

FACILITY ENCROACHMENT AGREEMENT

THIS AGREEMENT, made and effective as of May 27, 2026, by and between CSX TRANSPORTATION, INC., a Virginia corporation, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Licensor," and EFFINGHAM COUNTY BOARD OF COMMISSIONERS a municipal corporation, political subdivision or state agency, under the laws of the Georgia whose mailing address is 804 South Laurel Street, Springfield, Georgia 31329, hereinafter called "Licensee," WITNESSETH:

WHEREAS, Licensee desires to construct (unless previously constructed and designated as existing herein), use and maintain the below described facility(ies), hereinafter called "Facilities," over, under or across property owned or controlled by Licensor, at the below described location(s):

1. One (1) forty-two inch (42") diameter sub-grade pipeline crossing, solely for the conveyance of potable water, located at or near Rincon, Effingham County, Georgia, Florence Division, Columbia Subdivision, Milepost S-481.05, Latitude N32:18:37., Longitude W81:14:22.;

hereinafter, called the "Encroachment," as shown on print(s) labeled Exhibit "A," attached hereto and made a part hereof;

NOW, THEREFORE, in consideration of the mutual covenants, conditions, terms and agreements herein contained, the parties hereto agree and covenant as follows:

1. LICENSE:

1.1 Subject to Article 17, Licensor, insofar as it has the legal right, power and authority to do so, and its present title permits, and subject to:

(A) Licensor's present and future right to occupy, possess and use its property within the area of the Encroachment for any and all purposes, including Licensor's track(s) structures(s), power lines, communication, signal or other wires, train control system, cellular or data towers, or electrical or electronic apparatus, or any appurtenances thereto ("Licensor's Facilities") and any other facilities as now exist or which may in the future be located in, upon, over, under or across the property

(B) All encumbrances, conditions, covenants, easements, and limitations applicable to Licensor's title to or rights in the subject property; and

(C) Compliance by Licensee with the terms and conditions herein contained;

does hereby grant a non-exclusive license to Licensee for the Encroachment for the sole purpose of permitting Licensee to construct, maintain, repair, renew, operate, use, alter or change the

Facilities at the Encroachment above for the term herein stated, and to remove same upon termination.

1.2 The term Facilities, as used herein, shall include only those structures and ancillary facilities devoted exclusively to the transmission usage above within the Encroachment, and as shown on attached Exhibit A.

1.3 No additional structures or other facilities shall be placed, allowed, or maintained by Licensee in, upon or on the Encroachment except upon prior separate written consent of Licensor.

2. ENCROACHMENT FEE; TERM:

2.1 Licensee shall pay Licensor a one-time nonrefundable Encroachment Fee of SIX THOUSAND SEVEN HUNDRED EIGHTY AND 00/100 U.S. DOLLARS (\$6,780.00) upon execution of this Agreement. Licensee agrees that the Encroachment Fee applies only to the original Licensee under this Agreement. In the event of a successor (by merger, consolidation, reorganization and/or assignment) or if the original Licensee changes its name, then Licensee shall be subject to payment of Licensor's current administrative and document preparation fees for the cost incurred by Licensor in preparing and maintaining this Agreement on a current basis.

2.2 However, Licensee assumes sole responsibility for, and shall pay directly (or reimburse Licensor), any additional annual taxes and/or periodic assessments levied against Licensor or Licensor's property solely on account of said Facilities or Encroachment.

2.3 This Agreement shall terminate as herein provided, but shall also terminate upon: (a) Licensee's cessation of use of the Facilities or Encroachment for the purpose(s) above; (b) removal of the Facilities; (c) subsequent mutual written consent; and/or (d) failure of Licensee to complete installation within five (5) years from the effective date of this Agreement.

2.4 In further consideration for the license or right hereby granted, Licensee hereby agrees that Licensor shall not be charged or assessed, directly or indirectly, with any part of the cost of the installation of said Facilities and appurtenances, and/or maintenance thereof, or for any public works project of which said Facilities is a part. Licensee agrees that it shall not assess Licensor any stormwater or drainage fee associated with such Facilities. Furthermore, Licensee shall be responsible for any stormwater or drainage fees assessed by any County or State agency managing such systems.

3. CONSTRUCTION, MAINTENANCE AND REPAIRS:

3.1 Licensee shall construct, maintain, relocate, repair, renew, alter, and/or remove the Facilities, in a prudent, workmanlike manner, using quality materials and complying with any applicable standard(s) or regulation(s) of Licensor (CSXT Specifications), or Licensee's particular industry, National Electrical Safety Code, or any governmental or regulatory body having jurisdiction over the Encroachment.

3.2 Location and construction of Facilities shall be made strictly in accordance with design(s) and specifications furnished to and approved by Licensor and of material(s) and size(s) appropriate for the purpose(s) above recited.

3.3 All of Licensee's work, and exercise of rights hereunder, shall be undertaken at time(s) satisfactory to Licensor, and so as to eliminate or minimize any impact on or interference with the safe use and operation of Licensor's property and appurtenances thereto.

3.4 In the installation, maintenance, repair and/or removal of said Facilities, Licensee shall not use explosives on or adjacent to Licensor's property of any type or perform or cause any blasting on or adjacent to Licensor's property without the separate express prior written consent of Licensor. As a condition to such consent, a representative will be assigned by Licensor to monitor blasting, and Licensee shall reimburse Licensor for the entire cost and/or expense of furnishing said monitor.

3.5 Any repairs or maintenance to the Facilities, whether resulting from acts of Licensee, or natural or weather events, which are necessary to protect or facilitate Licensor's use of its property, shall be made by Licensee promptly, but in no event later than thirty (30) days after Licensee has notice as to the need for such repairs or maintenance.

3.6 Licensor, in order to protect or safeguard its property, rail operations, equipment and/or employees from damage or injury, may request immediate repair or renewal of the Facilities, and if the same is not performed, may make or contract to make such repairs or renewals, at the sole risk, cost and expense of Licensee.

3.7 All work on the Encroachment shall be conducted in accordance with Licensor's safety rules and regulations.

3.8 Licensee hereby agrees to reimburse Licensor any loss, cost or expense (including losses resulting from train delays and/or inability to meet train schedules) arising from any failure of Licensee to make repairs or conduct maintenance as required by Section 3.5 above or from improper or incomplete repairs or maintenance to the Facilities or Encroachment.

3.9 In the event it becomes necessary for the Licensee to deviate from the approved Exhibit A, Licensee shall seek prior approval from Licensor, or when applicable, an official field representative of Licensor permitted to approve changes, authorizing the necessary field changes and Licensee shall provide Licensor with complete As-Built Drawings of the completed work. As-Built Drawings shall be submitted to Licensor in either electronic or hard copy form upon the substantial completion of the project and upon Licensor's request.

3.10 In the event of large scale maintenance/construction work to railroad bridges Licensee is required to protect power lines with insulated covers or comparable safety devices at their costs during construction/maintenance for safety of railroad employees.

