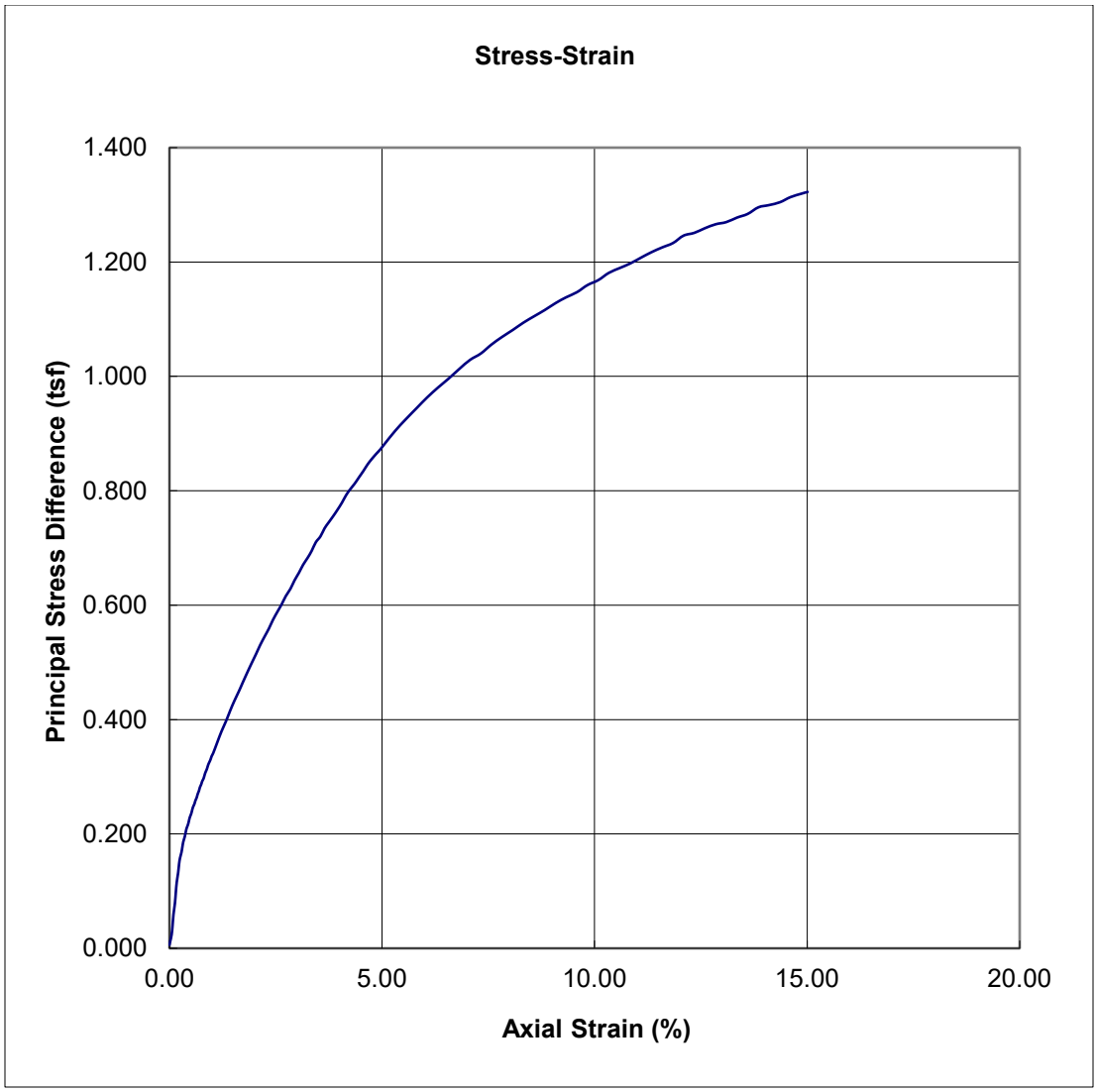
TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.123 tsf**

STRAIN: **5.82%**

CONFINING PRESSURE: **25.0 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Fat Clay (CH)**



SAMPLE: **24-057 B-12 #23 83-85'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **1.323 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **28.3 psi**

SAMPLE DESCRIPTION: **Stiff Bluish Gray Silty Clay (CL)**

SAMPLE: **24-057 B-12 #25 93-95'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.757 tsf**

STRAIN: **13.60%**

CONFINING PRESSURE: **31.7 psi**

SAMPLE DESCRIPTION: **Medium Stiff Bluish Gray Silty Clay (CL) with sand**

SAMPLE: **24-057 B-12 #26 98-100'**

TEST TYPE: **UNDRAINED UNCONSOLIDATED (UU)**

COMPRESSIVE STRENGTH: **0.402 tsf**

STRAIN: **15.01%**

CONFINING PRESSURE: **33.3 psi**

SAMPLE DESCRIPTION: **Soft Gray Sandy Clay (CL)**

GULF SOUTH

ENGINEERING AND TESTING, INC.

Geotechnical & Materials Consultants

15 Veterans Memorial Boulevard | Kenner LA 70062

p 504-305-4401

3121 S Darla Avenue | Gonzales LA 70737

p 225-450-3361

info@**gulfsoutheng.com**

DIVISION 01

GENERAL REQUIREMENTS

SECTION 01100

SUMMARY OF WORK

PART 1 GENERAL

1.01 PROJECT

A. Project Name: **Tammany Trace Bridges – Group 2 Bridge 13**

B. Owner's Name: St. Tammany Parish

C. Architect's Name: N/A.

D. Project consists of the removal of the existing Timber Tammany Trace Bridge 13. A new steel truss bridge will be installed. Revetment, and road work will also be performed.

1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in the contract.

1.03 OWNER OCCUPANCY

A. Owner intends to occupy the Project upon Substantial Completion.

B. Owner intends to occupy a certain portion of the Project prior to the completion date for the conduct of normal operations.

C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

D. Schedule the Work to accommodate Owner occupancy.

1.04 CONTRACTOR USE OF SITE AND PREMISES

A. Construction Operations: Limited to areas noted on Drawings.

B. Arrange use of site and premises to allow:
   1. Use of site and premises by the public.

C. Provide access to and from site as required by law and by Owner:
   1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
   2. Do not obstruct roadways, sidewalks, or other public ways without permit.

D. Utility Outages and Shutdown:
   1. Prevent accidental disruption of utility services to other facilities.

1.05 WORK SEQUENCE

A. Coordinate construction schedule and operations with Engineer.

1.06 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

A. Extra payments will not be authorized for relocation, removal and/or replacement of any in-place construction made necessary by untimely or improperly sequenced work, where proper time and sequence could have been determined by examination of the Contract Documents. Any work required to complete the scope of work as defined by

the Contract Documents shall be performed by the Contractor or his subcontractors at no additional cost to the Owner.

B. Should there be any discrepancy between scale and dimensions, figured dimensions shall override scale dimensions. Although plans are drawn to scale, as indicated, and dimensions are given, the Contractor shall work to measurements of in-place construction.

C. Should there be any discrepancy between information given on the Drawings, either written or drawing, and information written in the Specifications, the more stringent or detailed requirements shall govern.

D. Should there be any discrepancy between written requirements of the General or Supplementary Conditions of the Contract for Construction and the Specifications, or between certain portions of the Specifications, the more stringent or detailed requirements shall govern.

E. Any reference to standards (such as ASTM - American Society for Testing and Material), where the date is not specified, shall mean the latest edition of such standards published prior to the date of the Specifications, in accordance with the abbreviation referred to in the Technical Provisions. Where such a reference is made, the applicable standard is hereby made part of the Specification which refers to it, as if written out in the Specification in full, to the extent called for by the reference.

1.07 SUPERVISION AND CONSTRUCTION PROCEDURES

A. The Designer, the Designer's employees and consultants, and the Project Representative will not assume any duty or obligation to provide supervision of construction methods or processes. In accordance with the General Conditions, the Contractor is solely responsible for construction means and methods, for compliance with laws and regulations and for protection of persons and property. Reference in the contract Documents to any rule or regulation is for the Contractor's information and does not imply assumption of responsibility by the Designer.

1. No provision of any standard specification, manual or code incorporated by reference shall be effective to change the duties and responsibilities of Owner, Contractor and Designer, or any of their consultants, agents and employees from those set forth in the Contract Documents, nor shall it be effective to assign to the Designer or any of the Designer’s consultants, agents and employees any duty or authority to supervise and direct the furnishing and performance of the work, or to undertake any responsibilities contrary to those established in the General Conditions.
2. The Contractor shall be solely responsible for all grades, lines and levels and be responsible for the Work being within the permissible limits.
3. The Contractor shall secure all written warranties required in the Specifications and shall deliver them to the Designer for transmittal to the Owner.

1.08 EXAMINATION OF SITE

A. By executing the Contract, the Contractor represents that he has:

1. Visited the site;
2. Made due allowances for difficulties and contingencies to be encountered;

3. Informed himself of existing conditions and work being performed by others;
4. Notified the Designer of ambiguities, inconsistencies, and errors discovered in the Contract Documents, or between the Contract Documents and existing conditions.

B. In accordance with the General Conditions each Subcontractor shall similarly represent that he has fulfilled the same responsibilities to the Contractor.

C. Failure to visit the site and perform attendant responsibilities shall not relieve the Contractor or any Subcontractor from their obligations, and no extra payment will be authorized for work related to conditions which can be determined by examination of the site and the Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01350

SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

A. Section **01100** – Summary of Work: use of premises and occupancy.

B. Section **01500** - Temporary Facilities and Controls: Temporary lighting.

1.02 GENERAL

A. The requirements specified herein establish procedures that shall be followed by the Contractor during the course of construction. The particular location of the work requires constant vigilance on the part of the Contractor to properly protect the construction area.

1.03 PROCEDURES

A. Existing utility lines will remain in continuous operation during the construction period; the Contractor shall cooperate with the Owner to the fullest extent in order to prevent interruption of essential services. All excavation should be closed by the end of the day unless specific written permission has been granted by the Designer.

B. Contractor's Duties:
   1. Protect the safety of the public and his employees.
   2. Perform work and store materials and equipment without restricting highway or railroad access required by code, law or regulation.
   3. Restrict working force, vehicles, storage, loading and staging areas to locations that do not conflict with the traffic or facility operations.
   4. Advise the Owner and obtain advance permission for any interruptions of utility and operating services.
   5. Keep all necessary plans, specifications and permits for the said project on the jobsite at all times. The Contractor is also responsible for the same if he has any Subcontractors.

C. Confine loose materials, papers, trash, and debris to prevent scattering. Transport in covered carts or receptacles to prevent the spread of dust and dropping of materials.

D. Use canvas or rubber blankets to eliminate spread of sparks while welding.

E. Have adequate fire extinguishers available and readily accessible at work areas at all times.

F. Care shall be taken not to remove, disturb or injure existing utilities, pipes or conduits during excavation, backfilling and installing pipe without the approval of the Designer. If necessary the Contractor shall shore up, sling and maintain any of these structures during work operation and shall repair all damage done to same within a reasonable length of time after damage (within 24 hours). All repairs shall be made to the satisfaction of the Designer.
   1. If at any time utilities are damaged during progress of work, the Contractor shall notify the proper authority without delay and shall at his option repair the damage if approved by the utility agency done to such structures or pay to the

utility the amount required to make proper repairs for such damage. The Contractor shall be responsible for any damage done to persons or property due to damaged structures or his neglect in reporting and/or repairing damaged structures.

2. The Owner or Designer shall not be responsible for any claims the Contractor may have based on underground obstructions being different than shown on the Plans. The Contractor shall, when directed to do so by the Designer, uncover subsurface obstructions before the work reaches them.

G. Requirements and practices shall not be limited to items described herein. Compliance with these items shall not relieve the Contractor of responsibility for providing additional safety or warning devices as job conditions or construction phasing may require.

H. Existing Chemical lines shall be tapped and run above ground until new lines are operational.

I. Any work which requires temporary suspension of utilities or treatment shall be coordinated with the project Designer and the facility staff. A minimum of 48 hours' notice is required.

1.04 WORK SCHEDULE

A. Prior to starting work at the site, the Contractor shall submit a Progress Schedule in accordance with General Conditions and all other applicable sections of this project manual, indicating intended sequence of operations and planned starting and completion times for each operation. Progress Schedule shall be revised and resubmitted as necessary to reflect changes in progress and sequence.

B. Contractor shall expedite work to minimize interference with continuing facility operations.

C. Work at other than normal hours and days (whether for Contractor's convenience, to meet schedule requirements, or due to Owner's requirements) shall be arranged for and scheduled in advance with Owner's approval. No extension of time and no additional compensation will be allowed for additional costs due to work at other than normal times.

1.05 SECURITY DURING CONSTRUCTION

A. Cooperate with User Agency's security staff in maintaining security throughout the construction period.

B. The Contractor shall be solely responsible for security of his temporary facilities, storage areas, equipment and other construction means.

C. The Contractor shall construct and maintain temporary fences and gates, if necessary, for construction as indicated or required.

1.06 EMERGENCY CONTACT

A. Throughout the construction period, the Contractor shall have on call, 24 hours a day and 7 days a week, a responsible representative with authority to act immediately in emergencies involving life safety. Name and telephone number of this representative shall be kept on file with the facility.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01400

QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. References and standards.

B. Mock-ups.

C. Control of installation.

D. Tolerances.

E. Testing and inspection services.

F. Manufacturers' field services.

1.02 REFERENCE STANDARDS

A. ASTM C 1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008.

B. ASTM C 1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2008.

C. ASTM C 1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2008.

D. ASTM D 3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2008.

E. ASTM E 329 - Standard Specification for Agencies Engaged Construction Inspection and/or Testing; 2008.

F. ASTM E 543 - Standard Specification for Agencies Performing Nondestructive Testing; 2008a.

1.03 SUBMITTALS

A. Testing Agency Qualifications:
   1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
   2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

B. Design Data: Submit for Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.

C. Test Reports: After each test/inspection, promptly submit two copies of report to Engineer and to Contractor.
   1. Include:
      a. Date issued.
      b. Project title and number.
      c. Name of inspector.

d. Date and time of sampling or inspection.
e. Identification of product and specifications section.
f. Location in the Project.
g. Type of test/inspection.
h. Date of test/inspection.
i. Results of test/inspection.
j. Conformance with Contract Documents.
k. When requested by Engineer, provide interpretation of results.

2. Test report submittals are for Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.

D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Engineer, in quantities specified for Product Data.
1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
2. Certificates may be recent or previous test results on material or product, but must be acceptable to Engineer.

E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

F. Manufacturer's Field Reports: Submit reports for Engineer's benefit as contract administrator or for Owner.
1. Submit report in duplicate within 30 days of observation to Engineer for information.
2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

G. Erection Drawings: Submit drawings for Engineer's benefit as contract administrator or for Owner.
1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
2. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.04 REFERENCES AND STANDARDS

A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.

C. Obtain copies of standards where required by product specification sections.

D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.

E. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Engineer shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.05 TESTING AND INSPECTION AGENCIES

A. Owner will employ and pay for services of an independent testing agency to perform specified testing.

B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

C. Contractor Employed Agency:
   1. Testing agency: Comply with requirements of ASTM E 329, ASTM E 543, ASTM C 1021, ASTM C 1077, and ASTM C 1093.
   2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
   3. Laboratory: Authorized to operate in the State in which the Project is located.
   4. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
   5. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Have Work performed by persons qualified to produce required and specified quality.

F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.

B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

C. Accepted mock-ups shall be a comparison standard for the remaining Work.

D. Where mock-up has been accepted by Engineer and is specified in product specification sections to be removed, remove mock-up and clear area when directed to do so.

3.03 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

A. EXTENT OF LABORATORY TESTS AND INSPECTIONS
   1. The Designer will recommend to the Owner the type and number of tests to be performed on the Project. The Contractor will be advised of the number and type of tests to be performed by the Testing Laboratory, if different than specified in the various Sections of these Specifications.
   2. Testing Laboratory Services are required for the following items:
      a. Excavation, Filling and Grading
      b. Water Mains
      c. Aggregate Surface Course
      d. Sanitary Sewer
      e. Sanitary Sewer Force Main
      f. Cast-In-Place Concrete
      g. Bridge Components: bridge pile counts, vibration monitoring, dynamic monitoring
   3. The Contractor is responsible for testing laboratory costs necessary to confirm concrete mixes to be used where specified in plans.
   4. Concrete cylinders will be required as requested by the Designer and paid for by the Owner.

B. Selection and payment.
   1. The Owner will engage and pay for the services of an independent testing laboratory to perform inspection and tests of materials and construction as defined in the General Conditions except that in the event of a test failure, the Contractor shall pay for re-testing. Types and extent of testing is specified in detail in applicable Sections of the Specifications.
   2. See individual specification sections for testing required.

C. Testing Agency Duties:
   1. Provide qualified personnel at site. Cooperate with Engineer and Contractor in performance of services.
   2. Perform specified sampling and testing of products in accordance with specified standards. Tests and inspections shall be conducted in accordance with the

requirements of these Specifications, or where no specific procedure is specified, in accordance with the latest standards of ASTM or other recognized authorities applicable to the work being tested.

3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
4. Promptly notify Engineer and Contractor of observed irregularities or non-conformance of Work or products.
5. Perform additional tests and inspections required by Engineer.
6. Submit reports of all tests/inspections specified. The laboratory shall promptly submit written reports of each test and inspection made to the Designer, Contractor, Owner and to such other parties the Designer or Owner may specify.

D. Limits on Testing/Inspection Agency Authority:
   1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
   2. Agency may not approve or accept any portion of the Work.
   3. Agency may not assume any duties of Contractor.
   4. Agency has no authority to stop the Work.

E. Contractor Responsibilities:
   1. Deliver to agency, without cost, at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
   2. Cooperate with laboratory personnel, and provide access to the Work.
   3. Provide incidental labor and facilities:
      a. To provide access to Work to be tested/inspected.
      b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
      c. To facilitate tests/inspections.
      d. To provide storage and curing of test samples.
   4. Advise the laboratory of the identity of material sources and instruct suppliers of required tests or inspections by designated laboratory.
   5. Notify Engineer and laboratory 48 hours prior to expected time for operations requiring testing/inspection services.
   6. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
   7. Notify the laboratory sufficiently in advance of cancellation of required testing operations. The Contractor shall be responsible to the laboratory for charges due to failure to notify if requirements for testing are canceled.
   8. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

F. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Engineer.

G. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

H. ADDITIONAL TESTS
   1. The Owner reserves the right to require additional tests to those specified and the right to require tests upon materials not originally specified to receive testing. Should such additional tests be judged necessary because of apparently defective materials or workmanship, costs of these additional tests shall be borne by the Contractor.

I. CONTRACTOR'S RESPONSIBILITY
   1. Employment of, or failure to employ, a Testing Laboratory by the Owner shall not relieve the Contractor of responsibility to comply with Contract requirements for materials and methods of construction in all parts of the work. Contractor is advised that Testing Laboratory services are for the Owner's purposes and that reports made available to the Contractor are for information only and are not to be construed as a warranty of acceptability of the work.

3.05 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not conforming to specified requirements.

B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01410

REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

A. The following are a list of most but not all Regulatory Requirements which the contractor must abide by during performance of all construction activities. (State Uniform Construction Code) (LAC 55:VI.301)

B. Regulatory requirements applicable to this project are the following:
   1. 28 CFR 35 - Department of Justice accessibility regulations relating to State and local governments; current edition.
   2. 28 CFR 36 - Department of Justice accessibility regulations relating to public accommodations; current edition.
   3. 49 CFR 27, 37, and 38 - Transportation for Individuals with Disabilities; Final Rule; Department of Transportation; current edition.
   4. ATBCB ADAAG - Americans with Disabilities Act Accessibility Guidelines; 2002.

C. State of Louisiana amendments to some or all of the following.
   1. Parish of Livingston amendments to some or all of the following.

D. ICC (IFC) - ICC International Fire Code, 2009.
   1. NFPA 101 - Life Safety Code, 2009.

E. ICC (IBC) - ICC International Building Code, 2009.

F. Plumbing Code: LA State Plumbing Code.

G. ICC (IMC) - ICC International Mechanical Code, 2009.

H. ICC (IFGC) - ICC International Fuel Gas Code, 2009.

I. Private Sewage Disposal Code: Part XIV of the Louisiana State Sanitary Code.

J. NFPA 70 - National Electrical Code, 2008.

K. Energy Code: State of Louisiana.

L. Erosion and Sedimentation Control Regulations: Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R.S. 302001 et seq.).

1.02 RELATED REQUIREMENTS

A. Section **01400** - Quality Requirements.

1.03 PERMITS

A. The contractor must obtain all necessary clearances and permits in accordance with requirements of the General Conditions and all applicable regulations before beginning the project.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Locations
B. Access and Staging Area
C. Temporary utilities.
D. Temporary water and gas services.
E. Temporary Electricity Services
F. Temporary telecommunications services.
G. Temporary sanitary facilities.
H. Temporary Controls: Barriers, enclosures, fencing, and sheet piling.
I. Security requirements.
J. Fire Protection
K. Pumping and Draining
L. Vehicular access and parking.
M. Waste removal facilities and services.
N. Project identification sign.
O. Field offices.

1.02 RELATED REQUIREMENTS

1.03 LOCATIONS

A. Locate temporary facilities and signs in designated areas to avoid interfering with facility operations. All locations of temporary facilities must be approved by facility staff prior to beginning of construction.

1.04 ACCESS AND STAGING AREA

A. In accordance with the general conditions of the contract, it is understood that prior to bidding the Contractor became familiar with the conditions existing at the site, and accepts the site and conditions thereupon as they are.

B. Staging Area: The Contractor and Subcontractors shall locate offices, materials storage and staging, equipment storage and maintenance areas, and similar major facilities in a staging area which does not interfere with operations required under the Contract.

1.05 TEMPORARY UTILITIES

A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes.

B. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.06 TEMPORARY WATER AND GAS SERVICES

A. It shall be the responsibility of the Contractor to determine a source of water and gas service to be used for construction purposes and to make arrangements, pay deposits, furnish and install equipment, piping, valves, outlets and hoses to provide construction water and gas during construction period.

B. The Contractor shall pay all costs for water and gas service for construction purposes and shall pay all costs for water and gas used during construction until acceptance.