4. PERMITS, LICENSES:

4.1 Before any work hereunder is performed, or before use of the Encroachment for the contracted purpose, Licensee, at its sole cost and expense, shall obtain all necessary permit(s) (including zoning, building, construction, health, safety or environmental matters), letter(s) or certificate(s) of approval. Licensee expressly agrees and warrants that it shall conform and limit its activities to the terms of such permit(s), approval(s) and authorization(s), and shall comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (State, Federal or Local) having jurisdiction over Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act (OSHA) (29 CFR 1926.651(b)), et al., and State "One Call" - "Call Before You Dig" requirements.

4.2 Licensee assumes sole responsibility for failure to obtain such permit(s) or approval(s), for any violations thereof, and for costs or expenses of compliance or remedy.

5. MARKING AND SUPPORT:

5.1 With respect to any subsurface installation or maintenance upon Licensor's property, Licensee, at its sole cost and expense, shall:

- (A) support track(s) and roadbed in a manner satisfactory to Licensor;
- (B) backfill with satisfactory material and thoroughly tamp all trenches to prevent settling of surface of land and roadbed of Licensor in a manner satisfactory to Licensor; and
- (C) either remove any surplus earth or material from Licensor's property or cause said surplus earth or material to be placed and distributed at location(s) and in such manner Licensor may approve.

5.2 After construction or maintenance of the Facilities, Licensee shall:

- (A) Restore any track(s), roadbed and other disturbed property in a manner satisfactory to Licensor; and
- (B) Erect, maintain and periodically verify the accuracy of aboveground markers, in a form approved by Licensor, indicating the location, depth and ownership of any underground Facilities or related facilities.

5.3 Licensee shall be solely responsible for any subsidence or failure of lateral or subjacent support in the Encroachment area for a period of three (3) years after completion of installation.

6. TRACK CHANGES:

6.1 In the event that rail operations and/or track maintenance result in changes in grade or alignment of, additions to, or relocation of track(s) or other facilities, or in the event future use of Licensor's rail corridor ("Rail Corridor") or property necessitate any change of location, height or depth in the Facilities or Encroachment, Licensee, at its sole cost and expense and within thirty (30) days after notice in writing from Licensor, shall make changes in the Facilities or Encroachment to accommodate such track(s) or operations.

6.2 If Licensee fails to do so, Licensor may make or contract to make such changes at Licensee's sole risk, cost and expense.

7. FACILITY CHANGES:

7.1 Licensee shall periodically monitor and verify the depth or height of the Facilities or Encroachment in relation to the existing tracks and facilities, and shall relocate the Facilities or change the Encroachment, at Licensee's expense, should such relocation or change be necessary to comply with the minimum clearance requirements of Licensor.

7.2 If Licensee undertakes to revise, renew, relocate or change in any manner whatsoever all or any part of the Facilities (including any change in voltage or gauge of wire or any change in circumference, diameter or radius of pipe or change in materials transmitted in and through said pipe), or is required by any public agency or court order to do so, plans therefor shall be submitted to Licensor for approval before such change. After approval, the terms and conditions of this Agreement shall apply thereto.

8. INTERFERENCE WITH RAIL FACILITIES:

8.1 Although the Facilities/Encroachment herein permitted may not presently interfere with Licensor's Facilities, in the event that the operation, existence or maintenance of said Facilities, in the sole judgment of Licensor, causes: (a) interference (including physical or interference from an electromagnetic induction, or interference from stray or other currents) with Licensor's power lines, communication, signal or other wires, train control system, or electrical or electronic apparatus; or (b) interference in any manner, with the operation, maintenance or use of Licensor's Facilities; then and in either event, Licensee, upon receipt of written notice from Licensor of any such interference, and at Licensee's sole risk, cost and expense, shall promptly make such changes in its Facilities or installation, as may be required in the reasonable judgment of the Licensor to eliminate all such interference. Upon Licensee's failure to remedy or change, Licensor may do so or contract to do so at Licensee's sole risk, cost and expense.

8.2 Without assuming any duty hereunder to inspect the Facilities, Licensor hereby reserves the right to inspect same and to require Licensee to undertake repairs, maintenance or adjustments to the Facilities, which Licensee hereby agrees to make promptly, at Licensee's sole cost and expense.

9. RISK, LIABILITY, INDEMNITY:

With respect to the relative risk and liabilities of the parties, it is hereby agreed that:

9.1 To the fullest extent permitted by State law (constitutional or statutory, as amended), Licensee hereby agrees to, defend, indemnify, and hold Licensor harmless from and against any and all liability, loss, claim, suit, damage, charge, cost or expense (including attorneys' fees) (collectively, "Claims and Losses") which Licensor may suffer, sustain, incur or in any way be subjected to, on account of death of or injury to any person whomsoever (including officers, agents, employees or invitees of Licensor), and for damage to or loss of or destruction of any property whatsoever, arising out of, resulting from, or in any way connected with the construction, repair, maintenance, replacement, presence, existence, operations, use or removal of the Facilities or any structure in connection therewith, or restoration of premises of Licensor to good order or condition after removal, EXCEPT when proven to have been caused solely by the willful misconduct or gross negligence of Licensor. HOWEVER, to the fullest extent permitted by State law, during any period of actual construction, repair, maintenance, replacement or removal of the Facilities, wherein agents, equipment or personnel of Licensee are on the railroad rail corridor, Licensee's liability hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

9.2 Use of Licensor's Rail Corridor involves certain risks of loss or damage as a result of the rail operations. Notwithstanding Section 9.1, Licensee expressly assumes all risk of loss and damage to Licensee's Property or the Facilities in, on, over or under the Encroachment, including loss of or any interference with use or service thereof, regardless of cause, including electrical field creation, fire or derailment resulting from rail operations. For this Section, the term "Licensee's Property" shall include property of third parties situated or placed upon Licensor's Rail Corridor by Licensee or by such third parties at request of or for benefit of Licensee.

9.3 To the fullest extent permitted by State law, as above, Licensee assumes all responsibility for, and agrees to defend, indemnify and hold Licensor harmless from any and all Claims and Losses arising from, under or in connection with or as a consequence of: (a) (i) any sudden or nonsudden pollution of air, water, land and/or ground water on or off the Encroachment area, arising from or in connection with the use of the Encroachment or (ii) any leaking, bursting, spilling, or any escape of the material transmitted in or through the Facilities; (b) any federal or state law dealing with either such sudden or nonsudden pollution of air, water, land and/or ground water arising therefrom or the remedy thereof; (c) any subsidence or failure of lateral or subjacent support of the tracks arising from such Facilities leakage; and (d) any drainage or runoff on or off the Encroachment area as a result of the Facilities/Encroachment herein permitted.

9.4 Notwithstanding Section 9.1, Licensee also expressly assumes all risk of loss which in any way may result from Licensee's failure to maintain either required clearances for any overhead Facilities or the required depth and encasement for any underground Facilities, whether or not such loss(es) result(s) in whole or part from Licensor's contributory negligence or joint fault.