C. Provide cold water and paper cups for drinking by Project workers.

1.07 TEMPORARY ELECTRICITY SERVICES

A. It shall be the responsibility of the Contractor to determine a source for electric power to be used for construction purposes, and to make arrangements, pay deposits, furnish and install equipment, poles, wiring, switches and outlets to provide adequate supply of electricity for lighting and power during construction. Meet applicable safety requirements.

B. The Contractor shall pay all costs for providing electric service for construction purposes and shall pay for current used during construction until acceptance.

1.08 TELECOMMUNICATIONS SERVICES

A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.

1.09 TEMPORARY SANITARY FACILITIES

A. Provide adequate temporary toilet facilities for use of persons working at site, as determined by size of work force on site and Local Sanitary Code Requirements.

B. Maintain toilets in a clean and sanitary condition. Provide toilet tissue in suitable holder. Provide natural or artificial light and ventilation to toilet compartments.

C. Remove temporary toilets when construction is completed and accepted.

D. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

E. Maintain daily in clean and sanitary condition.

F. At end of construction, return facilities to same or better condition as originally found.

1.10 BARRIERS

A. Contractor shall construct and maintain, until construction is completed and accepted, fences, barricades and other necessary items required to prevent injury to persons on or about Project site, damage to property and intrusion of unauthorized persons.

B. Provide personal safety equipment for authorized visitors.

C. Protect structures, utilities, sidewalks, pavements, and other facilities immediately adjacent to excavations from damage or displacement.

D. The Contractor will be responsible for maintaining access at all times during construction for the facility.

E. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's

use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

F. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.

G. Provide protection for plants designated to remain. Replace damaged plants.

H. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

I. **Traffic Controls: Contractor shall utilize traffic control plan as provided by engineer.**

1.11 FENCING

A. Construction: Contractor's option.

1.12 SHEET PILING

A. In addition to work specified, provide sheet piling, should such be found necessary. All sheet pile designs must be signed by a licensed engineer in the state where the work is being done.

B. Type, thickness, shoring, bracing and other details in regard to sheet piling shall be Contractor's sole responsibility and shall be determined by him as necessitated by excavation depth, soil conditions, rainfall, traffic adjacent to site and other related factors.

1.13 SECURITY

A. Coordinate with Owner's security program.

1.14 FIRE PROTECTION

A. Provide general temporary fire protection during construction period.

B. Have immediately available suitable fire extinguishers in areas where welding, flame cutting, and other hazardous operations are underway.

1.15 PUMPING AND DRAINING

A. Keep working and storage areas free from water that could damage or that could interfere with progress of work.

B. Slope ground to drain surface water away from excavations and structures.

C. Pump or drain to designated points as determined by the Designer. Distribute discharge to prevent excessive erosion. Replace eroded materials.

1.16 VEHICULAR ACCESS AND PARKING

A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles. Load all trucks bringing materials to site or removing earth and debris from site in a manner to prevent dropping materials, earth or debris on public streets, roads and highways.

B. Coordinate access and haul routes with governing authorities and Owner. Conform to all local regulations regarding load limits.

C. Provide and maintain access to fire hydrants, free of obstructions.

D. Provide means of removing mud from vehicle wheels before entering streets. Maintain an installation at all points where and when trucks enter or leave site to remove materials, mud or debris immediately from streets, roads and highways.

E. Designated existing on-site roads may be used for construction traffic.

F. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

G. Do not allow vehicle parking on existing pavement.

1.17 WASTE REMOVAL

A. See Section **01741** – Construction Waste Management and Disposal, for additional requirements.

B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

C. Provide containers with lids. Remove trash from site daily.

D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

F. Remove temporary work when need for its use has passed.

G. Clean area that was occupied by temporary work. Remove debris, rubbish and excess materials from site on a daily basis.

1.18 PROJECT IDENTIFICATION

A. Provide professional quality project identification sign as shown on the Attachment to this Section 1500.

B. Erect on site at location indicated.

C. Signs, as necessary for safety and to meet insurance requirements will be required.

D. No other signs are allowed without Owner permission except those required by law.

1.19 FIELD OFFICES

A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack and drawing display table.

B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.

C. Locate offices a minimum distance of 30 feet from existing and new structures.

D. For exterior storage, provide suitable and sufficient enclosed covered structures with raised flooring, to protect materials and equipment subject to damage by weather or construction work.

E. Provide weatherproof coverage for materials and equipment needing only limited protection.

F. Allocate and designate storage areas and workspaces for various trades.

G. Arrange temporary buildings and designate storage spaces to avoid interfering with operations, to avoid re-handling and to expedite progress of work.

1.20 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.

B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.

C. Clean and repair damage caused by installation or use of temporary work.

D. Restore existing facilities used during construction to original condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

ATTACHMENT FOLLOWS

SECTION 01571

TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Prevention of erosion due to construction activities.

B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.

C. Restoration of areas eroded due to insufficient preventive measures.

D. Compensation of Owner for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

1.02 REFERENCE STANDARDS

A. EPA (NPDES) - National Pollutant Discharge Elimination System (NPDES), Construction General Permit; current edition.

B. FHWA FLP-94-005 - Best Management Practices for Erosion and Sediment Control; Federal Highway Administration; 1995.

1.03 PERFORMANCE REQUIREMENTS

A. Comply with all requirements of U.S. Environmental Protection Agency for erosion and sedimentation control, as specified for the National Pollutant Discharge Elimination System (NPDES), Phases I and II, under requirements for the 2003 Construction General Permit (CGP).

B. Also comply with all more stringent requirements of State of Louisiana Erosion and Sedimentation Control Manual.

C. Comply with all requirements of St. Tammany Parish for erosion and sedimentation control.

D. Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.

E. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.

1. Obtain and pay for permits and provide security required by authority having jurisdiction.

F. Provide to Owner a Performance Bond covering erosion and sedimentation preventive measures only, in an amount equal to 100 percent of the cost of erosion and sedimentation control work.

G. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.

H. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.

1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.

I. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
1. Control movement of sediment and soil from temporary stockpiles of soil.
2. Prevent development of ruts due to equipment and vehicular traffic.
3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.

J. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
1. Prevent windblown soil from leaving the project site.
2. Prevent tracking of mud onto public roads outside site.
3. Prevent mud and sediment from flowing onto sidewalks and pavements.
4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.

K. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.

L. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.

M. Open Water: Prevent standing water that could become stagnant.

N. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.04 SUBMITTALS

A. See Section **01300** - Administrative Requirements, for submittal procedures.

B. Erosion and Sedimentation Control Plan:
1. Include:
a. Site plan showing grading; new improvements; temporary roads, traffic accesses, and other temporary construction; and proposed preventive measures.

b. Other information required by law.
c. Format required by law is acceptable, provided any additional information specified is also included.

2. Obtain the approval of the Plan by authorities having jurisdiction.
3. Obtain the approval of the Plan by Owner.

C. Certificate: Mill certificate for silt fence fabric attesting that fabric and factory seams comply with specified requirements, signed by legally authorized official of manufacturer; indicate actual minimum average roll values; identify fabric by roll identification numbers.

D. Inspection Reports: Submit report of each inspection; identify each preventive measure, indicate condition, and specify maintenance or repair required and accomplished.

E. Maintenance Instructions: Provide instructions covering inspection and maintenance for temporary measures that must remain after Substantial Completion.

PART 2 PRODUCTS

2.01 MATERIALS

A. Mulch: Use one of the following:
1. Straw or hay.
2. Erosion control matting or netting.

B. Grass Seed for Temporary Cover: Select a species appropriate to climate, planting season, and intended purpose. If same area will later be planted with permanent vegetation, do not use species known to be excessively competitive or prone to volunteer in subsequent seasons.

C. Bales: Air dry, rectangular straw bales.
1. Cross Section: 14 by 18 inches, minimum.
2. Bindings: Wire or string, around long dimension.

D. Bale Stakes: One of the following, minimum 3 feet long:
1. Steel U- or T-section, with minimum mass of 1.33 lb per linear foot.
2. Wood, 2 by 2 inches in cross section.

E. Silt Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
1. Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D 4751.
2. Permittivity: 0.05 sec^-1, minimum, when tested in accordance with ASTM D 4491.
3. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D 4355 after 500 hours' exposure.
4. Tensile Strength: 100 lb-f, minimum, in cross-machine direction; 124 lb-f, minimum, in machine direction; when tested in accordance with ASTM D 4632.
5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D 4632.
6. Tear Strength: 55 lb-f, minimum, when tested in accordance with ASTM D 4533.

7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.

F. Silt Fence Posts: One of the following, minimum 5 feet long:
   1. Steel U- or T-section, with minimum mass of 1.33 lb per linear foot.
   2. Softwood, 4 by 4 inches in cross section.
   3. Hardwood, 2 by 2 inches in cross section.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.02 PREPARATION

A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.03 SCOPE OF PREVENTIVE MEASURES

A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.

B. Construction Entrances: Traffic-bearing aggregate surface.
   1. Width: As required; 20 feet, minimum.
   2. Length: 50 feet, minimum.
   3. Provide at each construction entrance from public right-of-way.
   4. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.

C. Linear Sediment Barriers: Made of silt fences.
   1. Provide linear sediment barriers:
      a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
      b. Across the entrances to culverts that receive runoff from disturbed areas.
   2. Space sediment barriers with the following maximum slope length upslope from barrier:
      a. Slope of Less Than 2 Percent: 100 feet.
      b. Slope Between 2 and 5 Percent: 75 feet.
      c. Slope Between 5 and 10 Percent: 50 feet.
      d. Slope Between 10 and 20 Percent: 25 feet.
      e. Slope Over 20 Percent: 15 feet.

D. Storm Drain Curb Inlet Sediment Trap: Protect each curb inlet using one of the following measures:
   1. Filter fabric wrapped around hollow concrete blocks blocking entire inlet face area; use one piece of fabric wrapped at least 1-1/2 times around concrete blocks and secured to prevent dislodging; orient cores of blocks so runoff passes into inlet.
   2. Straw bale row blocking entire inlet face area; anchor into pavement.

E. Storm Drain Drop Inlet Sediment Traps: As detailed on drawings.

F. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit application; provide at downspout outlets and storm water outlets.

G. Soil Stockpiles: Protect using one of the following measures:
   1. Cover with polyethylene film, secured by placing soil on outer edges.
   2. Cover with mulch at least 4 inches' thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.

H. Mulching: Use only for areas that may be subjected to erosion for less than 6 months.

I. Temporary Seeding: Use where temporary vegetated cover is required.

3.04 INSTALLATION

A. Traffic-Bearing Aggregate Surface:
   1. Excavate minimum of 6 inches.
   2. Place geotextile fabric full width and length, with minimum 12-inch overlap at joints.
   3. Place and compact at least 6 inches of 1.5 to 3.5-inch diameter stone.

B. Silt Fences:
   1. Store and handle fabric in accordance with ASTM D 4873.
   2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16-inch-high barriers with minimum 36-inch-long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
   3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28-inch-high barriers, minimum 48-inch-long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
   4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32-inch-high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
   5. Install with top of fabric at nominal height and embedment as specified.
   6. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
   7. Fasten fabric to wood posts using one of the following:
      a. Four 3/4-inch diameter, 1-inch-long, 14 gage nails.
      b. Five 17-gage staples with 3/4-inch-wide crown and 1/2 inch legs.
   8. Fasten fabric to steel posts using wire, nylon cord, or integral pockets.
   9. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.

C. Straw Bale Rows:
   1. Install bales in continuous rows with ends butting tightly, with one bale at each end of row turned uphill.
   2. Install bales so that bindings are not in contact with the ground.
   3. Embed bales at least 4 inches in the ground.
   4. Anchor bales with at least two stakes per bale, driven at least 18 inches into the ground; drive first stake in each bale toward the previously placed bale to force bales together.

5. Fill gaps between ends of bales with loose straw wedged tightly.
6. Place soil excavated for trench against bales on the upslope side of the row, compacted.

D. Mulching Over Large Areas:
1. Dry Straw and Hay: Apply 2-1/2 tons per acre; anchor using dull disc harrow or emulsified asphalt applied using same spraying machine at 100 gallons of water per ton of mulch.
2. Erosion Control Matting: Comply with manufacturer's instructions.

E. Mulching Over Small and Medium Areas:
1. Dry Straw and Hay: Apply 4 to 6 inches' depth.
2. Erosion Control Matting: Comply with manufacturer's instructions.

F. Temporary Seeding:
1. When hydraulic seeder is used, seedbed preparation is not required.
2. When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
3. If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1000 sq ft.
4. On soils of very low fertility, apply 10-10-10 fertilizer at rate of 12 to 16 pounds per 1000 sq ft.
5. Incorporate fertilizer into soil before seeding.
6. Apply seed uniformly; if using drill or cultipacker seeders place seed 1/2 to 1 inch deep.
7. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
8. Repeat irrigation as required until grass is established.

3.05 MAINTENANCE

A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.

B. Repair deficiencies immediately.

C. Silt Fences:
1. Promptly replace fabric that deteriorates unless need for fence has passed.
2. Remove silt deposits that exceed one-third of the height of the fence.
3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.

D. Straw Bale Rows:
1. Promptly replace bales that fall apart or otherwise deteriorate unless need has passed.
2. Remove silt deposits that exceed one-half of the height of the bales.
3. Repair bale rows that are undercut by runoff or otherwise damaged, whether by runoff or other causes.

E. Clean out temporary sediment control structures weekly and relocate soil on site.

F. Place sediment in appropriate locations on site; do not remove from site.

3.06 CLEAN UP

A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Engineer.

B. Clean out temporary sediment control structures that are to remain as permanent measures.

C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION

SECTION 01600

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. General product requirements.

B. Re-use of existing products.

C. Transportation, handling, storage and protection.

D. Product option requirements.

E. Substitution limitations and procedures.

F. Procedures for Owner-supplied products.

G. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

A. Section **01400** - Quality Requirements: Product quality monitoring.

B. Section **01741** - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.

1.03 GENERAL REQUIREMENTS

A. Material and equipment incorporated into the work shall conform to applicable specifications and standards.

B. Comply with size, make, type and quality specified, or as specifically approved in writing by the Designer.

C. Manufactured and Fabricated Products:
   1. Design, fabricate and assemble in accordance with the engineering and shop practices accepted as standard by the industry.
   2. Component parts of multiple items shall be interchangeable.
   3. Two or more items of the same kind shall be identical, by the same manufacturer.
   4. Product shall be suitable for the service conditions in which they will be used.
   5. Provide equipment in the capacities, sizes and dimensions shown or specified unless variations are specifically approved in writing.

D. Do not use material or equipment for any purpose other than that for which designed or specified.

1.04 REFERENCE STANDARDS

A. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.

1.05 SUBMITTALS

A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
   1. Submit within 15 days after date of Agreement.
   2. For products specified only by reference standards, list applicable reference standards.

B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
   1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

1.06 MANUFACTURER'S INSTRUCTIONS

A. Install work in compliance with Manufacturer's printed instructions unless conflicting requirements are specified. Obtain and distribute copies of such instructions to parties involved in the installation, including two (2) copies to the Designer for information only.
   1. Maintain one (1) set of complete instructions at the job site during installation and until completion.

B. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
   1. Should job conditions or specified requirements conflict with Manufacturer's instructions, consult with Designer for further instructions.
   2. Do not proceed with work without clear instructions.

C. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

A. Reused Products: Reused products include materials and equipment previously used in this or other construction, salvaged and refurbished as specified.

2.02 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

B. Do not use products having any of the following characteristics:

2.03 PRODUCT OPTIONS

A. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

B. At the pre-construction conference, submit a complete list of major products proposed to be used, with the name of the Manufacturer and the installing Subcontractor.

2.04 MAINTENANCE MATERIALS

A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.

B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.

B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

C. A request for substitution constitutes a representation that the submitter:
   1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
   2. Will provide the same warranty for the substitution as for the specified product.
   3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
   4. Waives claims for additional costs or time extension that may subsequently become apparent.

D. Substitution Submittal Procedure:
   1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
   2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
   3. The Engineer will notify Contractor in writing of decision to accept or reject request.

3.02 OWNER-SUPPLIED PRODUCTS

A. Owner's Responsibilities:
   1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
   2. Arrange and pay for product delivery to site.
   3. On delivery, inspect products jointly with Contractor.
   4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
   5. Arrange for manufacturers' warranties, inspections, and service.

B. Contractor's Responsibilities:
   1. Review Owner reviewed shop drawings, product data, and samples.
   2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
   3. Handle, store, install and finish products.
   4. Repair or replace items damaged after receipt.

3.03 TRANSPORTATION AND HANDLING

A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

B. Arrange deliveries of Products in accordance with construction schedules. Coordinate all deliveries with the facility to avoid conflict with work and conditions at the site.

C. Deliver Products in undamaged condition, in Manufacturer's original containers or packaging, with identifying labels intact and legible.

D. Transport and handle products in accordance with manufacturer's instructions.

E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.

B. Store and protect products in accordance with manufacturers' instructions.

C. Store with seals and labels intact and legible.

D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product. Maintain temperature and humidity within the ranges required by manufacturer's instructions.

E. For exterior storage of fabricated products, place on sloped supports above ground. Store fabricated products above the ground, on blocking or skids. Cover products which are subject to deterioration with impervious sheet coverings, with adequate ventilation to avoid condensation.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products. Prevent soiling and staining.

G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

H. Prevent contact with material that may cause corrosion, discoloration, or staining.

I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

K. Store Products in such a manner as to prevent damage to in-place work.

L. Protection After Installation: Provide substantial coverings as necessary to protect installed Products from damage from traffic and subsequent construction operations. Remove when no longer needed.

3.05 REPLACEMENT AND REPAIR

A. Promptly remove damaged, defective and non-conforming material and equipment and replace with new material and equipment.

B. Subject to Designer's approval, damaged and defective material and equipment may be repaired to condition equivalent to acceptable new condition. Material and equipment that cannot be satisfactorily repaired shall be removed and replaced.

END OF SECTION

SECTION 01711

MOBILIZATION

PART 1 GENERAL

1.01 DESCRIPTION

A. This work consists of preparatory work and operations, including those necessary for movement of personnel, equipment, supplies and incidentals to the project site; the establishment of offices, buildings and other facilities necessary for work on the project; the cost of bonds and any required insurance; and other preconstruction expenses necessary for start of the work, excluding the cost of construction materials.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION

3.01 CONSTRUCTION REQUIREMENTS

A. Payment will be made at the contract lump sum price, subject to the following provisions:

B. Partial payments for mobilization will be made in accordance with the following schedule up to a maximum of 10 percent of the original total contract amount, including this item, and payment of any remaining amount will be made upon completion of all work under the contract.

Percent of Total Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Item
1st Partial Estimate	25
25	50
50	75
75	100

C. Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the contract.

D. When the contract does not have a pay item for mobilization, no direct payment will be made for mobilization.

END OF SECTION

SECTION 01712

FIELD ENGINEERING

PART 1 GENERAL

1.01 GENERAL REQUIREMENTS

A. **Contractor shall provide the services of a Registered Land Surveyor for laying out lines and establishing elevations of structures and improvements including all piping, equipment and foundation elevations.**

B. The Surveyor shall locate benchmarks and other reference points necessary to establish location, limits and extent of work.

1.02 SITE WORK

A. Perform instrumental readings as follows:
   1. Verify grade elevations.
   2. Following filling and grading operations, but not earlier than two (2) weeks before Final Inspection, to certify that final grade elevations comply with grade elevations indicated on Drawings and are within tolerances specified.

B. Perform instrumental readings at established grade points indicated on Drawings.

1.03 RECORDS

A. Submit written records or readings to Designer before Final Inspection.

B. Include documentation of location and elevation of monument.

C. The Surveyor shall certify to the Owner that locations and elevations are in compliance with the Contract Documents.

D. A record (location and elevation) of all the following items that apply to this project shall be submitted by the Contractor to the Designer prior to Substantial Completion. (Contractor shall fill out and submit records in table form.)
   1. Road Grade Elevations
   2. Ditch Grades
   3. Pile cutoff elevations

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01741

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

A. Owner requires that this project generate the least amount of trash and waste possible.

B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.

C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.

D. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.

E. Methods of trash/waste disposal that are not acceptable are:
   1. Burning on the project site.
   2. Burying on the project site.
   3. Dumping or burying on other property, public or private.
   4. Other illegal dumping or burying.

F. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

G. Fire Protection: Store volatile waste in covered metal containers, and remove from premises daily.

H. Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and anti-pollution laws.

I. Disposal of volatile fluid wastes (such as mineral spirits, oil or paint thinner) in sanitary or storm system is not permitted.

J. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

K. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

1.02 RELATED REQUIREMENTS

A. Section **01500** - Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.

B. Section **01600** - Product Requirements: Waste prevention requirements related to delivery, storage, and handling.

1.03 DEFINITIONS

A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.

B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.

C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.

D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.

E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.

F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.

G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.

H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.

I. Return: To give back reusable items or unused products to vendors for credit.

J. Reuse: To reuse a construction waste material in some manner on the project site.

K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.

L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.

M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.

N. Toxic: Poisonous to humans either immediately or after a long period of exposure.

O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.

P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

PART 2 PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

A. See Section **01600** - Product Requirements for substitution submission procedures.

B. For each proposed product substitution, submit the following information in addition to requirements specified in Section **01600**:
   1. Relative amount of waste produced, compared to specified product.
   2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Price.
   3. Proposed disposal method for waste product.
   4. Markets for recycled waste product.

PART 3 EXECUTION

3.01 WASTE MANAGEMENT PROCEDURES

B. See Section **01500** for additional requirements related to trash/waste collection and removal facilities and services.

C. See Section **01600** for waste prevention requirements related to delivery, storage, and handling.

3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION

A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.

B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Engineer.

C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.

D. Meetings: Discuss trash/waste management goals and issues at project meetings.
   1. Pre-bid meeting.
   2. Pre-construction meeting.
   3. Regular job-site meetings.

E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
   1. Provide containers as required.
   2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
   3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.

F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.

G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.

H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.

I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

J. Execute periodic cleaning of Project site to ensure that grounds and adjacent properties are maintained free from accumulation of waste material and rubbish caused by Project construction operations.

K. Sprinkle dusty debris with water.

L. At reasonable intervals during progress of work, clean up site and dispose of waste materials, rubbish, and debris.

M. Provide for collection of waste materials, rubbish and debris.

N. Do not allow waste materials, rubbish, debris and garbage to accumulate and become unsightly, unhealthy or hazardous.

O. Remove waste materials, rubbish, and debris from the site and legally dispose of same at public or private dumping areas away from Project site.