9.5 Obligations of Licensee hereunder to release, indemnify and hold Licensor harmless shall also extend to companies and other legal entities that control, are controlled by,

subsidiaries of, or are affiliated with Licensor, as well as any railroad that operates over the rail corridor on which the Encroachment is located, and the officers, employees and agents of each.

9.6 If a claim is made or action is brought against Licensor, and/or its operating lessee, for which Licensee may be responsible hereunder, in whole or in part, Licensee shall be notified to assume the handling or defense of such claim or action; but Licensor may participate in such handling or defense.

9.7 Notwithstanding anything contained in this Agreement, the limitation of liability contained in the state statutes, as amended from time to time, shall not limit Licensor's ability to collect under the insurance policies required to be maintained under this Agreement.

9.8 Notwithstanding the foregoing in this Section 9, Licensee shall release and hold harmless Licensor from Claims and Losses.

10. INSURANCE:

10.1 Prior to commencement of surveys, installation or occupation of premises pursuant to this Agreement, Licensee shall procure and shall maintain during the continuance of this Agreement, at its sole cost and expense, a policy of

- (i) Statutory Worker's Compensation and Employers Liability Insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00).
- (ii) Commercial General Liability coverage (inclusive of contractual liability) with available limits of not less than FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence (limit may be satisfied through a combination of both primary and umbrella/excess liability policies) for bodily injury and property damage and covering the contractual liabilities assumed under this Agreement and naming Licensor, and/or its designee, as additional insured. The evidence of insurance coverage shall be endorsed to provide for thirty (30) days' notice to Licensor, or its designee, prior to cancellation or modification of any policy. Mail CGL certificate, along with agreement, to CSX Transportation, Inc., Speed Code J180, 500 Water Street, Jacksonville, FL 32202. On each successive year, send certificate to RenewalCOI@csx.com.
- (iii) Business automobile liability insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00) combined single limit for bodily injury and/or property damage per occurrence naming Licensor, and/or its designee, as additional insured.
- (iv) The insurance policies must contain a waiver of subrogation against CSXT and its parent, subsidiaries and affiliates, except where prohibited by law. All insurance companies must be A. M. Best rated A- and Class VII or better.

- (v) Such other insurance as Licensors may reasonably require.
- (vi) Licensee shall require its contractors to meet minimum insurance requirements above when performing work in relation to this Agreement. Licensee will procure and review contractor's insurance certificates to confirm requirements are met. Licensors may request a copy of the insurance certificate.
- (vii) Licensors' acceptance of any certificate of insurance does not constitute a waiver, release or modification of any of the insurance coverages or endorsements required under this Article 10.

10.2 If Licensee's existing CGL policy(ies) do(es) not automatically cover Licensee's contractual liability during periods of survey, installation, maintenance and continued occupation, a specific endorsement adding such coverage shall be purchased by Licensee. If said CGL policy is written on a "claims made" basis instead of a "per occurrence" basis, Licensee shall arrange for adequate time for reporting losses. Failure to do so shall be at Licensee's sole risk.

10.3 Licensors, or its designee, may at any time request evidence of insurance purchased by Licensee to comply with this Agreement. Failure of Licensee to comply with Licensors' request shall be considered a default by Licensee.

10.4 To the extent permitted by law and notwithstanding anything to the contrary in this Agreement, the insurance required and provided by Licensee shall not be subject to the limitations of sovereign immunity.

10.5 (A) In the event Licensee finds it necessary to perform construction or demolition operations within fifty feet (50') of any operated railroad track(s) or affecting any railroad bridge, trestle, tunnel, track(s), roadbed, overpass or underpass, Licensee shall: (a) notify Licensors; and (b) require its contractor(s) performing such operations to procure and maintain during the period of construction or demolition operations, at no cost to Licensors, Railroad Protective Liability (RPL) Insurance, naming Licensors, and/or its designee, as Named Insured, written on the current ISO/RIMA Form (ISO Form No. CG 00 35 04 13) with limits of FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence for bodily injury and property damage, with at least TEN MILLION AND 00/100 U.S. DOLLARS (\$10,000,000.00) aggregate limit per annual policy period. The original of such RPL policy shall be sent to and approved by Licensors prior to commencement of such construction or demolition. Licensors reserves the right to demand higher limits.

(B) At Licensors' option, in lieu of purchasing RPL insurance or the 50 foot endorsements from an insurance company (but not CGL insurance), Licensee may pay Licensors, at Licensors' current rate at time of request, the cost of adding this Encroachment, or additional construction and/or demolition activities, to Licensors' Railroad Protective Liability (RPL)

Policy for the period of actual construction. This coverage is offered at Licensors's sole discretion and may not be available under all circumstances.

10.6 Notwithstanding the provisions of Sections 10.1 and 10.2, Licensee, pursuant to State Statute(s), may self-insure or self-assume, in any amount(s), any contracted liability arising under this Agreement, under a funded program of self-insurance, which fund will respond to liability of Licensee imposed by and in accordance with the procedures established by law.

11. GRADE CROSSINGS; PROTECTION SERVICES:

11.1 Nothing herein contained shall be construed to permit Licensee or Licensee's contractor to move any vehicles or equipment over the track(s), except at public road crossing(s), without separate prior written approval of Licensor.

11.2 If Licensor deems it advisable, during any construction, maintenance, repair, renewal, alteration, change or removal of said Facilities, to place watchmen, flagmen, or field construction managers for protection of operations of Licensor or others on Licensor's Rail Corridor at the Encroachment, and to keep persons, equipment or materials away from the track(s), Licensor shall have the right to do so at the expense of Licensee, but Licensor shall not be liable for failure to do so.

11.3 Subject to consent of Licensor, in its sole discretion, and subject to Licensor's operating rules and labor agreements, Licensee may provide flagmen, in place of Licensor's provision, at Licensee's sole risk, cost and expense, and in such event, Licensor shall not be liable for the failure or neglect of such flagmen. Such flagmen shall be approved by Licensor and shall meet all Licensor's requirement for performing such work.

12. LICENSOR'S COSTS:

12.1 Any additional or alternative costs or expenses incurred by Licensor to accommodate Licensee's continued use of Licensor's property as a result of track changes or changes to Licensor's Facilities shall also be paid by Licensee.

12.2 Licensor's expense for wages ("force account" charges) and materials for any work performed at the expense of Licensee pursuant hereto shall be paid by Licensee within thirty (30) days after receipt of Licensor's bill therefor. Licensor may, at its discretion, request an advance deposit for estimated Licensor costs and expenses.

12.3 Such expense shall include cost of railroad labor and supervision under "force account" rules, plus current applicable overhead percentages, the actual cost of materials, and insurance, freight and handling charges on all material used. Equipment rentals shall be in accordance with Licensor's applicable fixed rate. Licensor may, at its discretion, require advance deposits for estimated costs of such expenses and costs.

13. DEFAULT, BREACH, WAIVER:

13.1 The proper and complete performance of each covenant of this Agreement shall be deemed of the essence thereof, and in the event Licensee fails or refuses to fully and completely perform any of said covenants or remedy any breach within thirty (30) days after receiving written notice from Licensor to do so (or within forty-eight (48) hours in the event of notice of a railroad emergency), Licensor shall have the option of immediately revoking this Agreement and the privileges and powers hereby conferred, regardless of encroachment fee(s) having been paid in advance for any annual or other period. Upon such revocation, Licensee shall make removal in accordance with Article 14.

13.2 No waiver by Licensor of its rights as to any breach of covenant or condition herein contained shall be construed as a permanent waiver of such covenant or condition, or any subsequent breach thereof, unless such covenant or condition is permanently waived in writing by Licensor.

13.3 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Encroachment, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

14. TERMINATION, REMOVAL:

14.1 All rights which Licensee may have hereunder shall cease upon the date of (a) termination, (b) revocation, or (c) subsequent agreement, or (d) Licensee's removal of the Facility from the Encroachment. However, neither termination nor revocation of this Agreement shall affect any claims and liabilities which have arisen or accrued hereunder, and which at the time of termination or revocation have not been satisfied; neither party, however, waiving any third party defenses or actions.

14.2 Within thirty (30) days after revocation or termination, Licensee, at its sole risk, cost and expense, shall (a) remove the Facilities from the Rail Corridor of Licensor, unless the parties hereto agree otherwise, (b) restore the Rail Corridor of Licensor in a manner satisfactory to Licensor, and (c) reimburse Licensor any loss, cost or expense of Licensor resulting from such removal.

14.3 Notwithstanding the termination, revocation or expiration of this Agreement, and except as otherwise stated in this Agreement, those obligations contained herein that by their terms or nature are intended to survive such termination, revocation or expiration shall do so including the indemnification, Facilities removal, restoration and reimbursement provisions herein.

15. NOTICE:

15.1 Licensee shall give Licensor at least thirty (30) days written notice before doing any work on Licensor's Rail Corridor, except that in cases of emergency shorter notice may be given. Licensee shall provide proper notification as follows:

a. For non-emergencies, Licensee shall submit online via the CSX Property Portal from Licensor's web site, via web link:
https://propertyportal.csx.com/pub_ps_res/ps_res/jsf/public/index.faces

b. For emergencies, Licensee shall complete all of the steps outlined in Section 15.1 a. above, and shall also include detailed information of the emergency. Licensee shall also call and report details of the emergency to Licensor's Rail Operations Emergency Telephone Number: 1-800-232-0144. In the event Licensor needs to contact Licensee concerning an emergency involving Licensee's Facility(ies), the emergency phone number for Licensee is: 912-667-0621.

15.2 All other notices and communications concerning this Agreement shall be addressed to Licensee at the address above, and to Licensor at the address shown on Page 1, c/o CSXT Contract Management, J180; or at such other address as either party may designate in writing to the other.

15.3 Unless otherwise expressly stated herein, all such notices shall be in writing and sent via Certified or Registered Mail, Return Receipt Requested, or by courier, and shall be considered delivered upon: (a) actual receipt, or (b) date of refusal of such delivery.

16. ASSIGNMENT:

16.1 The rights herein conferred are the privileges of Licensee only, and Licensee shall obtain Licensor's prior written consent to any assignment of Licensee's interest herein (by operation of law or otherwise); said consent shall not be unreasonably withheld. Any assignment of this Agreement by Licensee, by operation of law or otherwise, or any interest herein, without the prior written consent of Licensor, shall be void.

16.2 Subject to Sections 2 and 16.1, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors or assigns.

16.3 Licensee shall give Licensor written notice of any legal succession (by merger, consolidation, reorganization, etc.) or other change of legal existence or status of Licensee, with a copy of all documents attesting to such change or legal succession, within thirty (30) days thereof.

16.4 Licensor expressly reserves the right to assign this Agreement, in whole or in part, to any grantee, lessee, or vendee of Licensor's underlying property interests in the Encroachment, upon written notice thereof to Licensee.

16.5 In the event of any unauthorized sale, transfer, assignment, sublicense or encumbrance of this Agreement, or any of the rights and privileges hereunder, Licensor, at its

option, may revoke this Agreement by giving Licensee or any such assignee written notice of such revocation; and Licensee shall reimburse Licenser for any loss, cost or expense Licenser may incur as a result of Licensee's failure to obtain said consent.

17. TITLE:

17.1 Licensee understands that Licenser occupies, uses and possesses lands, rights-of-way and Rail Corridors under all forms and qualities of ownership rights or facts, from full fee simple absolute to bare occupation. Accordingly, nothing in this Agreement shall act as or be deemed to act as any warranty, guaranty or representation of the quality of Licenser's title for any particular Encroachment or segment of Rail Corridor occupied, used or enjoyed in any manner by Licensee under any rights created in this Agreement. It is expressly understood that Licenser does not warrant title to any Rail Corridor and Licensee will accept the grants and privileges contained herein, subject to all lawful outstanding existing liens, mortgages and superior rights in and to the Rail Corridor, and all leases, licenses and easements or other interests previously granted to others therein.

17.2 The term "license," as used herein, shall mean with regard to any portion of the Rail Corridor which is owned by Licenser in fee simple absolute, or where the applicable law of the State where the Encroachment is located otherwise permits Licenser to make such grants to Licensee, a "permission to use" the Rail Corridor, with dominion and control over such portion of the Rail Corridor remaining with Licenser, and no interest in or exclusive right to possess being otherwise granted to Licensee. With regard to any other portion of Rail Corridor occupied, used or controlled by Licenser under any other facts or rights, Licenser merely waives its exclusive right to occupy the Rail Corridor and grants no other rights whatsoever under this Agreement, such waiver continuing only so long as Licenser continues its own occupation, use or control. Licenser does not warrant or guarantee that the license granted hereunder provides Licensee with all of the rights necessary to occupy any portion of the Rail Corridor. Licensee further acknowledges that it does not have the right to occupy any portion of the Rail Corridor held by Licenser in less than fee simple absolute without also receiving the consent of the owner(s) of the fee simple absolute estate. Further, Licensee shall not obtain, exercise or claim any interest in the Rail Corridor that would impair Licenser's existing rights therein.

17.3 Licensee agrees it shall not have nor shall it make, and hereby completely and absolutely waives its right to, any claim against Licenser for damages on account of any deficiencies in title to the Rail Corridor in the event of failure or insufficiency of Licenser's title to any portion thereof arising from Licensee's use or occupancy thereof.

17.4 Licensee agrees to fully and completely indemnify and defend Licenser from and against any and all Claims and Losses arising out of or in connection with claims or litigation for slander of title, overburden of easement, or similar claims arising out of or based upon the Facilities placement, or the presence of the Facilities in, on or along any Encroachment(s), including claims for punitive or special damages; provided that Licenser shall have the right to participate in the defense of any such claim.

17.5 Licensee shall not at any time own or claim any right, title or interest in or to Licensor's property occupied by the Encroachments, nor shall the exercise of this Agreement for any length of time give rise to any right, title or interest in Licensee to said property other than the license herein created.