P. Broom clean paved surfaces; rake clean other surfaces of grounds.

Q. Maintain cleaning until Project or portion thereof is accepted by the Owner.

END OF SECTION

SECTION 01742
CLEAN-UP

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

Clean-up required for specific work is specified in Sections pertaining to that work.

1.2 REQUIREMENTS

A. Fire Protection: Store volatile waste in covered metal containers, and remove from premises daily.

B. Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and anti-pollution laws.

C. Disposal of volatile fluid wastes (such as mineral spirits, oil or paint thinner) in sanitary or storm system is not permitted.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.1 DURING CONSTRUCTION

A. Execute periodic cleaning of Project site to ensure that grounds and adjacent properties are maintained free from accumulation of waste material and rubbish caused by Project construction operations.

B. Sprinkle dusty debris with water.

C. At reasonable intervals during progress of work, clean up site and dispose of waste materials, rubbish, and debris.

D. Provide for collection of waste materials, rubbish and debris.

E. Do not allow waste materials, rubbish, debris and garbage to accumulate and become unsightly, unhealthy or hazardous.

F. Remove waste materials, rubbish, and debris from the site and legally dispose of same at public or private dumping areas away from Project site.

3.2 FINAL CLEANING

A. Broom clean paved surfaces; rake clean other surfaces of grounds.

B. Maintain cleaning until Project or portion thereof is accepted by the Owner.

END OF SECTION

DIVISION 02

SITE WORK

SECTION 020010

TECHNICAL SPECIFICATIONS

PART 1 - INSTRUCTIONS FOR PROCUREMENT

1.1 STANDARDS

A. Louisiana Standard Specifications for Roads and Bridges* (2016 Edition) are hereby incorporated as the Technical Specifications for this project.

B. The Order of Precedence for technical requirements shall be as follows:
   1. Special provisions contained within Part 2 of this specification section.
   2. Supplemental Specifications contained within Part 3 of this specification section.
   3. Specifications contained within this project manual.
   4. LA DOTD Standard Specifications for Roads and Bridges 2016 Edition (LA DOTD Specifications).
      Available online at:

      http://wwwsp.dotd.la.gov/inside_LaDOTD/Divisions/Engineering/Standard_Specifications/

      or

      Copies of the Louisiana Standard Specifications for Road and Bridges* (2016 Edition) may be obtained by mail for a $20.00 fee from the following address:

      Louisiana Department of Transportation & Development
      General Files Unit
      Post Office Box 94245
      Baton Rouge, Louisiana 70804-9245

C. Relation of Louisiana Standard Specifications for Roads and Bridges to this Construction Project:
   1. Substitution of Names:
      The word "Engineer, or his duly authorized agents," shall be substituted wherever reference (direct or indirect) is made to the "Louisiana Department of Transportation and Development or its agents."
   2. Relation of Contract Documents:
      In the event of conflict between the material contained in the Louisiana Standard Specifications for Roads and Bridges and the rest of the contract documents and drawings, the Louisiana Standard Specifications for Road and Bridges shall be considered as the least priority.
   3. Observation:
      Observations shall be performed by the Engineer or an independent inspection laboratory chosen by the Owner and paid for by the Owner. Tests to be performed before acceptance of the project are, but not limited to, those specified in the

Louisiana Standard Specifications for Roads and Bridges, 2016 Edition. It is the Contractor's responsibility to notify the Engineer or the testing laboratory in writing one week before commencing work and verbally twenty-four (24) hours in advance of any work.

1.2 MATERIALS AND CONSTRUCTION

A. Meet the requirements of the following sections of the referenced LA DOTD Standard Specifications for Roads and Bridges (except the Method of Measurement and Basis of Payment subsections) and the Plans, Supplemental Specifications and Special Provisions:

1.	Clearing and Grubbing	Section 201
2.	Removal Structures and Obstructions	Section 202
3.	Removal of Base	Section 202
4.	Removal of Bridge (Sta. 16+40)	Section 202
5.	Excavation and Embankment	Section 203
6.	Temporary Hay Bales	Section 204
7.	Temporary Silt Fencing	Section 204
8.	Class II Base Course	Section 302
9.	Asphalt (Wearing, Base Course)	Section 501
10.	Asphalt Concrete	Section 502
11.	Asphalt Concrete Pavement Patching	Section 510
12.	Riprap (30 lb., 18”)	Section 711
13.	Geotextile Fabric	Section 711
14.	Temporary Signs and Barricades	Section 713
15.	Mulch (Vegetative)	Section 716
16.	Seeding	Section 717
17.	Fertilizer	Section 718
18.	Mobilization	Section 727
19.	Construction Layout	Section 740
20.	Precast Concrete Piles (16”)	Section 804
21.	Dynamic Monitoring Assistance	Section 804
22.	Construction Site Survey	Section 804
23.	Vibration Monitoring	Section 804
24.	Class A1 Concrete (Deck) (Lightweight)	Section 805
25.	Class A1 Concrete (Bent Cap)	Section 805
26.	Concrete Finish (Class 2 Rubbed Finish)	Section 805
27.	Concrete Finish (Class 3 Special Finish)	Section 805
28.	Deformed Reinforcing Steel	Section 806
29.	Structural Metalwork (Anchor Bolts & Hardware, Joint Armor)	Section 807
30.	Structural Metalwork (Erect Pre-Fabricated Steel Truss)	Section 807
31.	Concrete Approach Slabs (Cast-in-place)	Section 813
32.	Sealed Expansion Joint (End Dams and preformed neoprene seal)	Section 815

B. All other work not sated in the above list shall conform to the applicable sections which govern the specific type of work in the referenced LA DOTD Standard Specifications for Roads and Bridges.

PART 2 - SPECIAL PROVISIONS

2.1 DESCRIPTION

A. Construct a functionally complete project, in accordance with the Contract.

B. Provide all resources that may reasonably be inferred from the Contract to produce the intended result, without any adjustment in the Bid Amount or Contract Time.

C. Bid Amount and Contract Time may only be modified by Change Order or Supplemental Agreement.

D. Work items descriptions, materials, and construction requirements will conform to the applicable Highway Specification sections. Assume sole responsibility for means, methods, techniques, sequences or procedures for the Work.

E. Submit a Proposed Schedule of Values as required under **Section 004373**. Include quantities and prices of pay items aggregating the Contract Price. Obtain the Engineer's approval of the Schedule of Values before beginning contract work.

2.2 METHOD OF MEASUREMENT

A. The work will not be measured for payment under this pay item, or any related pay item in the sections listed in the referenced technical or supplemental specifications.

2.3 BASIS OF PAYMENT

A. Partial payments will be calculated by the amount of work completed based on the approved Schedule of Values and Applications for Payment.

PART 3 - SUPPLEMENTAL TECHNICAL SPECIFICATIONS

3.1 GENERAL

A. Asphalt Concrete Mixture shall be PG70-22m and meet the requirements of Section 502 LA DOTD Standard Specifications for Roads and Bridges, 2016 Edition.

B. No adjustments will be made to asphalt unit prices based on fluctuations in commodity prices, including fuel.

C. Contractor shall be responsible for proof rolling of subgrade at no direct pay.

END OF SECTION

SECTION 020020

SPECIAL PROVISIONS FOR PREFABRICATED HALF THROUGH TRUSS PEDESTRIAN BRIDGE

SECTION 800

The Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, is amended to include the following:

1.0 GENERAL

1.1 Scope

These specifications are for fully engineered half through truss (no overhead bracing) bridge of steel construction and shall be regarded as minimum standards for design and fabrication. The work included under this item shall consist of design, fabricating, finishing and transporting the steel truss bridge superstructure including bearings. These specifications are based on products designed and manufactured by Contech Engineered Solutions LLC.

1.2 Definitions

- *Owner*: Entity who ultimately will own the bridge.
- *Engineer*: Engineering Entity or Firm who will be representing the Owner.
- *Contractor*: Entity who will be installing, and/or purchasing, the bridge.
- *Foundation Engineer*. Engineering Entity or Firm who will be designing and detailing the foundation system.
- *Geotechnical Engineer*. Engineering Entity or Firm who will be responsible for providing the Geotechnical information necessary to design the foundation system.
- *Bridge Manufacturer*: Firm who will be designing and supplying the bridge in accordance with these Special Provisions.

1.3 Qualified Bridge Manufacturer

Each Contractor is required to identify their intended supplier as part of the bid submittal. Qualified Bridge Manufacturers must have at least 5 years of experience fabricating these types of structures and shall have an up to date quality certification by AISC per Section 14.1 of these specifications. All suppliers shall fabricate their product utilizing a modern fabrication facility owned and operated by the Bridge Manufacturer that includes the use of CNC

beam drilling machines, no brokers are allowed.

Pre-Approved Bridge Manufacturer:

Contech Engineered Solutions LLC
1-800-338-1122
E-mail: info@conteches.com

Bridge Manufacturers, other than those listed above, may be used provided the Engineer receives a written request at least 10 days prior to the bid. The written request shall accompany the following information:

- Bridge Manufacturer's Product Literature,
- Name and resume of Bridge Manufacturer's design professional who will be signing and sealing the engineering submittals,
- Copy of current AISC certification,
- Representative copies of detailed drawings, field procedures, calculations, quality control manual, welder's certifications, proof of in-house C.W.I.,
- Listing of projects including owner, location, size, year of fabrication, contact person,
- Certification by the Bridge Manufacturer's Design Professional that the bridge proposed will be in accordance with all project development done up to the date of these specifications.

The above will be evaluated by the Engineer for accuracy and ability to provide the bridge in accordance with these specifications. Bridge Manufacturers other than those listed above may only be used if the Engineer provides written approval via addendum 5 days prior to the bid. The Engineer's ruling shall be final.

1.4 Bridge Manufacturer's Design Professional and Submittals

The Bridge Manufacturer shall have as a direct employee, an engineer who is experienced in bridge design to be in responsible charge of all engineering related task and design. The engineer shall have a minimum of 10 years of experience in bridge design and be a currently licensed civil or structural Professional Engineer in the State of Louisiana and shall be the engineer who will seal and sign the plans.

Prior to the submittal of engineering drawings, structural calculations for the design of the bridge superstructure, including truss reactions, shall be prepared by the Bridge Manufacturer and submitted for review and approval by the Engineer of Record. Calculations shall include complete design, analysis and code checks for the controlling members, connectivity and support conditions, truss stability checks, deck design, deflection checks, bearings, all splices, and all truss

reactions.

Engineering drawings, 11x17 format, shall be prepared and submitted to the Contractor for review and approval by the Engineer of Record after receipt of the order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the bridge being fabricated. All relative design information such as member size, ASTM/AASHTO material specification, dimensions necessary to fabricate and required welding shall be clearly shown on the drawings. Drawings shall have referenced details and sheet numbers. All drawings shall be stamped, signed and dated by the Bridge Manufacturer's Design Professional.

An As-Designed Load Rating Report for the truss shall be prepared and submitted to the Contractor. Load rating and deliverables shall be in accordance with LADOTD requirements and shall be stamped by the Bridge Manufacturer's Design Professional.

2.0 APPLICABLE CODES AND STANDARDS

2.1 Governing Specifications

Bridge shall be designed in compliance with the AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2009 (*AASHTO Ped*). Calculations shall be in accordance with this document, and formulas shall reference the appropriate sections.

2.2 Other Reference Codes, Specifications and Standards

- AASHTO LRFD Bridge Design Specifications, 9th Edition, 2020 (*AASHTO LRFD*)
- AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, First Edition, 2005 (*AASHTO Signs*)
- AISC Steel Construction Manual, 15th Edition, 2017 (*AISC*)
- ANSI/AISC 360-16 Specification for Structural Steel Buildings, 2016 *(AISC 360)*
- American Welding Society, Structural Welding Code, D1.1, 2015 (*AWS D1.1*)
- ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures, 2010 (*ASCE 7*)
- Setra Technical Guide for Footbridges, 2006 (Setra)
- ANSI/AWC NDC-2015 National Design Specification for Wood Construction, 2015 (*NDS*)
- Tropical Timbers of the World, US Forest Products Laboratory

The AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges shall control if any conflicting requirements occur with the Other Reference Documents and/or other local Codes.

3.0 BRIDGE SYSTEM TYPE

3.1 Truss Style

The truss style shall be a Connector®. The vertical trusses shall be designed such that the top and bottom chord members are parallel for the entire length of bridge. The interior verticals of the trusses shall be perpendicular to the top face of the bottom chord and the end verticals of the trusses shall be plumb. Trusses shall be laid out such that diagonals shall be at an angle of 30-degrees or more with respect to the bottom chord.

3.2 Diagonal Style

The vertical truss shall use a single-diagonal, Pratt configuration, where all the diagonals are in tension for gravity loads.

3.3 Floor Beam Location

The bridge shall utilize an H-Section configuration where the ends of the floor beams are welded only to the interior face of the verticals. The distance from the top of deck to the bottom of the bottom chord shall be determined by the Bridge Manufacturer during final design.

4.0 BRIDGE GEOMETRY

4.1 Span Length

The bridge span length shall be 255’-0” (horizontal straight line dimension) and measured from end to end of the bridge truss, not including the end dam, any deck extension or bearing that extends beyond the end of the truss.

4.2 Width

The bridge width shall provide a minimum clearance of 12'-0” between all interior railing elements.

4.3 Top of Truss Height Above Deck

The top of the top chord shall not be less than 48" above the deck (measured from the high point of the deck). Note that this dimension may be exceeded due to truss

height requirements for structural, deflection and vibration requirements.

4.4 Lower Steel Clearance

The maximum distance from the top of the deck (measured from the highest point of the deck) to the bottom of any steel member shall be 4'-4".

4.5 Truss Bay Spacing

The number of bays and the dimension of the panel points shall be determined by the Bridge Manufacturer.

4.6 Camber

A single simple-span bridge shall have a vertical camber dimension at the mid-span determined by the Bridge Manufacturer such that the deck slopes at any point on the bridge do not exceed the ADA requirements of 8.33%.

4.7 Elevation Difference

The top of the decks shall be at the same elevation at each end of the bridge.

5.0 STRUCTURAL DESIGN LOADS

5.1 Dead Load

The bridge structure shall be designed for the total bridge weight including the final deck system.

5.2 Pedestrian Loading (PL)

The bridge structure shall be designed for a uniform pedestrian loading of 90 psf. This loading shall be patterned to produce the maximum load effects. Consideration of dynamic load allowance is not required with this loading.

5.3 Vehicle Load (VL)

When vehicular access is not prevented by permanent physical methods, the superstructure and deck system shall be designed for each of the following concentrated/vehicular loads:

- A concentrated load of 1,000 pounds placed on any area 2.5' by 2.5' square.
- A single truck shall be placed to produce the maximum load effects and shall not be placed in combination with the pedestrian load. The dynamic load allowance need not be considered for this loading. The truck shall be

the following:

- H10 vehicle (20,000 pound two-axle vehicle with 80% to rear axle).

5.4 Wind Load (WS)

Pedestrian bridges shall be designed for wind loads as specified in *AASHTO Signs*, Articles 3.8 and 3.9. The loading shall be applied over the exposed area in front elevations of both trusses including all enclosures.

In addition to the wind load specified above, a vertical uplift line load as specified in *AASHTO LRFD* Article 3.8.2 and determined as the force caused by a pressure of 20 psf over the full deck width, shall be applied concurrently. This loading shall be applied at the windward quarter point of the deck width.

5.5 Seismic (EQ)

The bridge structure shall be designed for seismic loading as specified in Section 3.10 of *AASHTO LRFD*. The transverse loads shall be calculated considering the transverse period of the bridge and longitudinal loads shall be calculated using a period of zero. A response modification factor of 0.8 shall be used for the calculation of forces applied to the bridge anchorage. A response modification factor of 1.0 shall be used for the calculation of bearing reactions. The transverse seismic load shall be applied to all the bearings and the longitudinal seismic load shall be applied to the fixed bearings only. The vertical bearing reactions shall be calculated using an overturning force on the bridge based on the center of gravity of the bridge times the transverse seismic load.

5.6 Fatigue Load (FL)

The fatigue loading shall be as specified in Section 11 of *AASHTO Signs*. The Natural Wind Gust specified in Article 11.7.1.2 and the Truck-Induced Gust specified in Article 11.7.1.3 of *AASHTO Signs* only need only be considered, as appropriate.

Choose Other Loads
Choose Other Loads
Choose Other Loads
Choose Other Loads
Choose Other Loads

5.7 Combination of Loads

The load combinations and load factors to be used shall be as specified in *AASHTO LRFD* Table 3.4.1-1, with the following exceptions:

- Load combinations Strength II, Strength IV, and Strength V need not be

considered.

- The load factor for Fatigue I load combination shall be taken as 1.0, and Fatigue II load combination need not be considered.

6.0 STRUCTURAL DESIGN CRITERIA

6.1 Modeling

The bridge shall be modeled and analyzed utilizing a three-dimensional computer software which shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered. All loads listed in Section 5 of these specifications shall be applied to the model and analyzed appropriately.

6.2 Lateral Frame and Member Design

The bridge shall be designed and proportioned such that appropriate lateral stiffness is provided locally and globally, to ensure that the structure is stable.

For bridges without any overhead members (Half-Through Trusses), the vertical truss members, the floor beams and their connections shall be proportioned to resist a lateral force applied at the top of the truss verticals at the center of the top chord. This lateral force shall be applied as an additional load to the top of the vertical at the center of the top chord, creating a cantilever moment, which is then added to the forces obtained from the three-dimensional model. The magnitude of this lateral force shall not be less than 0.01/K times the average factored design compressive force in the two adjacent top chord members increased by a factor of safety of 1.33.

The top chord shall be analyzed as a column with elastic lateral supports at the panel points, considering all moments due to in-plane and out-of-plane bending, along with moments due to eccentricities of the members.

The U-Frame Stiffness of the verticals and floor beams shall be as specified in *AASHTO Ped* Article 7.1.2, assuming that the vertical and floor beam connection is rigid. This means that the following must be met:

- On H-Section floor beam connections, the floor beam width shall be at least 80% of the vertical face width in order to prevent any deformation due to tube wall plastification of the vertical member faces under service loads. The connection design will be checked at Strength I & Strength III load combinations.
- On Underhung floor beam connections, the vertical width shall match the bottom chord width in order to transfer vertical moments through the walls of the bottom chord to the verticals with no deformation of the chord side

walls due to sidewall yielding or crippling under service loads. The connection design will be checked at Strength I & Strength III load combinations.

- The vertical and floor beam members shall not be connected to faces of the bottom chord at a 90-degrees to one another.
- All fixed end moments in the floor beams and verticals due to floor beam rotations, in addition to the loads derived from a U-Frame analysis have been accounted for in the strength design of the connections.

The vertical and floor beam members shall be proportioned such that the effective length factor, K, used in the design of the top chord shall not be greater than 2.0.

The end verticals shall be designed as a simple cantilever to carry the loads obtained from the three-dimensional model, plus the cantilever moment due to a lateral load of 0.01 times the axial force in the end vertical, applied laterally at the top end of the end vertical at the center of the top chord.

The floor beams shall be sized for the forces obtained from a simple span, pinned end analysis, or from the forces obtained from the three-dimensional model, whichever controls.

The diagonals and brace diagonals shall be analyzed as pinned-end connection members.

Interior verticals shall be analyzed as pinned-end connections unless longitudinal forces are applied to the verticals such as when the brace diagonals are connected to floor beams on an H-Section floor beam configuration. When longitudinal forces are applied to the verticals they shall be analyzed as fixed-end connections.

All other members shall be analyzed as fixed-end connections.

HSS member connections shall be evaluated per the requirements of *AISC 360* Chapters J & K.

6.3 Deflections

The vertical deflection of the bridge due to the unfactored pedestrian live loading shall not exceed 1/360 of the span length.

The horizontal deflection of the bridge under unfactored wind loading shall not exceed 1/360 of the span length.

6.4 Fracture

The fracture toughness requirements and designation of Fracture Critical Member

and Main Member designation are hereby waived for these structures.

6.5 Vibrations

Vibration of the structure shall not cause discomfort or concern to the users of the bridges. To assure this, the fundamental frequency (f) of the pedestrian bridge in the vertical direction, without live load, shall be greater than 3.0 hertz (Hz) to avoid the first harmonic. The fundamental frequency of the pedestrian bridge in the lateral direction, shall be greater than 1.3 Hz. If the fundamental frequency cannot satisfy these limitations, then the bridge should be proportioned such that either of the following criteria are satisfied:

$$f \geq 2.86 * \ln(180/W)$$

or

$$W \geq 180 * e^{(-0.35 * f)}$$

Where W is the weight of the bridge in kips and f is the fundamental frequency in the vertical direction in Hz.

For bridges longer than 85 ft and shorter than 125 ft the vertical and horizontal vibration must also meet the requirements for Bridge Class III with a Mean comfort level in accordance with *Setra*.

7.0 DECK SYSTEM

7.1 Deck System

Truss Manufacturer is responsible for the structural design of the reinforced concrete deck. Mix design and structural design shall be performed by a Professional Engineer licensed in the state of Louisiana.

Reinforced concrete shall be lightweight concrete (115 pounds per cubic foot maximum) and shall have a minimum compressive strength of 4,500 psi at 28 days, with an air content of 5% +/- 1%.

Concrete mix design, materials, quality, mixing, placement, finishing and testing shall be in accordance with the requirements of Section 552 of Federal Highway Administration Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-14). FP-14 can be viewed or downloaded at: http://flh.fhwa.dot.gov/resources/specs

The surface of deck concrete shall be finished with a sidewalk finish per Section 552.14(c) of FP-14.

Stay-in-place galvanized (G90 coating) metal form deck shall be used and shall be designed to support the weight of the wet concrete plus a 20 pounds per square foot construction load. Form deck shall be shop attached to floor beams via self-drilling fasteners, welding or power actuated fasteners. Welding shall not be used on painted or galvanized bridges. The longitudinal sheet laps shall be attached with self-drilling self-tapping fasteners at 36-inch maximum spacing. The attachment of the form deck to the floor beams is only necessary to keep the form deck in place during transportation and during the concrete placement. The form deck is not to be used for diaphragm action or composite action and provides no structural benefit to the truss or the deck after the concrete is set. Metal form deck panels shall be of a length to span a minimum of two bays of the truss supports. The top of deck to bottom of form deck shall be as required to support the anticipated loads but shall not be less than 5".