17.6 Nothing in this Agreement shall be deemed to give, and Licensor hereby expressly waives, any claim of ownership in and to any part of the Facilities.

17.7 Licensee shall not create or permit any mortgage, pledge, security, interest, lien or encumbrances, including tax liens and liens or encumbrances with respect to work performed or equipment furnished in connection with the construction, installation, repair, maintenance or operation of the Facilities in or on any portion of the Encroachment (collectively, "Liens or Encumbrances"), to be established or remain against the Encroachment or any portion thereof or any other Licensor property.

17.8 In the event that any property of Licensor becomes subject to such Liens or Encumbrances, Licensee agrees to pay, discharge or remove the same promptly upon Licensee's receipt of notice that such Liens or Encumbrances have been filed or docketed against the Encroachment or any other property of Licensor; however, Licensee reserves the right to challenge, at its sole expense, the validity and/or enforceability of any such Liens or Encumbrances.

18. APPROVALS:

18.1 Whenever this Agreement requires the prior approval or consent of Licensor, Licensee shall make a timely written request to Licensor therefor; and such approval or consent shall be obtained in writing. Except where this Agreement expressly obligates Licensor not to unreasonably withhold its approval or consent to any of Licensee's actions or requests, Licensor has the absolute right, in its sole and arbitrary discretion, to refuse any request Licensee makes or to withhold its approval of any of Licensee's proposed or effected actions that require Licensor's approval.

18.2 Licensor makes no warranties or guarantees upon which Licensee may rely, and assumes no liability or obligation to Licensee, by providing any waiver, approval, consent, or suggestion to Licensee in connection with this Agreement, or by reason of any neglect, delay, or denial of any request therefor.

19. GENERAL PROVISIONS:

19.1 This Agreement, and the attachments hereto, contains the entire understanding between the parties hereto, and supersedes all other oral or written agreements and understandings between them, with respect to the subject matter hereof.

19.2 Except as otherwise expressly provided in this Agreement, neither this Agreement, any provision hereof, nor any agreement or provision included herein by reference, shall operate or be construed as being for the benefit of any third person.

19.3 Except as otherwise provided herein, or in any Exhibit, Schedule or other attachment hereto, neither the form of this Agreement, nor any language herein, shall be interpreted or construed in favor of or against either party hereto as the sole drafter thereof.

19.4 This Agreement is executed under current interpretation of applicable Federal, State, County, Municipal or other local statute, ordinance or law(s). However, each separate division (paragraph, clause, item, term, condition, covenant or agreement) herein shall have independent and severable status for the determination of legality, so that if any separate division is determined to be void or unenforceable for any reason, such determination shall have no effect upon the validity or enforceability of each other separate division, or any combination thereof.

19.5 This Agreement shall be construed and governed by the laws of the state in which the Facilities and Encroachment are located. In interpreting this Agreement, the singular shall be read as the plural in each instance as sense shall require. The words "include," "includes" and "including" when used in this Agreement will be interpreted as if they were followed by the words "without limitation."

19.6 If any amount due pursuant to the terms of this Agreement is not paid by the due date, it will be subject to Licensor's standard late charge and will also accrue interest at eighteen percent (18%) per annum, unless limited by local law, and then at the highest rate so permitted.

19.7 Licensee agrees to reimburse Licensor for all reasonable costs (including attorney's fees) incurred by Licensor for collecting any amount due under the Agreement.

19.8 The provisions of this License are considered confidential and may not be disclosed to a third party without the consent of the other party(s), except: (a) as required by statute, regulation or court order, (b) to a parent, affiliate or subsidiary company, (c) to an auditing firm or legal counsel that are agreeable to the confidentiality provisions, or (d) to Lessees of Licensor's land and/or track who are affected by the terms and conditions of this Agreement and will maintain the confidentiality of this Agreement.

19.9 Within thirty (30) days of an overpayment in a cumulative total amount of One Hundred Dollars (\$100.00) or more by Licensee to Licensor, Licensee shall notify Licensor in writing with documentation evidencing such overpayment. Licensor shall refund the actual amount of Licensee's overpayment within one hundred twenty (120) days of Licensor's verification of such overpayment.

19.10 This Agreement may be executed in any number of counterparts, and such counterparts may be exchanged by electronic transmission. Upon execution by the parties hereto, each counterpart shall be deemed an original and together shall constitute one and the same instrument. A fully executed copy of this Agreement by electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Agreement for all purposes.

19.11 Notwithstanding any other provision in this Agreement to the contrary, Licensor expressly reserves and does not waive any rights it may have under the Interstate Commerce Commission Termination Act of 1995, 49 U.S.C. § 10101, *et seq.*, the Federal Railroad Safety Act, 49 U.S.C. § 20101, *et seq.*, and/or any other federal law governing rail transportation and related operations.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate (each of which shall constitute an original) as of the effective date of this Agreement.

Witness for Licensors:

CSX TRANSPORTATION, INC.

By: _____

Print/Type Name: _____

Print/Type Title: _____

Witness for Licensee:

**EFFINGHAM COUNTY BOARD OF
COMMISSIONERS**

By: _____

Who, by the execution hereof, affirms that he/she has the authority to do so and to bind the Licensee to the terms and conditions of this Agreement.

Print/Type Name: _____

Print/Type Title: _____

Tax ID No.: _____

Authority under Ordinance or

Resolution No. _____,

Dated _____.

CSX Transportation (CSXT) General Notes (Bore and Jack):

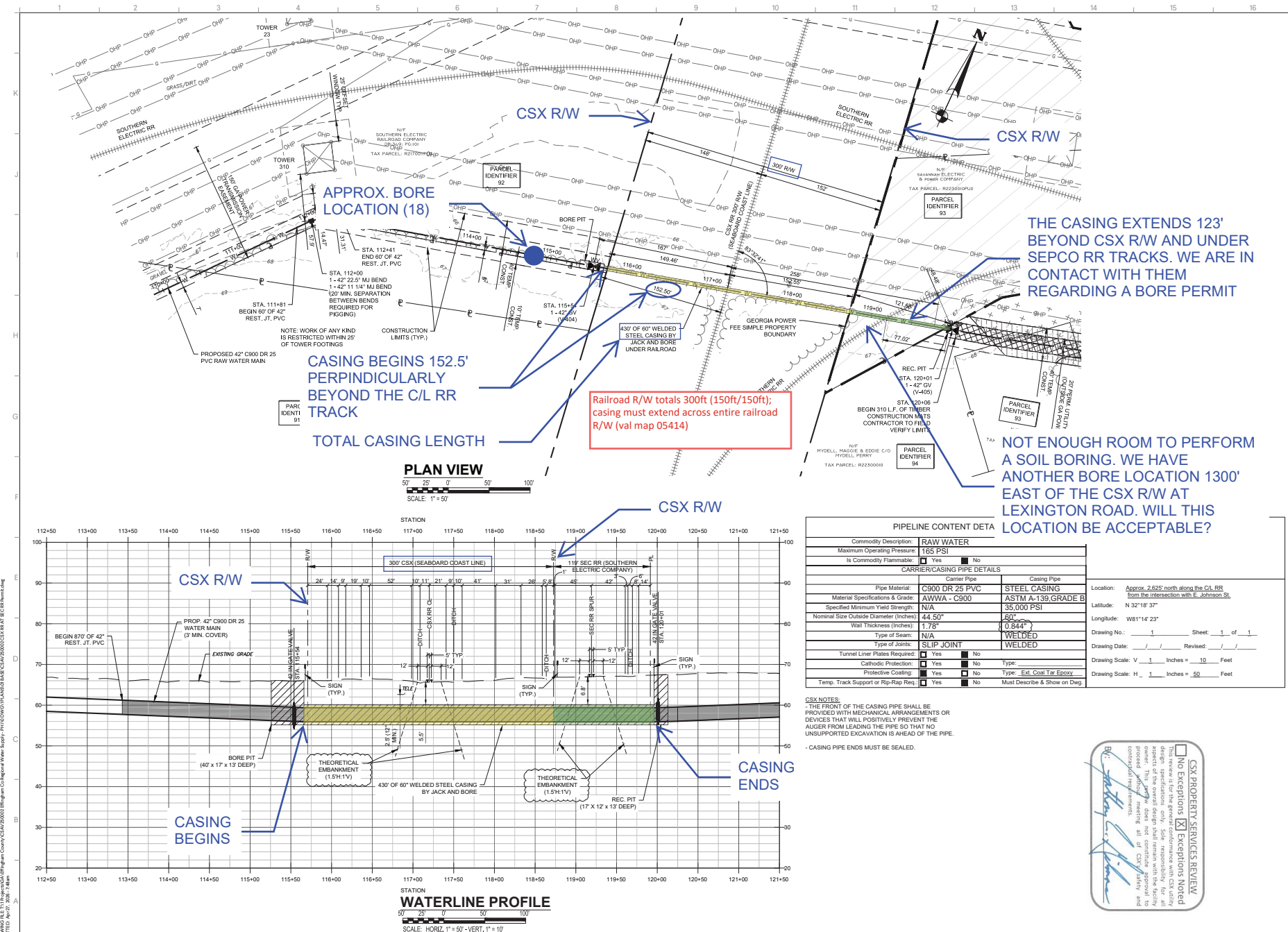
City, State: Rincon, Georgia

Engineering Region (Division): SOUTHEAST (SE) / Sub Division: COLUMBIA (C2) / Nearest DOT: 936020Y

Mile Post: S 481.0558 / Lat_Long: 32.31027,-81.23947

- 1) CSXT owns its right-of-way for the primary purpose of operating a railroad, and shall maintain unrestricted use of its property for current and future operations.
- 2) Agency or its contractor shall arrange and conduct its work so that there will be no interference with CSXT operations, including train, signal, telephone and telegraphic services, or damages to CSXT's property, or to poles, wires, and other facilities of tenants of CSXT's property or right-of-way.
- 3) Refer to the CSXT's "Design & Construction Standard Specifications Pipeline Occupancies" revised June 5, 2018 (4.1.2).
- 4) Work schedule is subject to the approval of all required construction submittals by the CSXT Construction Representative, verification that proposed work will not conflict with any CSXT U.G. Facilities, and the availability of CSXT Flagging and Protection Services. Construction submittals will be based upon the proposed scope of work and may include, but are not limited to; proposed work plan, project schedule, means and methods, site access, dewatering, temporary excavation/shoring, soil disposition/management, track monitoring, concrete placement work, structural lifting/rigging plans for hoisting operations, substructure construction plans, steel erection plans, roadwork plans, etc. No work may begin on, over, or adjacent to CSXT property, or that could potentially impact CSXT property, operations or safety without the prior completion and approval of the required aforementioned information and approvals.
- 5) Prior to construction, all signal facilities and/or warning devices at proposed facility crossing, i.e. cantilevers, flashers, and gates must be located and marked/flagged by CSXT. The traditional "One Call" utility locate services are not responsible for locating any CSXT under-grade utilities or facilities Contractor shall be held liable for any damages to CSXT communication & signal facilities.
- 6) Contractor also has the sole responsibility of ascertaining that all other utilities have been properly located by complying with the local "call before you dig" regulation(s). Contractor shall solely be responsible for notifying owners of adjacent properties and of underground facilities and utility owners when prosecution of the work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.
- 7) The use of construction safety fencing is required when a CSXT Flagman is not present. Distance of fencing from nearest rail to be determined by the CSXT Track Supervisor and shall be removed upon completion of the project.
- 8) Contractor access will be limited to the immediate project area only. The CSXT property outside the project area may not be used for contractor access to the project site and no temporary at-grade crossings will be allowed.
- 9) All material and equipment will be staged to not block any CSXT access or maintenance roads. No hoisting or auxiliary equipment necessary for the procedure shall be placed on CSXT track structure and / or ballast section. Clear working locations for equipment used will be laid out and approved by CSXT's representative prior to equipment set-up. Agency and contractor shall not store their materials or equipment on CSXT's property or where they may potentially interfere with CSXT's operations.
- 10) CSXT does not grant or convey an easement for this installation.
- 11) CSXT requires contractors, subcontractors, and vendors to participate in job safety briefings daily and as necessary with the CSXT flagger. The scope of work may require that various protection against train movements be discussed, understood, and utilized. Work shall only be undertaken with the presence and permission of the CSXT flagger. If at any time the CSXT flagger perceives that the hoisting procedure is causing or has the potential to cause a hazard or delay to CSXT operations through the project site, work will cease until such time as satisfactory modifications have been reviewed and approved.
- 12) The right of way shall be restored to a condition equal to or better than the condition prior to beginning the project before final acceptance will be provided. Punch lists shall be responded to prior to issuance of an acceptance memorandum signed by the CSXT representative.
- 13) No construction or entry upon the CSXT corridor is permitted until the document transaction is completed, you are in receipt of a fully executed document, and you have obtained authority from CSXT's.
- 14) The front of the pipe shall be provided with mechanical arrangements or devices that will positively prevent the auger from leading the pipe so that no unsupported excavation is ahead of the pipe. The bore head / auger set-up (sketch or photos) shall be submitted by contractor and accepted by assigned CSXT representative prior to start of the jack & bore.
- 15) The operation shall be progressed on a 24-hour basis without stoppage (except for adding lengths of pipe) until the leading edge of the pipe has reached the receiving pit.
- 16) The auger and cutting head arrangement shall be removable from within the pipe in the event an obstruction is encountered.
- 17) Pipeline shall be prominently marked at both sides of the CSXT property lines by durable, weatherproof signs located over the centerline of the pipe in accordance with CSXT specifications.
- 18) If required, a dewatering plan in accordance with CSXT specifications will be submitted to the CSXT representative for review and approval prior to any dewatering operations. Dewatering drawdown level at tracks shall be field verified that it meets the approved dewatering design prior to commencement of jack and bore operations.
- 19) Blasting is not permitted under, on, or adjacent to CSXT property.