The concrete deck shall be designed to span longitudinally from floor beam to floor beam and to support the loads specified in Section 5.0 of these specifications.

A distribution width of deck is allowed, to support the anticipated vehicle wheel loads. This distribution width (E in feet) shall be the narrower of the following:

- E = 4 + .06S
    - Where S is the floor beam spacing minus one-half of the floor beam width.
- One-half of the total driving width of the bridge deck.
- 0.75 times the lateral wheel spacing of the vehicle.
- 0.6S + Wheel Width
    - Where S is the floor beam spacing minus one-half of the floor beam width.
    - The Wheel Width (in inches) is $2.5 * \sqrt{(\frac{0.01 * P}{2.5})}$, where P is the wheel load in pounds

Reinforcing steel shall be ASTM A615 Grade 60 non-coated bars. All bar bends, anchorage and splices shall be in accordance with AASHTO Specifications. Top reinforcing shall have a minimum clearance of 2" to the top of deck. Splices shall be staggered every other longitudinal bar. Splices shall be located at or near the 1/3 point of the bay spans from floor beam to floor beam.

The use of grooved control joints shall be put in per the project contract documents or at the discretion of the engineer and owner. If construction joints are used, they shall be placed over the centerline of the floor beams as needed.

Bridge Manufacturer shall designate the estimated slab thickness and reinforcing requirements at time of quotation. These estimates are to be used for quoting purposes only. Actual quantities may vary during the final design process, with

costs variances due to any changes to the quantities being the sole responsibility of the contractor. Contractor shall supply all concrete and reinforcing materials.

8.0 MATERIALS OF CONSTRUCTION

8.1 Structural Steel

All members of the truss and deck support system shall be fabricated from square or rectangular hollow structural shapes (HSS), with the exception that floor beams may be wide flange shapes. All open ends of end posts and floor support beams shall be capped. Drain holes shall be provided for all sections at the low point of the member that may become filled with water.

All bridges shall be fabricated using A847 for HSS sections and A588 for structural shapes and plates.

Minimum nominal thickness of primary hollow structural shapes shall be 1/4". Rolled shapes shall have a minimum thickness of 1/4".

8.2 Fasteners

Structural bolts used to field splice or connect all main members shall be ASTM F3125 Grade A325. The nuts for these structural bolts shall be ASTM A563. The Bridge Manufacturer shall determine the finish of the structural bolts. They will be either Type 3 (Weathering) or Type 1 (Hot-Dipped or Mechanically Galvanized) as specified by the Bridge Manufacturer.

Bolts used for the connection of a wood rub rail shall be 18-8 or 316 Stainless Steel, ¼" diameter carriage bolts.

Screws for the attachment of wood deck shall be steel, 5/16" diameter, six lobe drive, self-tapping screws. The screws shall have flat heads for the screws in the wood and round heads for the screws on the edge cover. The screws shall have a protective coating that will prevent corrosion due to contact with treated wood and environmental exposure.

Self-drilling fasteners for attachment of the form decking shall be #14 x 1" zinc plated hex washer head Tek screws.

Power Actuated fasteners shall be Hilti sheet metal nail X-ENP-19 fastener.

Other miscellaneous fasteners shall be ASTM A307 zinc plated or galvanized, as determined by the Bridge Manufacturer.

9.0 FINISH

For corrosion resistant high-strength low-alloy (weathering) steel no surface finish treatment is necessary. All exposed surfaces of structural steel to be cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 7, SSPC -SP7 brush-off blast cleaning. Exposed surfaces of steel shall be defined as those surfaces seen from the deck or from the outside and bottom of the structure. All other surfaces to have standard mill finish. The steel will be allowed to form a protective weathering patina over time.

10.0 ATTACHMENTS

10.1 Safety Rails

Safety rail system shall be placed on the inside of the structure, spaced so as to prevent a 6" sphere from passing through the side truss for the full height of the side truss, or 54" , whichever is less. The top of the top chord may be considered the top of the rail system.

Rails system shall consist of horizontal rails. Rails shall be L 1 ¼ x 1 ¼ x 1/8 placed at a 45-degree orientation with both legs welded to truss verticals and with a maximum unsupported length of 6’-0” if placed on the inside of the structure and 7’-0” if placed on the outside of the structure. If the truss vertical spacing is greater than the maximum unsupported length, mid-bay supports will be required. When safety rails are placed on the inside of the structure and not covered by the end vertical, the ends of rail near the end of the bridge shall be mitered at a 45-degree angle, capped and ground smooth. No solid plate covering all rails as a unit will be allowed.

Each element of the pedestrian rail system shall be designed to support a uniformly applied load of 50 pounds per lineal foot, both transversely and vertically, acting simultaneously. In addition, each longitudinal element shall be designed to support a concentrated load of 200 pounds, which will act simultaneously with the above uniform loads at any point and in any direction at the top of the longitudinal element.

The posts of the pedestrian rail system shall be designed for a concentrated load applied at either the center of gravity of the upper longitudinal element or 60" above the top of the walkway, whichever is less. This concentrated load shall be equal to 200 pounds plus 0.05 times the post spacing in feet.

10.2 Toe Plate

Toe Plates shall be steel channel shape section, 4” high by 1” wide minimum with the end of the channel legs welded directly to the inside face of the truss verticals. The maximum unsupported length shall be 7’-0”. If the vertical spacing is greater

than the maximum unsupported length, mid-bay supports will be required. When the ends of the toe plates near the end of the bridge are not covered by the end verticals, they shall be capped and ground smooth. The bottom of the toe plate shall be placed 2" above the finished height of the deck. All seams of the toe plates shall be fully welded to give the appearance of a continuous member (welding should be located at a support member). If toe plates are incorporated into a safety rail system, they may be modified as needed but shall be a minimum of 4" high.

10.3 Rub Rail

Rub Rails shall be provided at a height of 3'-6" from top of the deck to the top of rub rail. Rub rails shall be steel channel shape section, 4" high by 1" wide minimum with the end of the channel legs welded directly to the inside face of the truss verticals. The maximum unsupported length shall be 7'-0". If the vertical spacing is greater than the maximum unsupported length, mid-bay supports will be required. When the ends of the rub rails near the end of the bridge are not covered by the end verticals, they shall be capped and ground smooth. All seams of the rub rails shall be fully welded to give the appearance of a continuous member (welding should be located at a support member). If rub rails are incorporated into a safety rail system, they may be modified as needed but shall be a minimum of 4" high.

10.4 Expansion Joint

The gap between the end of the bridge deck and the back wall of the foundation system be sized to accommodate bridge movements due to thermal expansion of the bridge over the design temperature range. The gaps shall be covered with a steel cover which attaches to the bridge and extends over the gap and onto the top of the foundation system back wall. The steel cover shall have its edges rounded or beveled at a 45-degree angle.

11.0 BEARINGS

11.1 Bearing Type

Bearing type and size shall be designed by the Bridge Manufacturer based on anticipated loads and movements.

11.2 Design Temperature Range

The Design Temperature Range will be site specific and will be determined per *AASHTO LRFD* Article 3.12.2.

11.3 Non-Shrink Grouting

The bridge will be supplied with a lower setting plate. This setting plate shall be leveled and shimmed to the proper elevation. The space between the lower surface of the setting plate and the foundation surface shall be filled with a non-shrink grout capable of achieving a minimum compressive strength equal to or greater than the strength of the foundation concrete. The cost of the leveling, shimming, and non-shrink grout shall be the responsibility of the Contractor.

12.0 FOUNDATIONS

12.1 Foundation System

Bridge foundation system has been designed in accordance with reactions and dimensional information provided by Contech Engineered Solutions LLC. Suppliers other than Contech Engineered Solutions LLC shall provide certification by a Professional Engineer meeting the requirements of Section 1.4 of these specifications at least 10 days prior to the bid to ensure that the foundation design and details (including the anchor bolt details) in the contract plans will accommodate the proposed structure without modifications or cost impacts to the project.

13.0 FABRICATION

13.1 Welding

Welding procedures and weld qualification test procedures shall conform to the provisions of *AWS D1.1*. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification and shall match the corrosion properties of the base metal.

13.2 Welders

Welders shall be qualified for each process and position used while fabricating the bridge. Qualification tests shall be in accordance with AWS D1.1. All weld qualifications and records shall be kept in accordance with the Fabricator's Quality Assurance Manual which has been approved and audited by AISC as the basis for certification.

13.3 Shop Splices

Shop splices for main truss members shall be full penetration welds all around the perimeter of the member. These shop splices shall be performed using a full perimeter backing plate. After welding of the shop splices, the weld shall be ground smooth to match the perimeter of the member. Grinding these welds

smooth is required and will be grounds for rejection of the bridge upon delivery if not completed.

Shop splices for all horizontal rail components to be located at the centerline of the truss verticals, each end welded to the truss vertical and seal welded together. Exposed surface of the seal welds as seen from the deck shall be ground smooth.

Shop spliced for all horizontal stringers to be located at the centerline of the floor beams, each end welded to the floor beam and seal welded together.

13.4 Bolted Splices

For shipping purposes, the bridge may be fabricated in sections. Sections shall be field assembled using bolted connections. No field welding of members shall be allowed.

The chord members of the bridge shall be bolted such that at least two faces of the member are bolted. This is to provide reasonable force distribution around the perimeter of the member. Bolted splices shall be designed and fabricated such that the head of the bolt and washer are the only item exposed. No through-bolting of the member is allowed. The nuts of the fastener cannot be welded to the internal splice plate and shall be held in plate with a nut capture system per Patent US 10,267,345 B2 or equal.

The diagonals and brace diagonals shall be bolted utilizing a through-bolt system with plates on the exterior faces of the members. An internal stiffening plate is required to keep the member from crushing during the bolt tightening process.

All bolted connections are considered to be pretensioned or slip-critical connections. All bolts are to be pretensioned per the requirements of section 8.2 of the Specification for Structural Joints Using High-Strength Bolts. Recommended tightening method of all structural bolts shall be Turn-of-the-Nut Pretensioning.

14.0 QUALITY CONTROL

14.1 AISC Certification

The bridge shall be fabricated in a shop owned by the Bridge Manufacturer. This facility shall have up to date quality certification by AISC as Certified Bridge Fabricator - Advanced (Major) with Fracture Critical Endorsement and Complex Coating Endorsement (P1-Enclosed or P2-Covered).

14.2 Certified Weld Inspector

The Bridge Manufacturer shall employ at least two Certified Weld Inspectors (CWI), with endorsement by AWS QC1. At least one CWI shall be present during the complete fabrication of the bridge. The CWI shall provide written documentation that the bridge has been fabricated in accordance with these specifications and the approved design drawings.

14.3 Documentation

Material Certifications shall be available for review for all materials within the bridge. Traceability of heat numbers is required for all structural steel.

Documentation showing the performance of all critical quality checks shall also be made available for review by the Engineer or Owner.

14.4 Non-Destructive Testing

All welds within the structure, shall be visually inspected for conformance to size, under cut, profile and finish.

All shop splices of main truss members shall be magnetic particle tested.

15.0 DELIVERY AND ERECTION

15.1 Delivery

Delivery shall be made via truck to a location nearest the site which is accessible to normal over-the-road equipment. All trucks delivering bridge materials will need to be unloaded at the time of arrival. If the erection Contractor needs special delivery or delivery is restricted, they shall notify the Bridge Manufacturer prior to bid date. This includes site issues which may prevent over-the-road equipment from accessing the site. Steerable dollies are not used in the cost provided by the Bridge Manufacturer. Determining the length of bridge section which can be delivered is the responsibility of the Contractor and shall be communicated to the Bridge Manufacturer prior to the bid date.

15.2 Installation & Lifting Procedures.

The Bridge Manufacturer will provide standard typical written procedures for lifting and splicing the bridge. All actual means, methods, equipment and sequence of erection used are the responsibility of the Contractor.

16.0 WARRANTY

The Bridge Manufacturer shall warrant, at the time of delivery, that it has conveyed good title to its steel structure, free of liens and encumbrances created by the Bridge

Manufacturer, and that its steel structure is free of defects in design, material and workmanship. This warranty shall be valid for a period of one (1) year from the earlier date of delivery or 60 days after final fabrication is complete. Durable tropical hardwood decking and hardwood attachments shall carry a one (1) year warranty against rot, termite damage, or fungal decay. This warranty shall specifically exclude all softwood and decking material such as Treated Southern Yellow Pine, Douglas Fir and Wood thermoplastic composite lumber (e.g. Trex). Paint, galvanizing and other special coatings, if warranted, shall be warranted by the coating manufacturer in accordance with their warranty provisions and are not covered under the Bridge Manufacturer's warranty.

This warranty shall not cover defects in the steel structure caused by abuse, misuse, overloading, accident, improper installation, maintenance, alteration, or any other cause not expressly warranted. This warranty shall not cover damage resulting from or relating to the use of any kind of de-icing material. This warranty shall be void unless owner's records are supplied that show compliance with the minimum guidelines specified in the in the Bridge Manufacturer's inspection and maintenance procedures.

Repair, replacement, or adjustment, in Bridge Manufacturer's sole discretion, shall be the exclusive remedy for any defects under this warranty. This warranty shall exclude liability for any indirect, consequential, or incidental damages.

100% FINAL PLANS

4/22/2026 2:46 PM

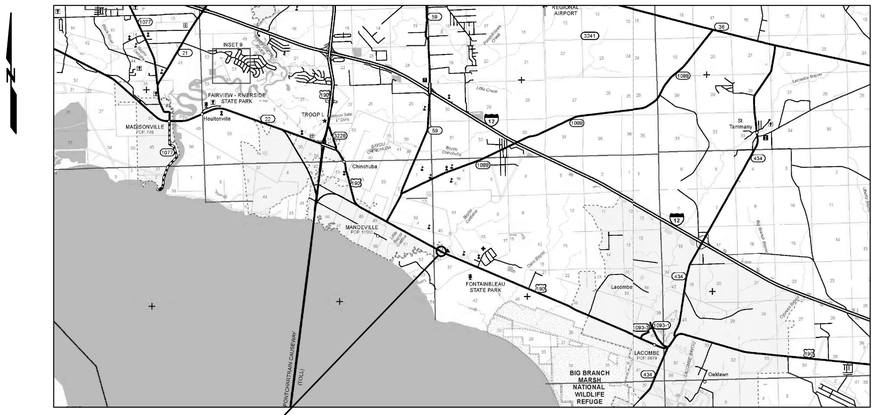
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - TI01 Title

INDEX TO SHEETS

SHEET No.	DESCRIPTION
1	TITLE SHEET AND LAYOUT MAP
2	CONSTRUCTION NOTES
2a	TYPICAL SECTION
3-3A	SUMMARY SHEETS
3B	SUMMARY OF ESTIMATED QUANTITIES
4	PLAN & PROFILE
5	REFERENCE POINTS AND BENCHMARKS
	BRIDGE PLANS
100	BRIDGE GENERAL NOTES AND BRIDGE INDEX
101	GENERAL BRIDGE PLAN
102	FOUNDATION PLAN AND PILE DATA TABLE
103-104	BRIDGE ABUTMENT PLAN AND DETAILS
105	CONCRETE APPROACH SLAB AND UNDERDRAIN DETAILS
106	BD.2.5.1.0.01 - P.P.C. PILES (CS-216)
107	BD.2.11.3.2.01 (FR-01)
108	BD.2.11.10.0.01 - CONCRETE SURFACE FINISH (1 of 2)
109	BD.2.11.10.0.02 - CONCRETE SURFACE FINISH (2 of 2)
	PEDESTRIAN & BICYCLE HANDRAIL
201-202	PEDESTRIAN HANDRAIL
	STANDARD PLANS — **REV. DATE**
301-302	EC-01 — 10-01-08
	CROSS SECTIONS
401-402	CROSS SECTIONS

ST. TAMMANY PARISH
DEPT. OF ENGINEERING
PLANS OF PROPOSED
BRIDGE CAPITAL IMPROVEMENTS

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184



LAYOUT MAP

SCALE: 1 INCH = 2 MILES

1 0 1 2 3 4 5

DATUM USED: NAD83/NAVD88
BEARINGS ARE REFERENCED TO LOUISIANA STATE PLANE COORDINATE SYSTEM (LOUISIANA SOUTH 1702)

VICINITY MAP

MIKE COOPER, PARISH PRESIDENT

COUNCIL MEMBERS

RICK SMITH
LARRY ROLLING
MARTHA J. CAZAUBON
KATHY SEIDEN
PAT PHILLIPS
CHERYL TANNER
JOE IMPASTATO
PAT BURKE
DAVID COUGLE
MAUREEN "MO" O'BRIEN
ARTHUR LAUGHLIN
JERRY BINDER
JEFF CORBIN
JIMMY STRICKLAND

RECOMMENDED FOR APPROVAL BY:

_____
NICHOLAS J. FALGOUT, P.E.
REG. NO. 46785
FORTE & TABLADA, INC.

DATE_____

NOTE:
TOPOGRAPHIC SURVEY WAS PERFORMED BY LOWE ENGINEERS

NOTE:
THE 2016 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THIS PROJECT

TYPE OF CONSTRUCTION:

REMOVAL OF EXISTING TIMBER BRIDGE, CONSTRUCTION OF PRE-FABRICATED STEEL TRUSS PEDESTRIAN BRIDGE, ASPHALT SURFACING AND BASE.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 1

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

TITLE SHEET & LAYOUT MAP

DESIGNED	NJF	
CHECKED	JEE	
DETAILED	CAT	
CHECKED	JEE	
DATE	2/13/26	
SCALE	-	

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:43 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - GN01 Construction Notes

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY ALL QUANTITIES AND MEASUREMENTS.
2. PRIOR TO BEGINNING WORK, CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN PROJECT AND CONSTRUCTION SIGNS.
3. ANY ADDITIONAL WORK PERFORMED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL FROM THE ST. TAMMANY DEPT. OF ENGINEERING SHALL BE BORNE BY THE CONTRACTOR AND WILL NOT BE REIMBURSED BY THE PARISH.
4. ALL SIGNS AND BOLLARDS THAT ARE DISTURBED SHALL BE MOVED OR REPLACED AT NO DIRECT COST.

DRAINAGE:

1. THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION OF THE PROJECT.

UTILITIES:

1. BEFORE ANY EXCAVATION, THE CONTRACTOR IS REQUIRED TO CALL LOUISIANA ONE CALL FOR LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE TO PROTECT ALL EXISTING UTILITIES.

ENVIRONMENTAL COMPLIANCE:

1. CONTRACTOR SHALL CAREFULLY REVIEW ALL PERMITS AND PERFORM ALL WORK IN ACCORDANCE WITH PERMIT CONDITIONS.
2. CONTRACTOR SHALL KEEP A COPY OF PERMITS AT THE JOB SITE AT ALL TIMES DURING OPERATIONS.
3. ALL, WORK, EQUIPMENT, AND VESSEL OPERATION SHALL CEASE IF A MANATEE IS SPOTTED WITHIN A 50-FOOT RADIUS (BUFFER ZONE) OF THE ACTIVE WORK AREA. ONCE THE MANATEE HAS LEFT THE BUFFER ZONE ON ITS OWN ACCORD (MANATEES MUST NOT BE HERDED OR HARASSED INTO LEAVING), OR AFTER 30 MINUTES HAVE PASSED WITHOUT ADDITIONAL SIGHTINGS OF MANATEE(S) IN THE BUFFER ZONE, IN-WATER WORK CAN RESUME UNDER CAREFUL OBSERVATION FOR MANATEE(S).
4. TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES AND REMOVED UPON COMPLETION. EACH VESSEL INVOLVED IN CONSTRUCTION ACTIVITIES SHALL DISPLAY AT THE VESSEL CONTROL STATION OR IN A PROMINENT LOCATION, VISIBLE TO ALL EMPLOYEES OPERATING THE VESSEL. A TEMPORARY SIGN AT LEAST 8½"X11" READING LANGUAGE SIMILAR TO THE FOLLOWING "CAUTION BOATERS: MANATEE AREA/IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A SECOND TEMPORARY SIGN MEASURING 8½"x11" SHALL BE POSTED AT A LOCATION PROMINENTLY VISIBLE TO ALL PERSONNEL ENGAGED IN WATER-RELATED ACTIVITIES AND SHALL READ LANGUAGE SIMILAR TO THE FOLLOWING "CAUTION: MANATEE AREA/EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".
5. COLLISIONS WITH, INJURY TO, OR SIGHTINGS OF MANATEES SHALL BE IMMEDIATELY REPORTED TO THE U.S. FISH AND WILDLIFE SERVICES. LOUISIANA ECOLOGICAL SERVICES OFFICE (334-291-3100) AND THE LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES, NATURAL HERITAGE PROGRAM (225-765-2821). PLEASE PROVIDE THE NATURE OF THE CALL (I.E. REPORT OF AN INCIDENT, MANATEE SIGHTING ETC.); TIME OF INCIDENT/SIGHTING; AND THE APPROXIMATE LOCATION, INCLUDING THE LATITUDE AND LONGITUDE COORDINATES, IF POSSIBLE.
6. CONTRACTOR SHALL PROVIDE ON-GROUND PRE AND POST-CONSTRUCTION PHOTOGRAPHIC DOCUMENTATION, INCLUDING A PHOTOGRAPH KEY THAT SHOWS LOCATION AND DIRECTION OF EACH PHOTOGRAPH THAT CLEARLY SHOWS ALL VEGETATED WETLANDS OCCURRING WITHIN THE PERMITTED PROJECT AREA. THE POST-CONSTRUCTION PHOTOS SHALL BE TAKEN AT THE SAME LOCATION AND IN THE SAME DIRECTION AS THE PRE-CONSTRUCTION PHOTOS. THE POST-CONSTRUCTION SHALL BE TAKEN WITHIN 60 DAYS OF THE END OF THE FIRST FULL GROWING SEASON FOLLOWING COMPLETION OF THE PROJECT.