- 20) Jacking pit: identify hazards and put controls in place prior to start of excavation. Contractor shall erect a barrier and construction fence along the face of jacking pit construction limits and not encroach past it when preparing the pit. Stake or mark pit as needed for digging. Erosion control devices shall be placed at the jacking and receiving pits protecting CSXT property and ditches to the satisfaction of the CSXT representative.
- 21) Excavation: If the excavation is 5 feet or greater in depth, the walls may be sloped at 1.5 horizontal to 1 vertical to reduce the risk of cave-ins or slides. A safe manner in which to enter and exit the excavation must be established. The toe of slopes in excavation shall in no case be undercut by power shovels, bulldozers, graders, blasting, or in any manner. Excavation shall not be made in excess of the authorized cross-section.
- 22) Backfill, cover or fence all excavations when unattended. The CSXT representative will approve the protection method and the type of fencing material. Set fencing back at least 3 feet (91 centimeters) from the edges of the excavation. Set fence posts securely in the ground and insure the fencing is securely tied to posts with zip ties or some other tie wrap product.
- 23) For any excavations permitted on CSXT property, all backfill in excavations and trenches shall be compacted to 95% maximum dry density as defined in ASTM standard d1557 and installed in six-inch lifts. In-situ soil shall be used for backfill material. Should additional offsite backfill material be needed, offsite material sources are to meet state and residential clean fill requirements and be preapproved by CSXT's representative. CSXT does not require a specific testing requirement or standard for stone.
- 24) Track monitoring: prior to commencing jack & bore operations, contractor shall be required to conduct and submit a baseline survey along the top of each rail under CSXT flagger protection and in accordance with the preapproved settlement monitoring construction submittal. Additional survey data shall be collected and submitted once each day during casing pipe installation, or as directed by CSXT representative. Contractor shall also take elevation shots at top of tie and top of casing pipe before starting the bore to verify depth of cover proposed for the work has been met.
- 25) Projects that generate soils from CSXT property must adhere to CSXT's soil management policies. CSXT requires soils generated from its property to either be reused on CSXT property or properly disposed in a CSXT approved disposal facility. CSXT environmental department will handle waste characterization and profiling into an approved disposal facility. CSXT prohibits any environmental sampling on its property unless granted through a written environmental right-of-entry or approved in writing by the CSXT environmental department. The management of soils generated from CSXT property should be planned for and properly permitted (if applicable) prior to initiating any work on CSXT property. A list of CSXT approved laboratories and/or disposal facilities may be obtained from the CSXT manager environmental pro
- 26) CSXT does not represent or warrant the right-of-way dimensions depicted on these drawings. A third party survey is recommended for verification and accuracy.
- 27) Upon completion of project construction, contractor must submit to CSXT the as-built plans showing the final alignment on CSXT property, including actual depth of facility and any field change to location on CSXT property, pipe materials, number of innerducts, etc.



GMC
114 BARNARD STREET
SUITE 114-2B
SAVANNAH, GA 31401
T 912.228.8607



DATE: 06/02/2025
ISSUE: 30% SUBMITTAL
DATE: 10/10/2025
70% SUBMITTAL
DATE: 07/09/2026
90% SUBMITTAL
DATE: 04/28/2026
PERMITTING SUBMITTAL
PROJECT MANAGER: J.V.
ENGINEER: GMC
DESIGNER: DSKJ
DRAWN BY: DSKJ

EFFINGHAM COUNTY
REGIONAL WATER SUPPLY
FACILITIES
EFFINGHAM COUNTY, GA

CSA/250002



BORE UNDER CSX
AND SEC RR AT GRADE
CROSSING N. OF SR 21

C-377P



Effingham Water Supply Water Main - Road and RR Crossings

Effingham County, Georgia

May 8, 2026

REPORT OF GEOTECHNICAL EXPLORATION

Prepared By



Goodwyn Mills Cawood, LLC
114 Barnard Street, Suite 114-2B
Savannah, GA 31401
T (921) 226-1667
www.gmcnetwork.com

GMC PROJECT NUMBER: GSAV250004

Goodwyn Mills Cawood

114 Barnard St
Suite 114-2B
Savannah, GA 31401

T (912) 226-1667

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May 8, 2026

Mr. John Barlow
GMC Engineering

**RE: REPORT OF GEOTECHNICAL EXPLORATION
EFFINGHAM WATER SUPPLY – WATER MAIN - ROAD AND RR CROSSINGS
EFFINGHAM COUNTY, GEORGIA
GMC PROJECT GSAV250004**

Dear Mr. Barlow,

Goodwyn Mills Cawood, LLC (Geotechnical & Construction Services Division) is pleased to provide this report of geotechnical exploration performed for the above referenced project. This report describes our understanding of the project, presents the findings of our site investigation, and provides geotechnical related design and construction recommendations.

We appreciate the opportunity to perform this study during this phase of the project for you and look forward to continued participation during the construction phase of this project. If you have any questions pertaining to this report, or if we may be of further service, please do not hesitate to call.

Sincerely,
GOODWYN MILLS CAWOOD, LLC


Ryan C. Wakeford, PE
Regional Geotechnical Engineer
Licensed Georgia PE054781





Kevin W. Wales, PE
Executive Vice President
Licensed Georgia PE046948

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APPENDIX:	Site Location Plan
	Test Location Plan
	Soil Classification Chart
	CPT Records
	HAB Records
	Field Testing Procedures

1.0 PROJECT INFORMATION AND SCOPE OF WORK

1.1 Project Information

Goodwyn Mills Cawood, LLC (GMC) has conducted a geotechnical exploration and engineering evaluation for the proposed 36-inch water utility main located in Effingham County, Georgia. The proposed waterline will be constructed using a jack and bore method to cross beneath multiple road and railroad crossings. We understand the proposed waterline will be about 28 miles of new water main connecting the proposed intake structure to the Hyundai plant in Bryan County, GA. Detailed project plans were provided with proposed depths of utility crossings. There is significant topographic relief along the entire length of the utility.

1.2 Scope of Work

The purpose of this exploration was to provide information and geotechnical engineering recommendations related to subsurface soil conditions, groundwater conditions, general sitework, and lateral earth pressure soil parameters. The geotechnical engineering scope of services for this project included the advancement of in-situ Cone Penetration Test (CPT) soundings with Hand Auger Borings (HAB), engineering analysis, and preparation of this report.

The scope of services for the geotechnical study did not include any environmental assessment for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements in this report or on the boring records regarding odors, colors, or unusual or suspicious items or conditions are strictly for the information of the client.