EROSION AND SEDIMENT CONTROL:

1. TEMPORARY EROSION CONTROL MEASURES SHALL CONSIST OF SILT FENCING, VEGETATIVE MULCHING, AND/OR HAY BALES, MEASURES SHALL BE IN PLACE AROUND ERODIBLE AREAS TO PREVENT SILT FROM ENTERING WATERWAYS. SILT FENCING SHALL BE INSTALLED AROUND PERIMETER OF DISTURBED AREAS.
2. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE PROJECT FOOTPRINT SHALL BE SEEDED AS DIRECTED BY THE PROJECT ENGINEER OR INSPECTOR AT NO DIRECT PAY.
3. CONTROL TECHNIQUES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK ACTIVITIES AND MAINTAINED UNTIL THE PROJECT IS COMPLETE AND/OR THE SUBJECT AREA ARE STABILIZED. UPON THE COMPLETION OF CONSTRUCTION ACTIVITIES OR IF AT ANY TIME CONSTRUCTION ACTIVITIES CEASE FOR MORE THAN 14 DAYS. ALL DISTURBED SOILS SHALL BE RE-VEGETATED BY SOD, SEED, OR ANOTHER ACCEPTABLE METHOD, AS NECESSARY TO RESTORE COVER AND PREVENT EROSION.
4. SILTATION OR TURBIDITY BARRIERS SHALL BE PROPERLY SECURED, MADE OF A MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, AND BE MONITORED TO AVOID MANATEE ENTRAPMENT OR IMPEDING THEIR MOVEMENT.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 45785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 2

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

CONSTRUCTION NOTES

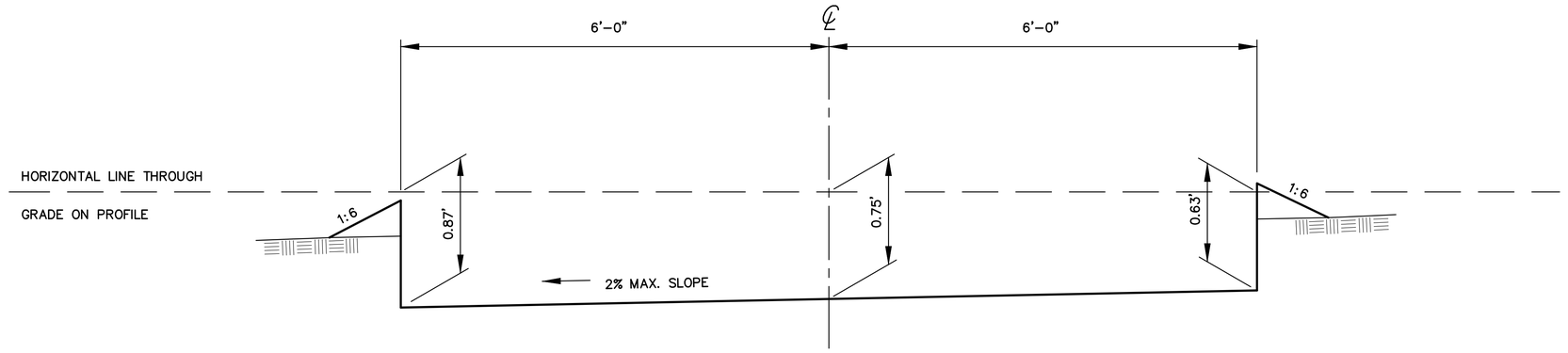
DESIGNED	NJF	
CHECKED	JEE	
DETAILED	CAT	
CHECKED	JEE	
DATE	2/13/26	
SCALE	-	

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

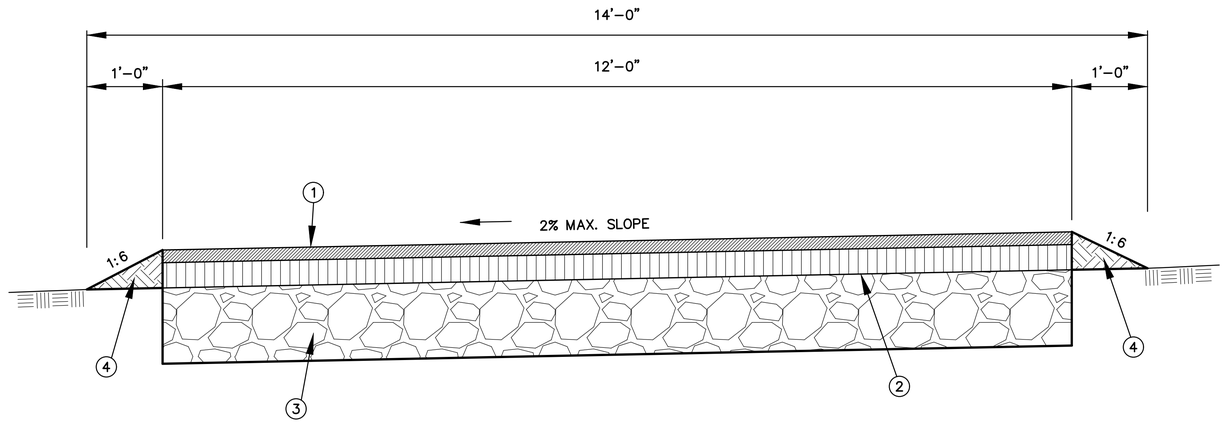
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:42 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13c - MS01 Typical Section



TYPICAL GRADING SECTION

(VERTICAL SCALE EXAGGERATED FOR CLARITY)



TYPICAL FINISHED SECTION

(VERTICAL SCALE EXAGGERATED FOR CLARITY)

STA. 14+55.00 TO STA. 15+01.92
STA. 17+79.09 TO STA. 18+36.00

① THIN ASPHALT CONCRETE (DENSE MIX) WEARING (1" THICK)

② ASPHALT CONCRETE BINDER (2" THICK) (PG 67-22 ALLOWED)

③ 6" THICK CLASS II BASE (STONE) AND GEOTEXTILE FABRIC

④ REQ'D BORROW AND SEEDING

GENERAL NOTES:

1.) ALL DIMENSIONS SHOWN ON TYPICAL SECTIONS ARE COMPACTED DIMENSIONS.

2.) ALL VERTICAL DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE NOTED. ALL HORIZONTAL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 2A

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN2300184

TYPICAL SECTION

DESIGNED	NJF	DATE	2/13/26
CHECKED	JEE	SCALE	-
DETAILED	CAT		
CHECKED	JEE		

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
ADJUST SCALE IF THIS BAR ≠ 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:40 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - SS01 Summary of Quantities

RIP RAP AND GEOTEXTILE FABRIC

STATION		711-01-13000	711-04-00100
BEGIN	END	30 LB RIP RAP 18" THICK(SQ. YD.)	GEOTEXTILE FABRIC (SQ. YD.)
STA. ALONG TAMMANY TRACE			
15+02.10	15+34.50	153.5	153.5
17+46.50	17+78.75	153.6	153.6
GENERAL TOTAL		307.1	307.1

EARTHWORK

STATION		203-05-00100		203-02-00100
BEGIN	END	EXCAVATION (CU. YD.)	EMBANKMENT (CU. YD.)	DRAINAGE EXCAVATION (CU. YD.)
STA. ALONG TAMMANY TRACE				
14+55.00	15+12.75	18	46	
15+12.75	17+68.25			274
17+68.25	18+36.00	17	40	
GENERAL TOTAL		35	86	274

REMOVAL OF ASPHALT PAVEMENT

STATION		LENGTH (FEET)	WIDTH (FEET)	202-02-02020
BEGIN	END			SQ. YD.
STA. ALONG TAMMANY TRACE				
14+55.00	15+02.75	47.75	10.0	54.7
17+78.75	18+36.00	57.25	9.9	67.3
			GENERAL TOTAL	122

REMOVAL OF CONCRETE APPROACH SLABS

STATION		LENGTH (FEET)	WIDTH (FEET)	202-02-06000
BEGIN	END			SQ. YD.
STA. ALONG TAMMANY TRACE				
15+03.00	15+13.00	10.00	12.40	12.8
17+65.45	17+75.45	10.00	12.75	12.9
GENERAL TOTAL				25.7

REMOVAL OF BASE

STATION		LENGTH (FEET)	WIDTH (FEET)	202-02-03000
BEGIN	END			SQ. YD.
STA. ALONG TAMMANY TRACE				
14+55.00	15+02.75	47.75	10.0	54.7
17+78.75	18+36.00	57.25	9.9	67.3
			GENERAL TOTAL	122

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 3

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

SUMMARY SHEET

DESIGNED NJF
CHECKED JEE
DETAILED CAT
CHECKED JEE
DATE 2/13/26
SCALE -

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, SCALE THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - SS01A Summary of Quantities
4/22/2026 2:39 PM

ASPHALT CONCRETE

STATION		LENGTH (FEET)	AVG.WIDTH (FEET)	501-01-00100	502-01-00100
BEGIN	END			1" THIN ASPHALT CONCRETE (DENSE MIX) (TON)	2" ASPHALT CONCRETE (TON)
STA. ALONG TAMMANY TRACE					
14+55.00	15+01.92	46.92	12.00	3.50	6.90
17+79.09	18+36.00	56.91	12.00	4.20	8.40
			GENERAL TOTAL	7.7	15.3

CLASS II BASE COURSE (CRUSHED STONE)

STATION		DESCRIPTION	LENGTH (FEET)	AVG. WIDTH (FEET)	302-02-06050
BEGIN	END				CU. YD.
STA. ALONG TAMMANY TRACE					
14+55.00	15+01.92	TRANSITION	46.92	12.00	12.20
17+79.09	18+36.00	TRANSITION	56.91	12.00	14.90
				GENERAL TOTAL	27.10

TEMPORARY SILT FENCING

STATION	STATION	SIDE OF C/L	204-06-00100
			LENGTH (FEET)
STA. ALONG TAMMANY TRACE			
14+53.00	15+36.52	RT./LT.	252
17+44.48	18+38.07	RT./LT.	276
		GENERAL TOTAL	528

SAW CUTTING ASPHALTIC CONCRETE PAVEMENT

STATION		SIDE OF C/L	LENGTH	DEPTH (INCHES)	NS-140-00340
BEGIN	END				IN-FT
STA. ALONG TAMMANY TRACE					
14+55.00		CT	10	3	30
18+36.00		CT	10	3	30
				GENERAL TOTAL	60

HAND RAILING

STATION		SIDE OF C/L	NS-800-00260
BEGIN	END		LENGTH (FEET)
STA. ALONG TAMMANY TRACE			
15+03.75	15+12.75	LT.	9
15+03.75	15+12.75	RT.	9
17+68.25	17+77.25	LT.	9
17+68.25	17+77.25	RT.	9
		GENERAL TOTAL	36

SEEDING, FERTILIZER, ETC.

ACRES	716-01-00100	717-01-00100	718-01-00100	204-02-00100
	MULCH (VEGETATIVE)	SEEDING	FERTILIZER	TEMPORARY HAY BALES
	TON	POUND	POUND	EACH
STA. ALONG TAMMANY TRACE				
0.05	0.1	2	50	2
GENERAL TOTAL	0.1	2	50	2

SHEET NUMBER 3A

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

SUMMARY SHEET

DESIGNED NJF
CHECKED JEE
DETAILED CAT
CHECKED JEE
DATE 2/13/26
SCALE -

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO. | DATE | REVISION DESCRIPTION | BY

SUMMARY OF ESTIMATED QUANTITIES

	ITEM NO.	ITEM	UNIT	QUANTITY
	201-01-00100	CLEARING AND GRUBBING	LUMP SUM	LUMP
	202-01-00100	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	LUMP
	202-02-02020	REMOVAL OF ASPHALT PAVEMENT	SQ. YARD	122
	202-02-03000	REMOVAL OF BASE - SOIL CEMENT, ASPHALT, OR BCS	SQ. YARD	122
*	202-02-04000	REMOVAL OF BRIDGE (STA. 16+40 - 13.7 FT. X 252.21 FT. TIMBER BRIDGE)	EACH	1
	202-02-06000	REMOVAL OF CONCRETE APPROACH SLABS	SQ. YARD	26
	202-02-38300	REMOVAL OF SIGN AND U-CHANNEL POST	EACH	2
	203-02-00100	DRAINAGE EXCAVATION	CU. YARD	274
	203-05-00100	EXCAVATION AND EMBANKMENT	LUMP SUM	LUMP
	204-02-00100	TEMPORARY HAY BALES	EACH	2
	204-06-00100	TEMPORARY SILT FENCING	LIN. FOOT	528
	302-02-06020	CLASS II BASE COURSE (6" THICK) (CRUSHED STOME)	SQ. YARD	27.1
	501-01-00100	THIN ASPHALT CONCRETE (DENSE MIX)	TON	7.7
	502-01-00100	ASPHALT CONCRETE	TON	15.3
	711-01-03020	RIPRAP (30LB., 18" THICK)	SQ. YARD	307.1
	711-04-00100	GEOTEXTILE FABRIC	SQ. YARD	307.1
	713-01-00100	TEMPORARY SIGNS AND BARRICADES	LUMP SUM	LUMP
	716-01-00100	MULCH (VEGETATIVE)	TON	0.1
	717-01-00100	SEEDING	POUND	2
	718-01-00100	FERTILIZER	POUND	50
	727-01-00100	MOBILIZATION	LUMP SUM	LUMP
	740-01-00100	CONSTRUCTION LAYOUT	LUMP SUM	LUMP
	804-01-00200	PRECAST CONCRETE PILES (14")	LIN. FOOT	800
	804-17-00100	CONSTRUCTION SITE SURVEY	LUMP SUM	LUMP
	804-18-00100	VIBRATION MONITORING	DAY	8
	805-01-00300	CLASS A1 CONCRETE (BENT CAP)	CU. YARD	51.02
	805-18-00100	CONCRETE FINISH (CLASS 2 RUBBED FINISH)	SQ. FOOT	1052
	805-18-00200	CONCRETE FINISH (CLASS 3 SPECIAL FINISH)	SQ. FOOT	1052
	806-01-00100	DEFORMED REINFORCING STEEL	POUND	6,986
	807-02-00100	STRUCTURAL METALWORK (ANCHOR BOLTS & HARDWARE, JOINT ARMOR)	LUMP SUM	LUMP
	807-04-00100	STRUCTURAL METALWORK (ERECT PRE-FABRICATED STEEL TRUSS)	LUMP SUM	LUMP
	813-01-00100	CONCRETE APPROACH SLAB (CAST-IN-PLACE)	SQ. FOOT	279
	815-02-00100	SEALED EXPANSION JOINT (END DAMS AND PREFORMED NEOPRENE SEAL)	LIN. FOOT	28
	NS-140-00340	SAW CUTTING ASPHALTIC CONCRETE PAVEMENT	INCH FOOT	60
	NS-800-00260	PEDESTRIAN HANDRAIL	LIN. FOOT	36
**	TS-800-00100	PREFABRICATED HALF THROUGH TRUSS PEDESTRIAN BRIDGE	LUMP SUM	LUMP

* REMOVAL OF BRIDGE = 3,455 SQ. FEET (QUANTITY FOR ESTIMATING PURPOSES ONLY).

** BIDS FOR ITEM TS-800-00100 - PREFABRICATED HALF THROUGH TRUSS PEDESTRIAN BRIDGE ARE TO BE ON A LUMP SUM BASIS. BID PRICE SHALL INCLUDE THE COST OF ALL DESIGN, SUBMITTALS, MATERIALS, AND LABOR REQUIRED TO MANUFACTURE AND ERECT THE STEEL TRUSS AND CONCRETE DECK AS NOTED IN THE DESIGN DRAWINGS AND SPECIAL PROVISIONS. FOR INFORMATIONAL PURPOSES ONLY, THE FOLLOWING QUANTITIES HAVE BEEN ESTIMATED:
- STRUCTURAL METALWORK = 254,150 LBS.
- LIGHTWEIGHT CONCRETE DECK = 56.67 CU. YD.
- DEFORMED REINFORCING STEEL = 10,456 LBS.

STATE OF LOUISIANA NICHOLAS J. FALGOUT License No. 40195 PROFESSIONAL ENGINEERING 4/15/26

NO.	DATE	REVISION DESCRIPTION	BY

ATTENTION: THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

FORTE & TABLADA

DESIGNED	NJF
CHECKED	JEE
DETAILED	CAT
CHECKED	JEE
DATE	2/13/26
SCALE	-

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184
SUMMARY OF ESTIMATED QUANTITIES

SHEET NUMBER 3B

100% FINAL PLANS
4/22/2026 2:39 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - PP01

TOWN OF MANDEVILLE

BAYOU CASTINE

14+00 15+00 16+00 17+00 18+00

N

Scale: 1" = 20'

EXISTING STRUCTURE
13.7' WIDE x 252.21' LONG
21-SPAN WOOD BRIDGE WITH CONCRETE OVERLAY AND WOOD SUBSTRUCTURE
PILES: WOOD (5 PILES/BENT)
CAPS: WOOD
BENTS: WOOD
STRUCTURE NO. ST. TAMMANY BRIDGE 13

REQUIRED STRUCTURE
255' PRE-FABRICATED STEEL TRUSS BRIDGE @ 90° CROSSING FURNISHED AND INSTALLED BY CONTRACTOR.

10'-0" CONC. APPR. SLAB
255'-6" FACE TO FACE OF ABUTMENT BACKWALL
10'-0" CONC. APPR. SLAB
END PROJECT
P.I. ℄ STA. 18+36.00
N: 675072.4898
E: 3689256.6973
9" TOP ABUTMENT BACKWALL
9" TOP ABUTMENT BACKWALL
Apparent RW
12'-0" CLEAR WIDTH
14'-0" OVERALL BRIDGE WIDTH
S66°05'39"E
S66°28'02"E
S66°10'44"E
S65°22'26"E
S66°05'39"E
Apparent RW
BEGIN PROJECT
P.I. ℄ STA. 14+55.00
N: 675226.8947
E: 3688908.3598
BEGIN BRIDGE
℄ STA. 15+12.75
N: 675203.7849
E: 3688961.2890
END BRIDGE
℄ STA. 17+68.25
N: 675100.5927
E: 3689195.0231
END CONC. APPR. SLAB
P.I. ℄ STA. 17+79.09
N: 675096.2173
E: 3689204.9336
BEGIN CONC. APPR. SLAB
P.I. ℄ STA. 15+01.92
N: 675208.1596
E: 3688951.3783
Wood Fence

SCALES:
1" = 20' HOR
1" = 5' VER

STA. 14+55.00
ELEV. ±10.83
STA. 15+01.92
ELEV. 10.70
PROPOSED ℄ GRADE TAMMANY TRACE
-0.28%
0.00%
-1.69%
STA. 17+79.09
ELEV. 10.70
STA. 18+36.00
ELEV. ±9.73
EXISTING GRADE

25 20 15 10 5 0 -5 -10

14+00	15+00	16+00	17+00	18+00	19+00
11.11	10.97	10.78' 10.81	10.75' 10.76	10.74' 10.70	3.06' 10.70
-0.16' 10.70	0.36' 10.70	0.19' 10.70	-0.26' 10.70	-3.03' 10.70	-4.04' 10.70
-0.51' 10.70	-0.30' 10.70	-0.06' 10.70	-0.91' 10.70	-0.40' 10.70	2.48' 10.70
9.89' 10.68	9.91' 10.34	9.86' 10.00	9.70'	9.63'	9.64'
9.67'					

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 4

TAMMANY TRACE BRIDGE # 13
PROJECT NO.: EN23000184

PLAN & PROFILE

DESIGNED	NJF	DETAILED	CAT	DATE	2/13/26
CHECKED	JEE	CHECKED	JEE	SCALE	1" = 20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS

4/22/2026 2:32 PM

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - RE01

10+00

15+00

20+00

N

Scale :1" = 50'

END PROJECT
TAMMANY TRACE BRIDGE 13
P.I. ℄ STA. 18+36.00
N: 675072.4898
E: 3689256.6973

Begin Survey
Sta. 10+00.00
N: 675,411.2769
E: 3,688.492.3932

S66°05'39"E

TBM-1

S66°28'02"E

T.B.M. 2
EL. = 10.07'
N: 675217.87
E: 3688952.15

S66°10'44"E

Projected &
Adopted ℄

S66°05'39"E

Surveyed &
Abandoned ℄

S65°22'26"E

S66°05'39"E

End Survey
Sta. 22+72.00
N: 675,411.2769
E: 3,688,492.3932

TBM-3

BEGIN PROJECT
TAMMANY TRACE BRIDGE 13
P.I. ℄ STA. 14+55.00
N: 675226.8947
E: 3688908.3598

P.I. ℄ STA. 15+01.92
N: 675208.1596
E: 3688951.3783

P.I. ℄ STA. 17+79.09
N: 675096.2173
E: 3689204.9336

BEGIN SURVEY
PK NAIL SET
Sta. 10+00.00
N: 675,411.2769
E: 3,688.492.3932

PK NAIL SET
16.92'
4.81'
7.95'
PK NAIL SET
BASELINE
TBM-1
½" IRON ROD SET
(CAPPED)
EL.=12.24'
ST. TAMMANY TRACE

ST. TAMMANY TRACE
BASELINE
END SURVEY
PK NAIL SET
Sta. 22+72.00
N: 675,411.2769
E: 3,688,492.3932
7.17'
4.81'
11.47'
TBM-3
½" IRON ROD SET
(CAPPED)
EL.=9.23'
PK NAIL
SET
PK NAIL SET

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46765
REGISTERED
PROFESSIONAL
CIVIL ENGINEER
02/13/26

SHEET NUMBER 5

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN2300184

REFERENCE POINTS AND BENCHMARKS

DESIGNED NJF
CHECKED JEE
DETAILED CAT
CHECKED JEE
DATE 2/13/26
SCALE 1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON
ORIGINAL DRAWING.
ADJUST SCALE IF
THIS BAR ≠ 1 INCH.

NO. | DATE | REVISION DESCRIPTION | BY

100% FINAL PLANS

4/22/2026 2:30 PM

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - Bridge General Notes & Bridge Index Sheets

BRIDGE GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:
CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOUISIANA DOTD SPECIFICATIONS FOR ROADS AND BRIDGES, 2016, EXCEPT AS SUPPLEMENTED OR AMENDED BY THE PLANS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS.

ELEVATIONS:
ALL ELEVATIONS ARE BASED ON N.A.V.D.-88.

DIMENSIONS:
ALL DIMENSIONS ARE GIVEN AT NORMAL TEMPERATURE OF 68° F.

DESIGN SPECIFICATIONS:
STRUCTURAL DESIGN IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, LADOTD BRIDGE DESIGN TECHNICAL MEMORANDUM APPLICABLE, AND AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION, WITH 2015 INTERIM REVISIONS.

DESIGN CRITERIA:
LIVE LOAD SHALL BE AASHTO H-10 VEHICLE + 90 PSF PEDESTRIAN LOAD.

WIND LOADING PER LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 1ST EDITION, 2015 SECTION 3.8.
- I. DESIGN WIND SPEED: 133 MPH
- II. SERVICE WIND SPEED: 78 MPH
- III. EXPOSURE CATEGORY: C

SEISMIC LOADING PER AASHTO LRFD DESING SPECIFICATIONS SECTION 3.10.
- I. SITE CLASS: D
- II. PGA: 0.03
- III. S_S: 0.065
- IV. S_1: 0.03

CONCRETE:
ALL CONCRETE IS TO BE CLASS "A1" CONCRETE UNLESS OTHERWISE NOTED IN THE PLANS. CHAMFER ALL EXPOSED EDGES OF CONCRETE ¾" EXCEPT ALL CORNERS OF BENTS WHICH SHALL BE CHAMFERED 1½" UNLESS OTHERWISE NOTED. NO DEDUCTIONS ARE TO BE MADE IN CONCRETE QUANTITIES FOR CHAMFERS 1½" OR LESS.

FINISH OF CONCRETE:
SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 805.08 "CONCRETE SURFACE FINISHES" OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2016 EDITION.

REINFORCING STEEL:
DIMENSIONS RELATING TO REINFORCING STEEL FABRICATION ARE OUT TO OUT OF BAR UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO REINFORCING STEEL SPACING ARE CENTER TO CENTER OF BAR. THE MINIMUM COVERING FROM THE SURFACE OF THE CONCRETE TO THE FACE OF A DEFORMED REINFORCING BAR SHALL NOT BE LESS THAN THE FOLLOWING:

TOP OF TRUSS DECK & APPR. SLAB	2½"
BOTTOM OF APPROACH SLAB	2"
SUBSTRUCTURE	3" (FOOTINGS) / 2" (WALLS)

ALL OTHER REINFORCING STEEL COVER SHALL BE 2" UNLESS OTHERWISE NOTED IN THE PLANS. SEE STANDARD PLAN SWBS FOR BAR SUPPORTS FOR REINFORCING STEEL. ALL REINFORCING STEEL SHALL BE GRADE 60. BAR DESIGNATIONS ARE SPECIFIED WITH THE FIRST DIGIT INDICATING BAR SIZE.

CONCRETE CONSTRUCTION JOINTS:
WHERE CONSTRUCTION JOINTS ARE USED, NOT LESS THAN SEVEN (7) DAYS SHALL HAVE ELAPSED BETWEEN ADJACENT POURS. THE VERTICAL SURFACES OF THE CONSTRUCTION JOINTS BETWEEN ADJACENT POURS SHALL BE COATED PRIOR TO EACH SUCCEEDING POUR WITH A TYPE V EPOXY RESIN SYSTEM IN ACCORDANCE WITH SUBSECTION 805.05.8.2 OF THE LOUISIANA STANDARD SPECIFICATIONS. EPOXY IS TO BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STRUCTURAL METALWORK:
ALL STEEL SHALL BE STRUCTURAL CARBON STEEL CONFORMING TO ASTM A709 (GR36) UNLESS OTHERWISE SHOWN IN THE PLANS. ANY NECESSARY SUBSTITUTION MUST HAVE PRIOR APPROVAL OF THE ENGINEER. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED.

GALVANIZED STEEL:
ALL MISCELLANEOUS HARDWARE WHICH IS SPECIFIED TO BE GALVANIZED SHALL BE COATED IN ACCORDANCE WITH ASTM A153. ALL STRUCTURAL STEEL SHAPES WHICH ARE SPECIFIED TO BE GALVANIZED SHALL BE COATED IN CONFORMANCE WITH ASTM A123 AFTER FABRICATION. DAMAGED GALVANIZED COATS THAT ARE NOT TO BE EMBEDDED IN MORE THAN 3" OF CONCRETE SHALL BE REPAIRED WITH COLD APPLIED, ZINC RICH, ORGANIC PAINT, FROM THE LADOTD APPROVED MATERIALS LIST OR OTHER APPROVED METHOD OF REPAIR.

WELDING:
WELDING OF ALL STRUCTURAL STEEL AND STEEL PIPES SHALL CONFORM TO SECTION 809 WELDING OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.

ERECTION:
DETAILED ERECTION DRAWINGS OUTLINING THE PROCEDURE AND EQUIPMENT TO BE USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

DEBRIS CONTAINMENT:
THE CONTRACTOR IS TO DEVELOP AND USE A DEBRIS CONTAINMENT SYSTEM THAT WILL PROTECT THE ENVIRONMENT BENEATH THE STRUCTURE. THE CONTRACTOR SHALL DESIGN THE CONTAINMENT SYSTEM AND ASSUME RESPONSIBILITY FOR ITS PERFORMANCE. TO BE PAID UNDER ITEM 202-02-04501, REMOVAL OF BRIDGE.

ENVIRONMENTAL COMPLIANCE:
PRIOR TO THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL OBTAIN A COPY OF THE ENVIRONMENTAL CLEARANCE DOCUMENT AS WELL AS COPIES OF ALL PERMITS AND AGREEMENTS OBTAINED BY DOTD. THE CONTRACTOR SHALL THOROUGHLY EXAMINE AND COMPLY WITH ALL REQUIREMENTS SET FORTH IN THOSE DOCUMENTS.

BEDDING MATERIAL:
BEDDING MATERIAL AND UNDERDRAINS TO BE PAID FOR UNDER "CONCRETE APPROACH SLABS".

PREFABRICATED STEEL TRUSS:
TRUSS SUPPLIER SHALL PROVIDE DESIGN CALCULATIONS, INCLUDING ALL DESIGN LOADING AND RESULTING TRUSS REACTIONS (DL, LL, WIND, SEISMIC, ETC.) TO THE ENGINEER OF RECORD FOR APPROVAL. AFTER APPROVAL OF DESIGN CALCULATIONS AND RESULTING TRUSS REACTIONS, TRUSS SHOP DRAWINGS AND LOAD RATING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL.

BRIDGE INDEX

SHEET NO.	DESCRIPTION
100	GENERAL BRIDGE NOTES AND BRIDGE INDEX
101	GENERAL BRIDGE PLAN
102	FOUNDATION PLAN AND PILE DATA TABLE
103-104	BRIDGE ABUTMENT PLAN AND DETAILS
105	CONCRETE APPROACH SLAB AND UNDERDRAIN DETAILS

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46755
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 100

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

BRIDGE GENERAL NOTES AND BRIDGE INDEX

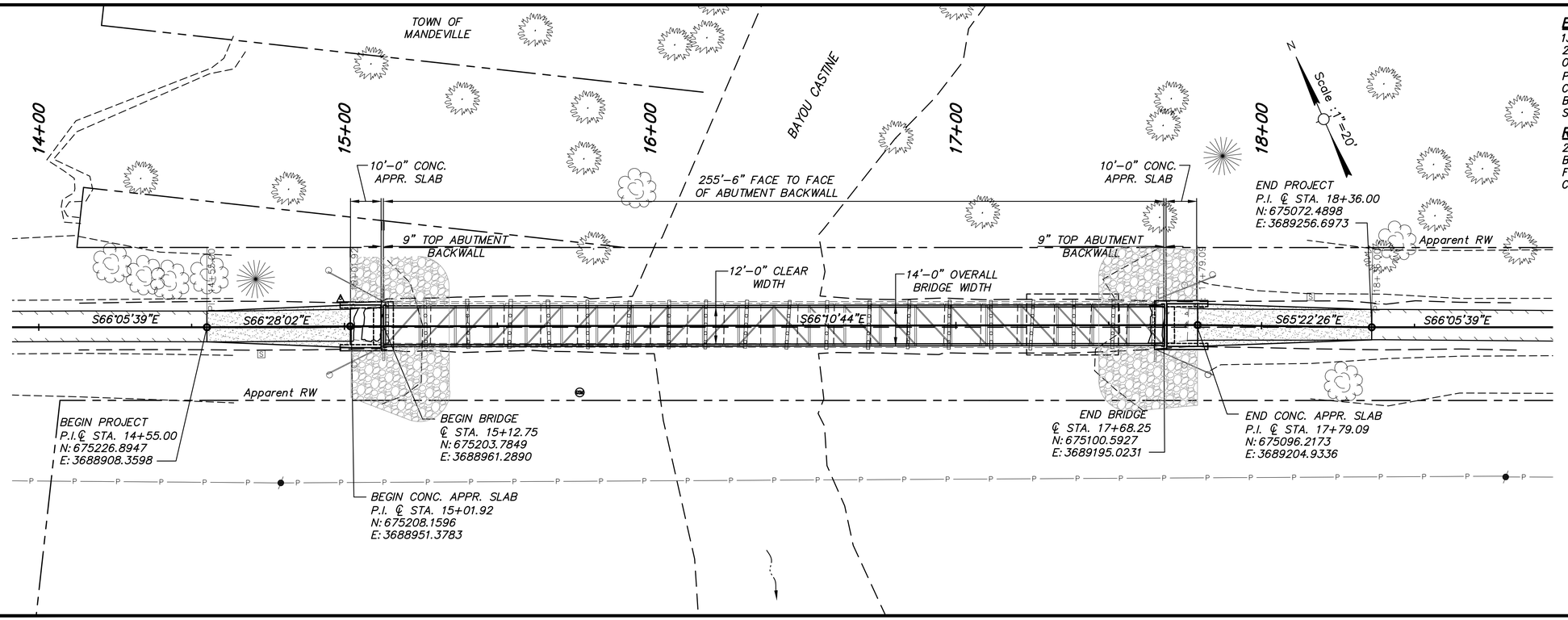
DESIGNED JMW | CHECKED LEY | DETAILED LEY | CHECKED JEE | DATE 2/13/26 | SCALE -

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY. THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

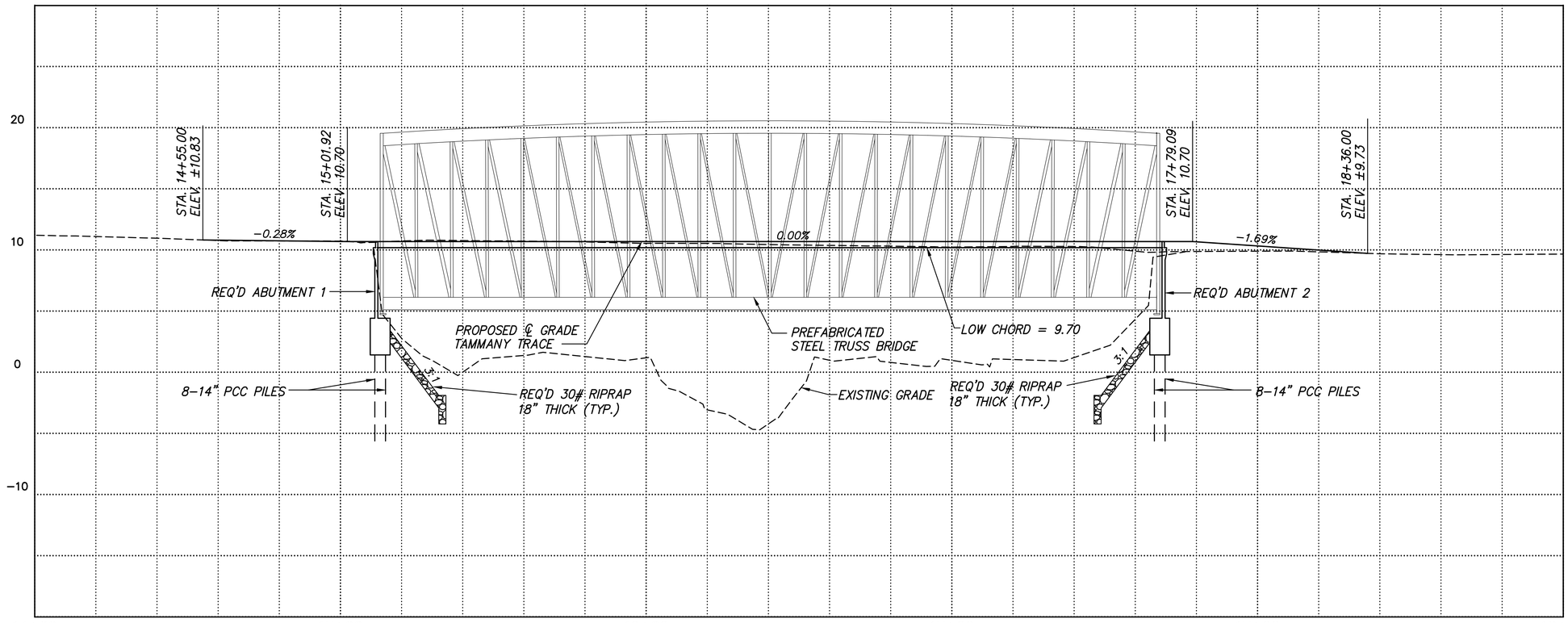
100% FINAL PLANS
4/22/2026 2:28 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - PP02-GBP



EXISTING STRUCTURE
13.7' WIDE x 252.21' LONG
21-SPAN WOOD BRIDGE WITH CONCRETE OVERLAY AND WOOD SUBSTRUCTURE
PILES: WOOD (5 PILES/BENT)
CAPS: WOOD
BENTS: WOOD
STRUCTURE NO. ST. TAMMANY BRIDGE 13

REQUIRED STRUCTURE
255' PRE-FABRICATED STEEL TRUSS BRIDGE @ 90° CROSSING TO BE FURNISHED AND INSTALLED BY CONTRACTOR.

SCALES:
1" = 20' HOR
1" = 5' VER



NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
STATE OF LOUISIANA
02/13/26

SHEET NUMBER	101

TAMMANY TRACE BRIDGE # 13
PROJECT NO.: EN230000184

GENERAL BRIDGE PLAN AND PROFILE

DESIGNED	JWW	DETAILED	JEE	DATE	2/13/26
CHECKED	LEY	CHECKED	LEY	SCALE	1" = 20'

FORTE & TABLADA

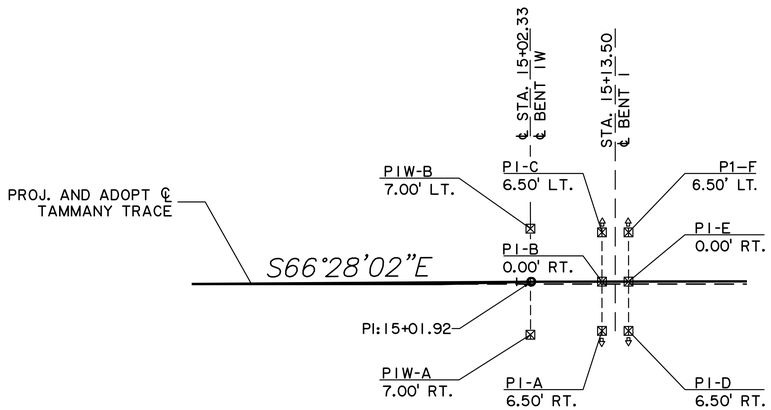
ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

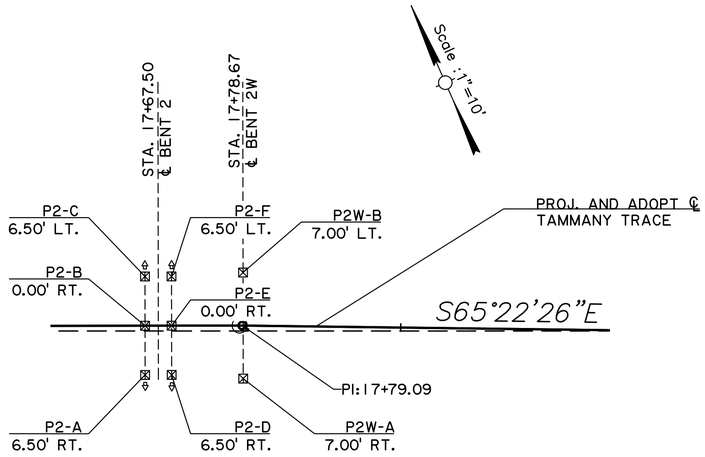
100% FINAL PLANS
4/22/2026 2:28 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C Foundation plan and Data Table - Bridge 13.dwg

PRODUCTION PILE DATA TABLE

BENT NO.	STATION	NO. OF PILES PER BENT	PILE TYPE & SIZE	MONITOR PILE REQUIRED (Y OR N)	LOAD (TONS)						SOIL RESISTANCE FACTOR ( ) ϕ				REQUIRED NOMINAL RESISTANCE (TONS)		MAX. CUTOFF EL. (FT.)	PLAN LENGTH (FT.)	PLAN TIP EL. (FT.)	ORDER LENGTH (FT.)	AS-BUILT TIP EL. (FT)		
					SERVICE		STRENGTH		EXTREME		SERVICE	STRENGTH		EXTREME	WITHOUT PREBORING	PREBORING TO SCOUR DEPTH					MAX.	MIN.	AVG.
					PERMANENT LOAD	TRANSIENT LOAD	COMPRESSION	TENSION	COMPRESSION	TENSION		COMPRESSION	TENSION										
1W	15+02.33	2	14" ⊠ P.P.C.	N	25	–	32	–	–	–	1	0.5	–	–	–	64	1.43	50	-48.57	50			
1	15+13.50	6	14" ⊠ P.P.C.	N	25	15	85	–	–	–	1	0.5	–	–	–	170	1.43	50	-48.57	50			
2	17+67.50	6	14" ⊠ P.P.C.	N	25	15	85	–	–	–	1	0.5	–	–	–	170	1.43	50	-48.57	50			
2W	17+78.67	2	14" ⊠ P.P.C.	N	25	–	32	–	–	–	1	0.5	–	–	–	64	1.43	50	-48.57	50			



FOUNDATION LAYOUT ABUTMENT 1



FOUNDATION LAYOUT ABUTMENT 2

PILE NOTES:

PILES: ALL PILE REQUIREMENTS INCLUDING SIZE, TYPE, LOCATION, AND MAXIMUM DESIGN LOAD SHALL BE AS DESCRIBED IN THE CONTRACT DOCUMENTS. THE MINIMUM PILE TIP ELEVATION WILL BE THE PLAN TIP ELEVATION AS SHOWN IN THE PRODUCTION PILE DATA TABLE, UNLESS OTHERWISE NOTED OR OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER. PLAN LENGTHS PROVIDED IN THE PRODUCTION PILE DATA TABLE ARE ORDER LENGTHS.

PILE CAPACTY VERIFICATION: SHALL BE BASED ON THE MODIFIED GATES DYNAMIC FORMULA:

$$R = \frac{(1.75\sqrt{E_r}\log(10N_b)-100}{2}$$

R = Pile Bearing Capacity (Tons)

E_r = Manufacturer's Rated Energy at the field observed ram stroke (foot-pounds)

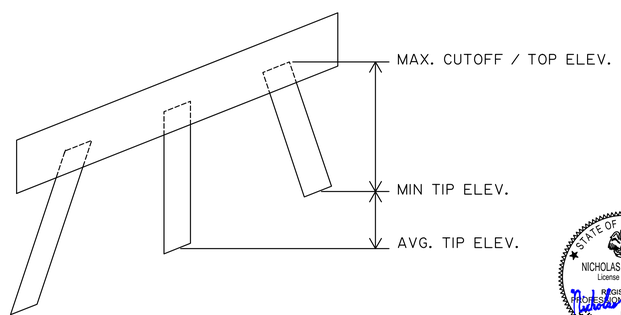
N_b = Number of Hammer Blows/Inch

REQUIRED NOMINAL RESISTANCE: REQUIRED NOMINAL RESISTANCE "WITHOUT PREBORING" SHALL BE USED TO VERIFY PILE CAPACITY IF NO PREBORING IS PERFORMED. IF PREBORING TO THE SCOUR ELEVATION IS PERFORMED, THE REQUIRED NOMINAL RESISTANCE "PREBORING TO SCOUR" SHALL BE USED FOR PILE CAPACITY VERIFICATION.

PREBORING AND/OR JETTING: PREBORING AND/OR JETTING MAY BE NECESSARY TO FACILITATE PILE INSTALLATION. PREAPPROVAL FROM THE FIELD PROJECT ENGINEER AND THE GEOTECHNICAL ENGINEER IS REQUIRED PRIOR TO ANY PREBORING AND/OR JETTING OPERATION. ALL PREBORING AND/OR JETTING SHALL BE IN ACCORDANCE WITH ARTICLES 804.07.1 AND 804.07.2 AS APPROPRIATE.

LEGEND

⊕ INDICATES BATTER PILES 2 IN 12
⊠ INDICATES 14" ⊠ P.P.C. PILES



STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 102

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

FOUNDATION PLAN AND PILE DATA TABLE

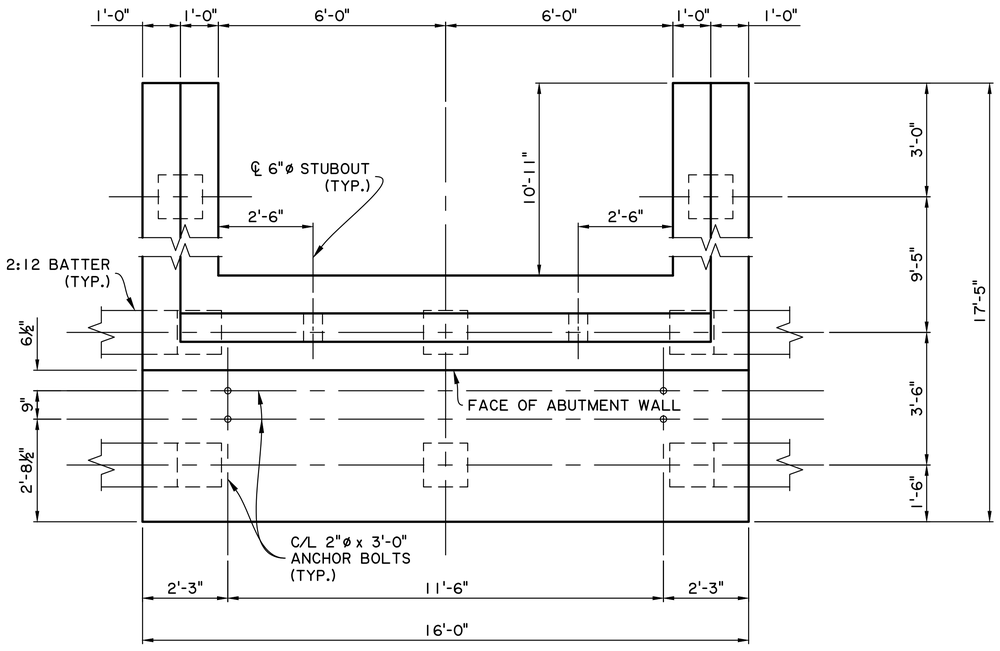
DESIGNED JWW
CHECKED LEY
DETAILED LEY
CHECKED JEE
DATE 2/13/26
SCALE -

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, ADJUST SCALE ACCORDINGLY. THIS BAR = 1 INCH.

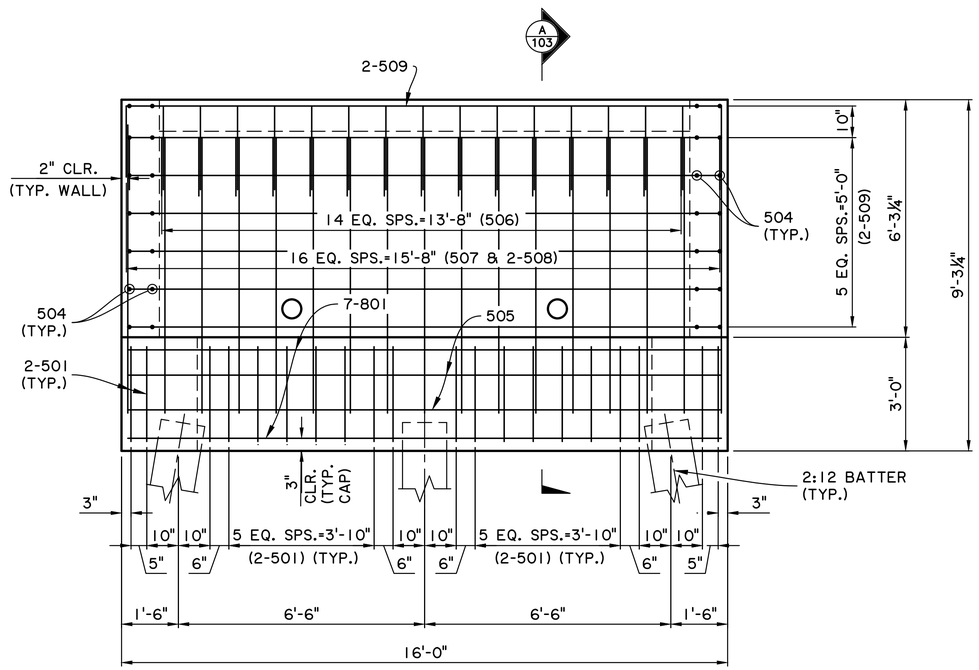
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:28 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - DT02-108 ABUTMENT



ABUTMENT PLAN

SCALE: 1/2" = 1'-0"

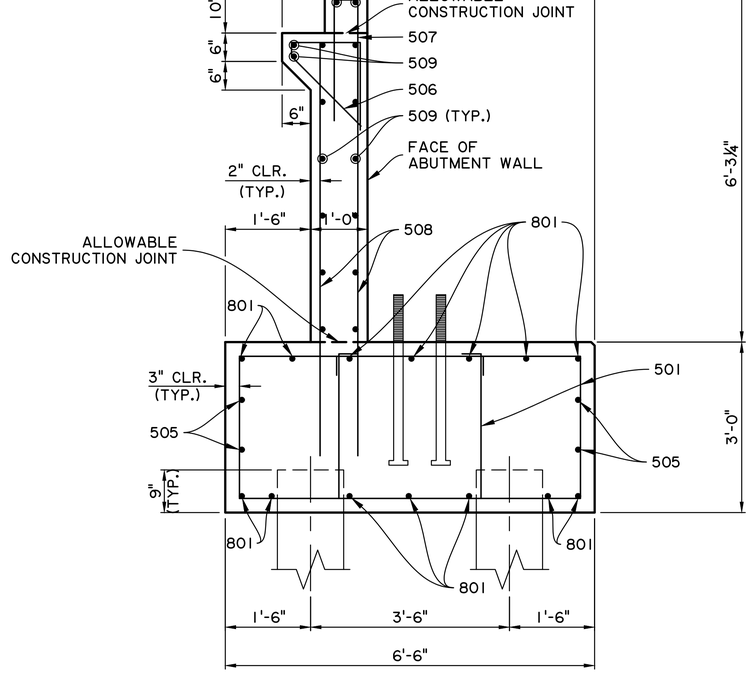


ABUTMENT ELEVATION

SCALE: 1/2" = 1'-0"

ESTIMATED QUANTITIES (ONE ABUTMENT)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
801	14	15'-6"	217'-0"	LONGIT. IN ABUT. CAP
802	8	14'-0"	112'-0"	LONGIT. IN WINGWALL CAP
TOTAL NO. 8 BARS = 329'-0" = 879 LBS.				
501	40	14'-4"	573'-4"	STIRRUPS IN ABUT. CAP
502	60	8'-1"	485'-0"	VERTICAL IN WINGWALL
503	28	13'-1"	366'-4"	LONGIT. IN WINGWALL
504	28	4'-0"	112'-0"	90 DEG. HOOKS IN WINGWALL
505	4	15'-6"	62'-0"	LONGIT. IN ABUT. CAP
506	15	4'-9"	71'-3"	STIRRUPS IN ABUT. WALL CORBEL
507	17	4'-9"	80'-9"	STIRRUPS IN ABUT. WALL RISER
508	34	7'-7"	257'-10'	VERTICAL IN ABUT. WALL
509	16	15'-8"	250'-8"	LONGIT. IN ABUT. WALL
510	8	14'-0"	112'-0"	LONGIT. IN WINGWALL CAP
TOTAL NO. 5 BARS = 2371'-2" = 2,474 LBS.				
401	22	9'-6"	209'-0"	STIRRUPS IN WINGWALL CAP
TOTAL NO. 4 BARS = 209'-0" = 140 LBS.				
TOTAL DEFORMED REINFORCING STEEL = 3,493 LBS.				
* STRUCTURAL METAL WORK = 227 LBS.				
CLASS A1 CONCRETE = 25.51 CU. YDS.				
CONCRETE FINISH (CLASS 2 RUBBED FINISH) = 526 SQ. FEET				
CONCRETE FINISH (CLASS 3 SPECIAL FINISH) = 526 SQ. FEET				
MAXIMUM PILE LOAD: SERVICE DEAD LOAD = 25 TONS SERVICE LIVE LOAD = 15 TONS FACTORED TOTAL LOAD = 85 TONS				

* FOR INFORMATIONAL PURPOSES ONLY. INCLUDES ANCHOR BOLTS & ASSOCIATED HARDWARE AND JOINT ARMOR. ALL LABOR AND MATERIALS TO BE PAID FOR UNDER 807-02-00100 "STRUCTURAL METALWORK".



SECTION A

SCALE: 3/4" = 1'-0"

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46765
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 103

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

BRIDGE ABUTMENT PLAN AND DETAILS (1 OF 2)

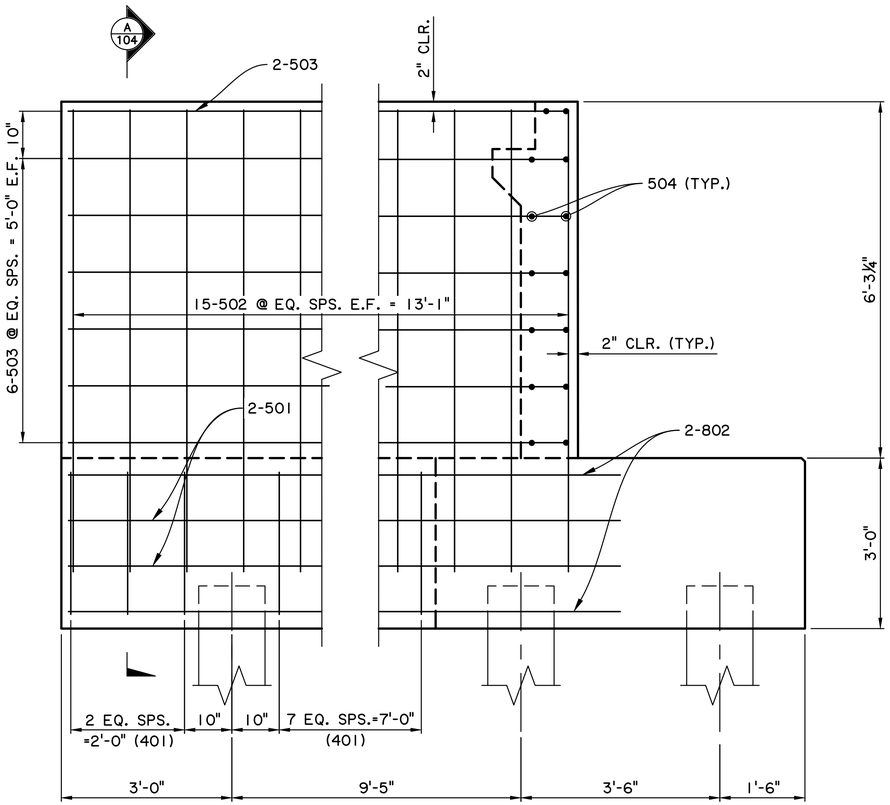
DESIGNED	JWW	DATE	2/13/26
CHECKED	LEY	SCALE	-
DETAILED	LEY		
CHECKED	JEE		

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
ADJUST SCALE IF THIS BAR ≠ 1 INCH.

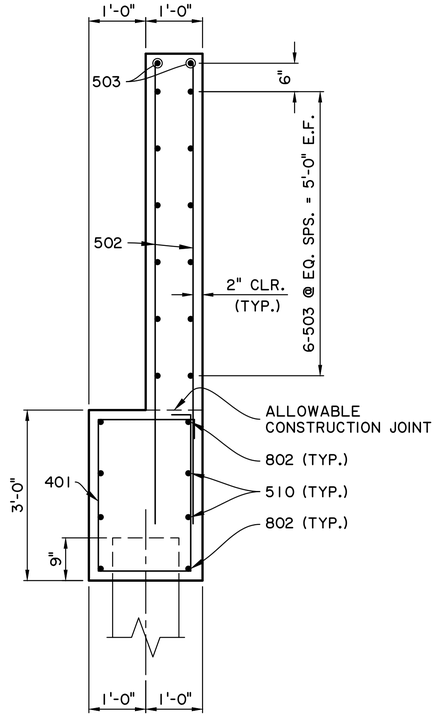
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:28 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - DT02-108 ABUTMENT

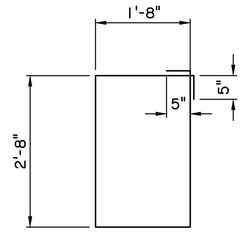


END ELEVATION
SCALE: 3/4" = 1'-0"

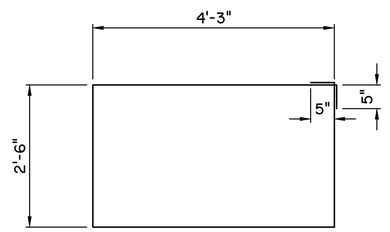
ARMOR JOINT DETAIL
SCALE: N.T.S.



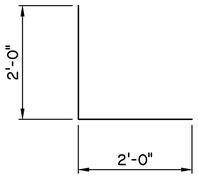
SECTION A
SCALE: 3/4" = 1'-0"



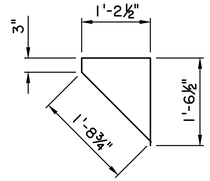
401
2" Ø PIN



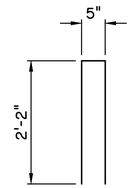
501
2 1/2" Ø PIN



504
2 1/2" Ø PIN



506
2 1/2" Ø PIN



507
2 1/2" Ø PIN

NOTES:

1. HEADED STUDS AND ANGLES SHALL BE HOT DIP GALVANIZED AFTER WELDING STUDS TO ANGLES.
2. ANCHOR BOLT LAYOUT SHALL BE VERIFIED WITH TRUSS SUPPLIER BY CONTRACTOR BEFORE CONSTRUCTION OF ABUTMENTS. IF THE LAYOUT DIFFERS FROM WHAT IS SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED BEFORE CONSTRUCTION OF THE ABUTMENTS.
3. ANCHOR BOLTS SHALL BE 2" DIAMETER X 3'-0" F1554 GRADE 105 GALVANIZED THREADED ROD WITH 2 NUTS AND 3½" O.D. WASHER. THE ANCHOR BOLTS SHALL HAVE A PROJECTION OF 10".

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 104

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

BRIDGE ABUTMENT PLAN AND DETAILS (2 OF 2)

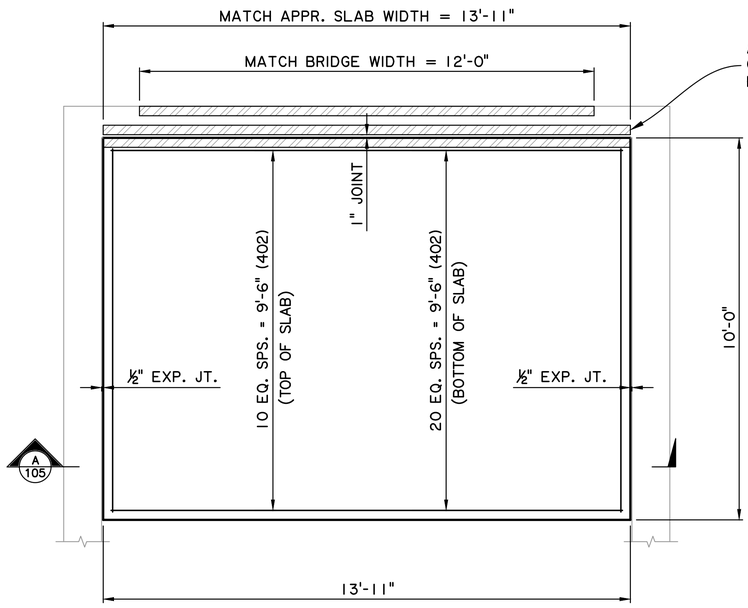
DESIGNED	JNW	
CHECKED	LEY	
DETAILED	LEY	
CHECKED	JEE	
DATE	2/13/26	
SCALE	-	

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

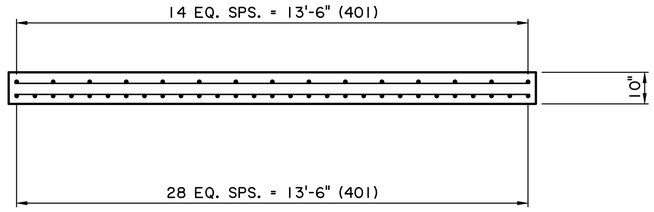
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS
4/22/2026 2:10 PM
R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - DT01-107 APPROACH SLAB



APPROACH SLAB PLAN

SCALE: 1/2" = 1'-0"



SECTION A

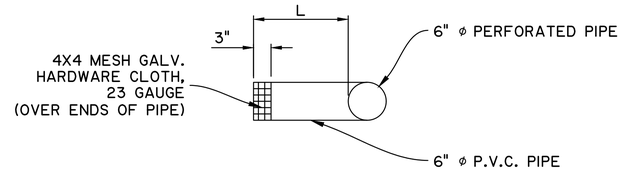
SCALE: 1/2" = 1'-0"

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

ESTIMATED QUANTITIES (ONE APPROACH SLAB)				
BAR	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
401	44	9'-8"	425'-4"	LONGIT. IN APPR. SLAB
402	32	13'-7"	434'-8"	TRANSV. IN APPR. SLAB
TOTAL NO. 4 BARS = 860'-0" = 575 LBS.				
* TOTAL DEFORMED REINFORCING STEEL = 575 LBS.				
* CLASS A1 CONCRETE = 4.30 CU. YDS.				
** STRUCTURAL METALWORK = 206 LBS.				
SEALED EXPANSION JOINT = 14 LIN. FT.				
CONCRETE APPROACH SLAB = 15.47 SQ. YDS.				

* FOR INFORMATIONAL PURPOSES ONLY. ALL LABOR AND MATERIALS TO BE PAID FOR UNDER 813-01-00100 "CONCRETE APPROACH SLABS (CAST-IN-PLACE)."

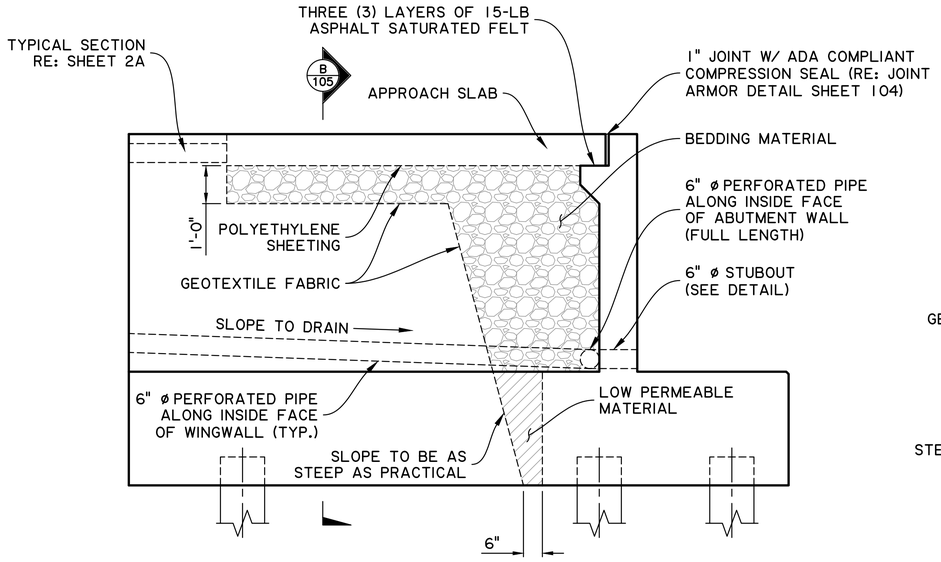
** FOR INFORMATIONAL PURPOSES ONLY. ALL LABOR AND MATERIALS TO BE PAID FOR UNDER 815-02-00100 "SEALED EXPANSION JOINT (END DAMS AND PREFORMED NEOPRENE SEAL)."



STUBOUT DETAIL

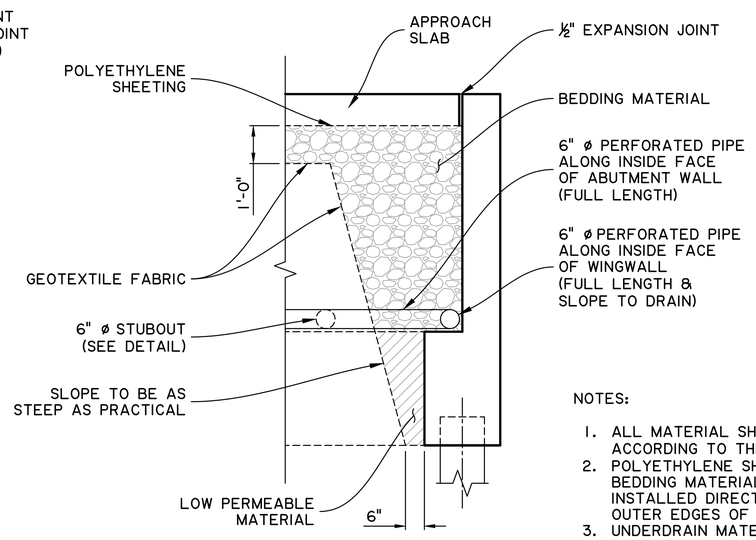
SCALE: N.T.S.

"L" IS DETERMINED BY THE THICKNESS OF THE WALL



UNDERDRAINS ELEVATION

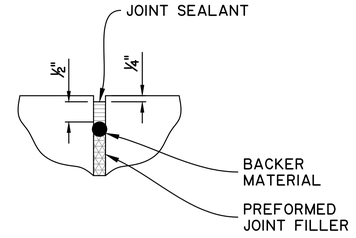
SCALE: 1/2" = 1'-0"



SECTION B

SCALE: 1/2" = 1'-0"

SYMMETRICAL BOTH WINGWALLS



EXPANSION JOINT DETAIL

SCALE: N.T.S.

NOTES:

1. ALL MATERIAL SHALL BE PAID FOR UNDER "CONCRETE APPROACH SLABS" ACCORDING TO THE SPECIFICATIONS, EXCEPT WHERE NOTED ON THIS SHEET.
2. POLYETHYLENE SHEETING (6 MIL THICKNESS) SHALL BE INSTALLED BETWEEN THE BEDDING MATERIAL AND APPROACH SLAB. GEOTEXTILE FABRIC SHALL BE INSTALLED DIRECTLY BELOW THE BEDDING MATERIAL. LIMITS SHALL BE THE OUTER EDGES OF THE APPROACH SLAB.
3. UNDERDRAIN MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 813 OF THE STANDARD SPECIFICATIONS
4. LOW PERMEABLE MATERIAL SHALL BE DEFINED AS A SOIL HAVING THE SAME PI LIMITS AS PLASTIC SOIL BLANKETS, SEE SECTION 203.10.
5. GEOTEXTILE FABRIC (CLASS C OR D) SAHLL BE WRAPPED AROUND THE PERFORATED PIPE ONLY IN THE AREA OUTSIDE OF THE BEDDING MATERIAL.
6. BEDDING MATERIAL, LOW PERMEABLE MATERIAL, POLYETHYLENE SHEETING, GEOTEXTILE FABRIC, 6" ø PERFORATED PIPE, 4x4 MESH, WELDED WIRE FABRIC, AND CONCRETE HEADWALL AT PIPE ENDS TO BE INCLUDED IN THE PRICE BID FOR 813-01 "CONCRETE APPROACH SLABS."
7. PREFORMED JOINT MATERIAL AND JOINT SEALANT SHALL BE IN ACCORDANCE WITH SECTION 815 OF THE STANDARD SPECIFICATIONS.

SHEET NUMBER 105

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

CONCRETE APPROACH SLAB & UNDERDRAIN DETAILS

DESIGNED	JNW
CHECKED	LEY
DETAILED	LEY
CHECKED	JEE
DATE	2/13/26
SCALE	-

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL TRACINGS
R:\2024\240363 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240363C-DOTD-GEN- BD.2.11.10.0.01 - Concrete Surface Finish (2 of 2).dgn 4/22/2026 2:06 PM

TAMMANY TRACE BRIDGES GROUP 2 – BRIDGE 13

SUMMARY OF SURFACE FINISH QUANTITIES			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
			WATER SURFACE ELEVATION = N/A
SIDEWALK RAILING (LT.)	N/A	N/A	
SIDEWALK RAILING (RT.)	N/A	N/A	
BRIDGE RAILING (LT.)	N/A	N/A	
BRIDGE RAILING (RT.)	N/A	N/A	
SLAB EDGE FASCIA (LT.)	N/A	N/A	
SLAB EDGE FASCIA (RT.)		N/A	
BENT CAP ENDS (LT.)		N/A	
BENT CAP ENDS (RT.)		N/A	
BACKWALL	552	552	STA. 15+01.92 TO STA. 15+12.75 – 17+68.25 TO 17+79.09
WINGWALL	226	226	STA. 15+01.92 TO STA. 15+12.75 – 17+68.25 TO 17+79.09
ABUTMENT CAP	274	274	STA. 15+01.92 TO STA. 15+12.75 – 17+68.25 TO 17+79.09
DECK / SLAB	N/A	N/A	
EXTERIOR GIRDER		N/A	
BENT CAP / PIER CAP		N/A	
COLUMNS		N/A	
TOWER		N/A	
PILES		N/A	
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:	1,052	1,052	
MISCELLANEOUS ITEMS:			
PERMANENT BARRIER (ON BRIDGE ONLY)	N/A	N/A	
PIER PROTECTION (USING BARRIER)	N/A	N/A	
HANDRAILING	N/A	N/A	
RETAINING WALL	N/A	N/A	
SUBTOTAL:	N/A	N/A	

TOTAL CONCRETE FINISH (CLASS 2) (ITEM NO. 805-18-00100) =	1,052 SQ. FT.
TOTAL CONCRETE FINISH (CLASS 3) (ITEM NO. 805-18-00200) =	1,052 SQ. FT.

NOTES:

SEE DETAIL 9 ABOVE AND SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 109

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN2300184

BD.2.11.10.0.02 CONCRETE SURFACE FINISHES

DESIGNED NJF
CHECKED JEE
DETAILED CAT
CHECKED JEE
DATE 2/13/26
SCALE

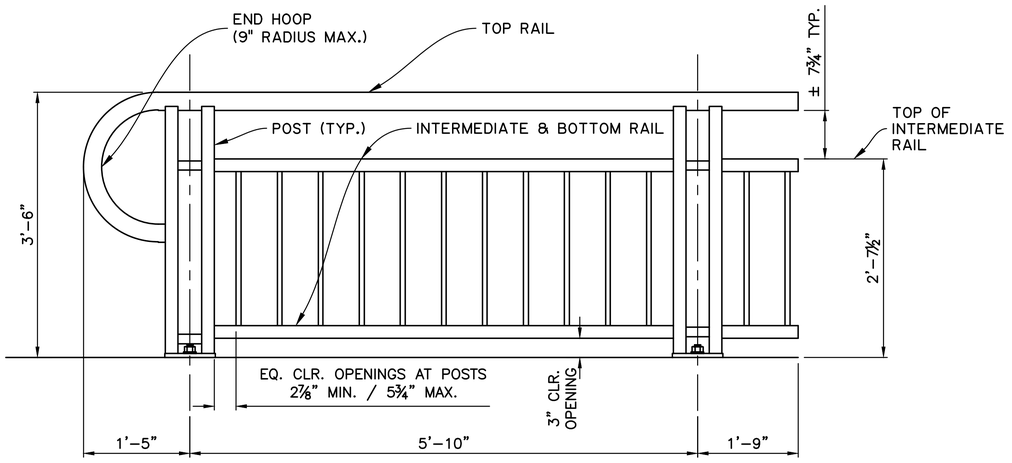
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

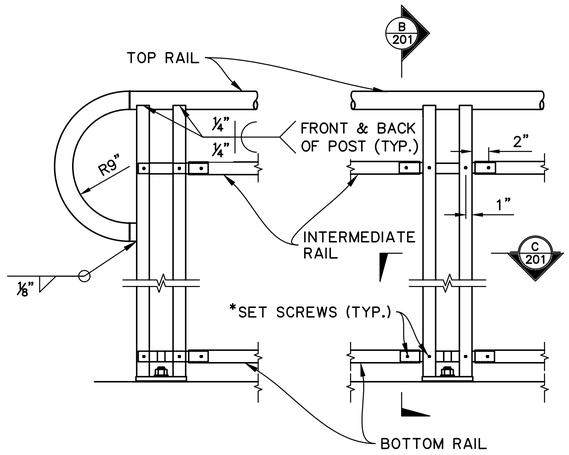
100% FINAL PLANS

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - DT04-201 Pedestrian Handrail-1
4/22/2026 2:04 PM



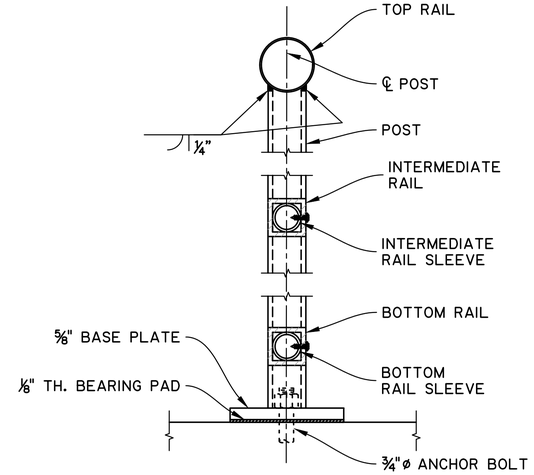
HANDRAIL ELEVATION

SCALE: N.T.S.



RAIL CONNECTIONS DETAIL

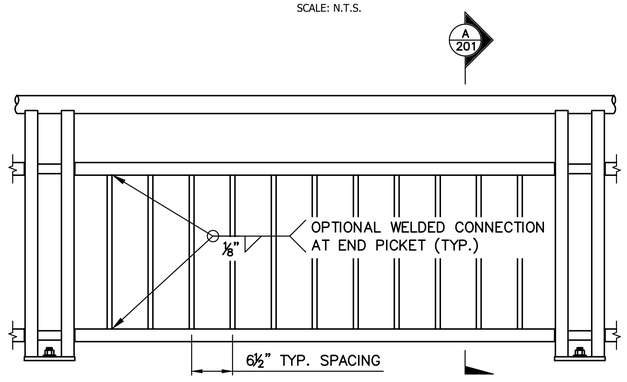
SCALE: N.T.S.
(SHOWING INSIDE FACE OF RAILING)
(PICKETS/PANELS NOT SHOWN FOR CLARITY)



SECTION B

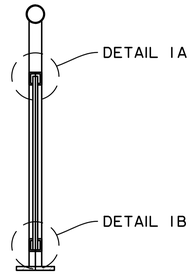
SCALE: N.T.S.

(TOP RAIL CONNECTION)



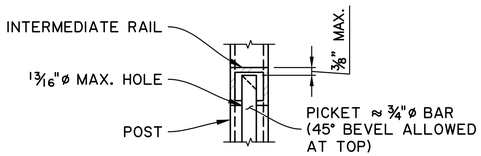
PICKET INFILL PANEL

SCALE: N.T.S.



SECTION A

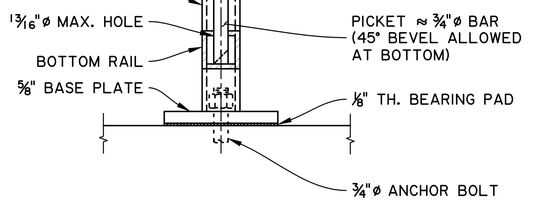
SCALE: N.T.S.



DETAIL 1A

SCALE: N.T.S.

(TOP OF PICKET CONNECTION)

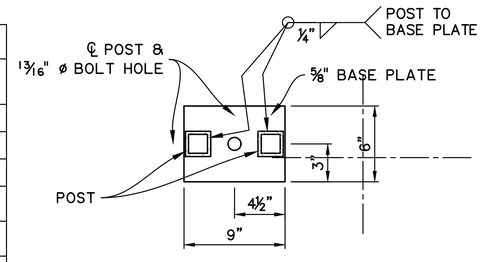


DETAIL 1B

SCALE: N.T.S.

(BOTTOM OF PICKET CONNECTION)

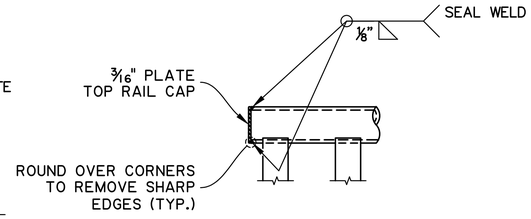
RAILING MEMBERS				
MEMBER	ALLOY	DESIGNATION	OUTSIDE DIMENSION	WALL THICKNESS
POST	6061–T6	RT 2x2x0.250	2.00" x 2.00"	0.250"
TOP RAIL	6061–T6	2½" NPS (SCH. 10)	2.875"	0.120"
END HOOP	6061–T6	2½" NPS (SCH. 10)	2.875"	0.120"
INTERMEDIATE & BOTTOM RAIL	6061–T6	RT 2x2x0.250	2.00" x 2.00"	0.250"
INT. & BOTTOM RAIL POST CONNECTION SLEEVE	6061–T6	1½" O.D. x 0.125 WALL	1½"	N/A
PICKETS	6061–T6	¾" ø ROUND BAR	¾"	N/A
BASE PLATE	6061–T6	⅝" PL	⅝"	N/A
ALUMINUM SCREWS	2024–T4 OR 7075–T73	¼" ø x ¾" PAN HEAD	¼"	N/A
STAINLESS STEEL SCREWS	TYPE 316 OR 18–8	¼" ø x ¾" PAN HEAD	¼"	N/A



SECTION C

SCALE: N.T.S.

(BASE PLATE DETAILS)



RAIL TERMINATION DETAIL

SCALE: N.T.S.

(WHEN END HOOP IS NOT USED)

NOTES:

* 1. ¼"ø x ¾" PAN HEAD ALUMINUM OR STAINLESS STEEL SET SCREWS. SCREWS MUST BE SET FLUSH AGAINST THE OUTSIDE FACE OF RAILS & POSTS AND UNDERSIDE OF HANDRAILS. A SINGLE TACK WELD (½" MAX. LENGTH) AT TOP OF THE SLEEVE FOR EACH POST MAY BE SUBSTITUTED FOR THE SET SCREWS.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46765
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER 201

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

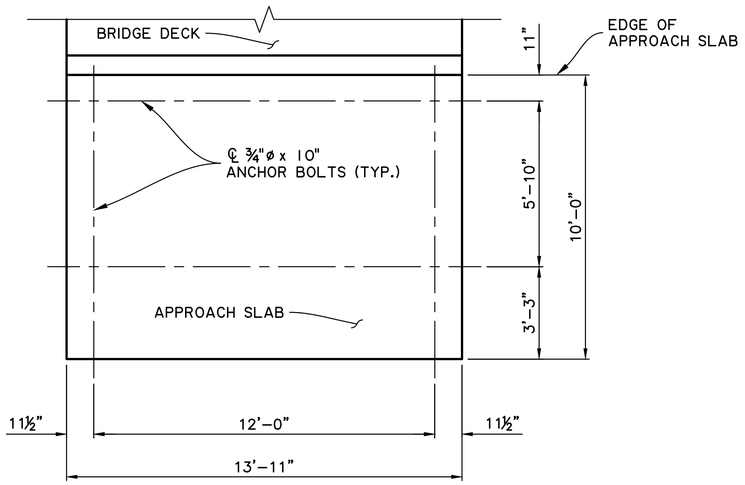
PEDESTRIAN HANDRAIL

DESIGNED	LEY
CHECKED	JEE
DETAILED	LEY
CHECKED	JEE
DATE	2/13/26
SCALE	-

FORTE & TABLADA

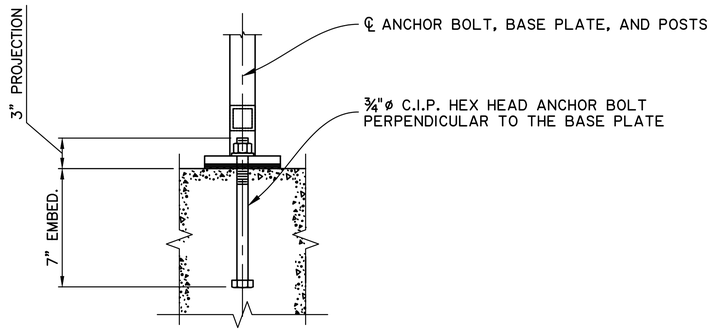
ATTENTION:
THIS BAR = 1" INCH ON ORIGINAL DRAWING.
ADJUST SCALE IF THIS BAR ≠ 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY



ANCHOR BOLT PLAN

SCALE: N.T.S.



ANCHOR BOLT DETAIL

SCALE: N.T.S.

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED
PROFESSIONAL
CIVIL ENGINEERING
02/13/26

100% FINAL PLANS

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - DT04-202 Pedestrian Handrail-2 4/22/2026 2:04 PM

SHEET NUMBER 202

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

PEDESTRIAN HANDRAIL

DESIGNED	LEY
CHECKED	JEE
DETAILED	LEY
CHECKED	JEE
DATE	2/13/26
SCALE	-

FORTE & TABLADA

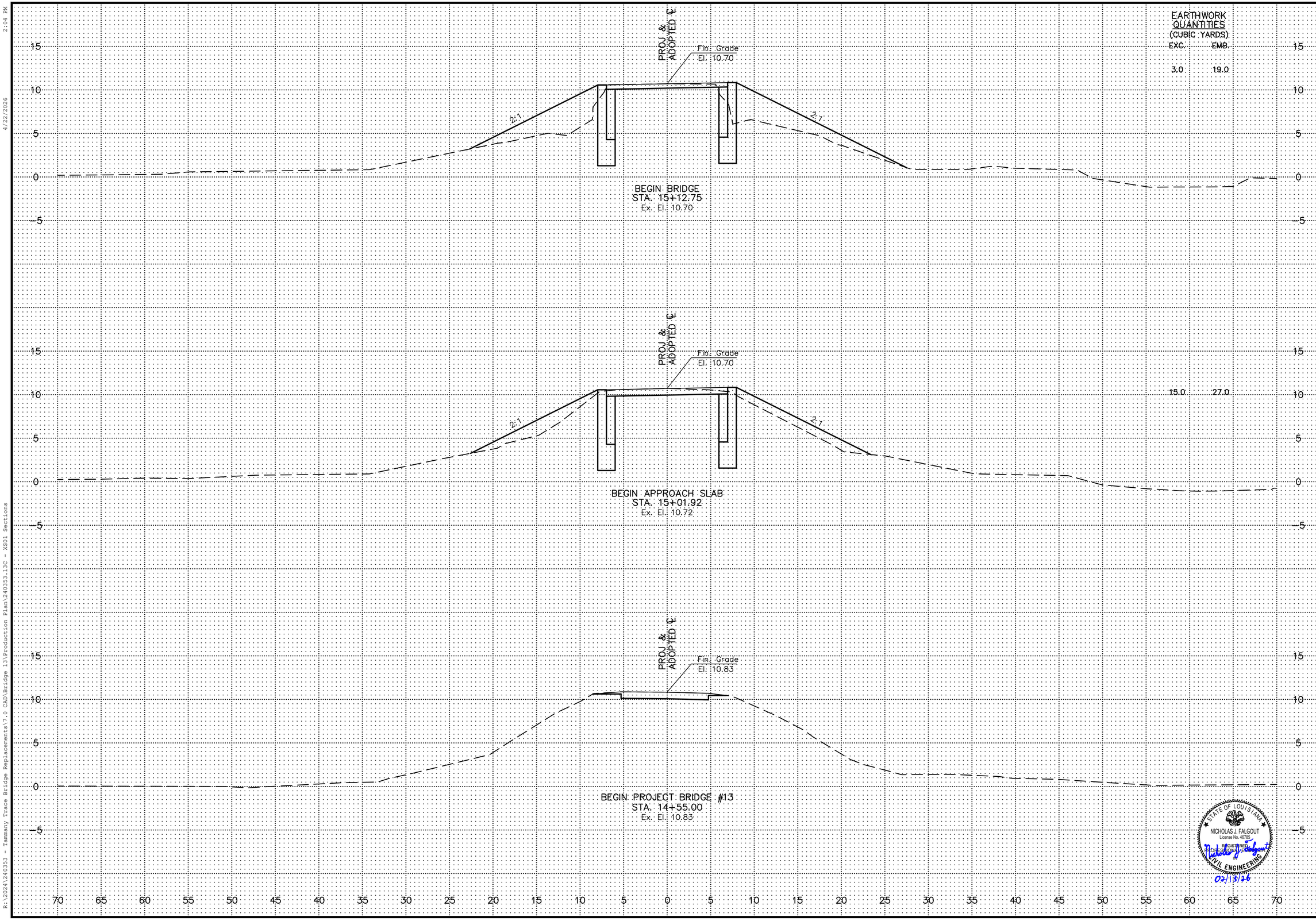
ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS

4/22/2026 2:04 PM

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353.13C - XS01 Sections



EARTHWORK QUANTITIES
(CUBIC YARDS)

EXC.	EMB.
3.0	19.0
15.0	27.0

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
02/13/26

SHEET NUMBER	401

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN230000184

CROSS SECTIONS

DESIGNED	NJF	DATE	2/13/26
CHECKED	JEE	SCALE	1" = 5'
DETAILED	CAT		
CHECKED	JEE		

FORTE & TABLADA

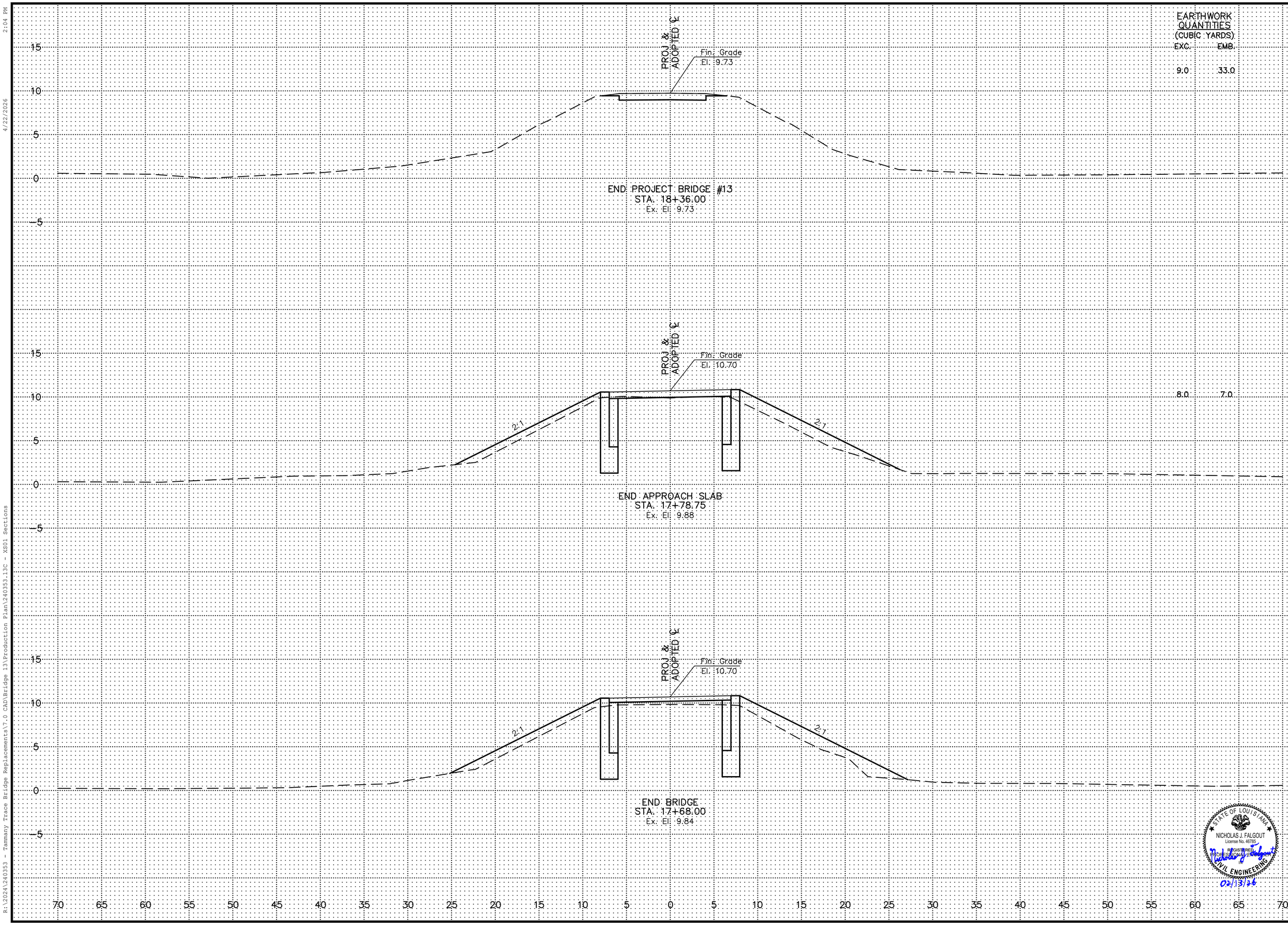
ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS

4/22/2026 2:04 PM

R:\2024\240353 - Tammany Trace Bridge Replacements\7.0 CAD\Bridge 13\Production Plan\240353_13C - XS01 Sections



EARTHWORK QUANTITIES
(CUBIC YARDS)

EXC.	EMB.
9.0	33.0
8.0	7.0

SHEET NUMBER 402

TAMMANY TRACE BRIDGE #13
PROJECT NO.: EN23000184

CROSS SECTIONS

DESIGNED	NJF
CHECKED	JEE
DETAILED	CAT
CHECKED	JEE
DATE	2/13/26
SCALE	1" = 5'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA
NICHOLAS J. FALGOUT
License No. 46785
REGISTERED
CIVIL ENGINEERING
02/13/26