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

The subsurface conditions were explored by performing a total of 24 CPT soundings at road and railroad crossings. Hand auger borings to depths of 4 feet below existing grade were performed adjacent to each CPT sounding. CPT and HAB holes were left open for 24-hour, delayed water readings before being backfilled by soil auger cuttings. The test locations were requested by the Construction Manager At Risk (CMAR) and verified by GMC geotechnical personnel based on provided design plans dated January 19, 2026. Test locations are presented in the Appendix. The CPT soundings were performed by continuously pushing an instrumented cone through underlying soil at a rate of 1 to 2 centimeters per second. The resistance to the cone tip is processed to produce a computerized continuous log of the materials encountered along with tip and sleeve resistance on the instrumented cone. The soundings were performed in general accordance with ASTM D5778 *Electronic Friction Cone and Piezocone Penetration Testing of Soils*.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 General

At the time of exploration, road and railroad crossings generally consisted of sandy and grassy surficial conditions with adjacent drainage swales.

The following photographs depict two conditions at road crossings on April 6, 2026:



Photo 1: CPT-11



Photo 2: CPT-14

3.2 Site Geology

Published geologic information indicates that the site is underlain by the Penholoway Shoreline Complex and Stream Alluvium which is part of the Atlantic Coastal Plain and consists of marsh and lagoonal facies of the Pleistocene age. The complex consists of sandy beach deposits and lagoonal clays which represents a former high-stand shoreline that now sits inland from the modern coast. The Atlantic Coastal Plain is typically characterized by a thick layer of undeformed sedimentary rock that is primary composed of marine deposits such as sand, clay, and limestone.

3.3 Subsurface Conditions

The sounding and boring records included in the Appendix should be reviewed for specific information as to specific test location. The stratification shown on the sounding and boring records represents conditions only at the actual test location. Variations may occur and should be expected throughout the proposed construction locations. In addition, the stratifications represent the approximate boundary between subsurface materials, and the transition may be gradual.

All the soundings contained very loose to very dense sand mixtures to depths of 15 to 20 feet below existing grade. A majority of the soundings were performed past the requested depth of 20 feet and encountered soft to stiff clay mixtures from 15 feet to termination depths. CPT-7 through CPT-12 encountered early refusal in very dense sands at depths ranging from 9 to 15 feet below existing grade.

3.4 Groundwater Information

Groundwater was observed following a 24-hour delay. This delay allows the groundwater to stabilize after soundings and hand augers were performed. The soundings were backfilled with auger cuttings upon completion of drilling. Groundwater levels may vary due to seasonal conditions including recent rainfall. The following table the groundwater after 24-hour readings:

Table 3.4.1: Groundwater Observations

Test No.	Plan Sheet No. ¹	Approx. Ground EL (ft) ¹	Approx. Casing EL (ft) ¹	Groundwater Depth / EL (ft) ²	Soil Type ³
CPT-1	C-306	30	22	3.5 / 26.5	Very dense Sand (SP)
CPT-2	C-308	27	16	4.5 / 22.5	Very dense Sand (SP)
CPT-3	C-316	24	18	2.5 / 21.5	Dense Sand (SP)
CPT-4	C-325	37	30	5.0 / 32.0	Dense Silty Sand (SM)
CPT-5	C-333	56	50	7.0 / 49.0	Medium Sand (SP)
CPT-6	C-338	74	64	7.0 / 67.0	Loose Sand (SP)
CPT-7	C-339	75	66	3.5 / 71.5	Medium Sand (SP)
CPT-8	C-347	79	70	4.0 / 75.0	Very dense Sand (SP)
CPT-9	C-350	79	64	4.0 / 75.0	Very dense Sand (SP)
CPT-10	C-350	78	68	5.0 / 73.0	Very dense Sand (SP)
CPT-11	C-356	79	72	3.5 / 75.5	Medium Sand (SP)
CPT-12	C-359	74	64	4.5 / 69.5	Very dense Sand (SP)
CPT-13	C-361	78	64	3.5 / 74.5	Very dense Sand (SP)
CPT-14	C-366	77	68	4.0 / 73.0	Medium Sand (SP)
CPT-15	C-367	72	64	1.0 / 71.0	Medium Sand (SP)
CPT-16	C-368	73	60	3.0 / 70.0	Medium Sand (SP)
CPT-17	C-376	66	56	3.5 / 62.5	Loose Sand (SP)
CPT-18	C-377	66	56	2.0 / 64.0	Loose Silty Sand (SM)
CPT-19	C-378	67	60	2.0 / 65.0	Medium Sand (SP)
CPT-20	C-384	71	60	3.5 / 67.5	Loose Sand (SP)
CPT-21	C-387	69	62	5.5 / 63.5	Medium Sand (SP)
CPT-22	C-389	72	60	6.0 / 66.0	Medium Sand (SP)
CPT-23	C-389	65	56	4.5 / 60.5	Loose Silty Sand (SM)
CPT-24	C-392	71	60	7.0 / 64.0	Loose Silty Sand (SM)

1. Referenced from Site Plans dated January 19, 2026 - 90% Submittal

2. 24-hour delayed groundwater readings

3. Soil type at approx. casing elevation

4.0 SITE PREPARATION

4.1 Excavations and Dewatering

Open cut excavations with slopes no greater than 2:1 (horizontal: vertical) can be utilized at this site to install the utility and construct below grade structures like entrance and exit pits. If site constraints will not allow slopes of that size, shielding consisting of steel sheeting can be used, or a combination of both sloping and shielding. The shielding and dewatering design should be undertaken by an engineer registered in the State of Georgia, employed by the contractor, and is familiar with this type of operation. At a minimum, sheeting should extend past the anticipated bottom depth of the excavation by a minimum of 5 feet to minimize the potential for bottom heave and limit groundwater inflow to a level that can be adequately controlled with sumps, pumps, and/or sanded well points.

Depending on the stability of the excavation bottom encountered at the time of construction, it may be necessary to increase the excavation depth and backfill the trench with free draining No. 57 stone or similar material to provide a working surface. The stone should be wrapped in geotextile separation fabric to limit the migration of fines into the stone.

The Occupational Safety and Health Administration (OSHA) requires soils within the proposed excavation be classified for shielding and safety considerations. The estimated soil parameters in Section 4.7 Below Grade Walls may be used in conjunction with OSHA Standards 29 CFR 1926 Subpart P Appendix A for the contractor's shielding design. The soil properties are based on the results of our field investigation and experience with similar soil conditions. Site excavation safety shall be solely the responsibility of the contractor and his subcontractors, and should comply with applicable local, state, and OSHA standards.

4.2 Time of Year Site Preparation Considerations

The time of the year that the sitework begins can affect the project considerably. There are many considerations that need to be addressed prior to bidding a project that could affect the budget based on the time of year a project starts earthwork activities. The time of the year that the geotechnical borings were performed can provide a false sense of actual near surface conditions depending on the time of year and weather conditions.

Below are considerations that should be addressed based on the time of the year the earthwork starts.

"Wet" Season

During the "wet" season, the amount of undercutting may be greater, especially on the low-lying portion of this site, therefore resulting in greater excavation costs. The soils are typically proofrolled to determine their suitability for the placement of new fill or subgrade support. During the wet season, the surface soils have a higher moisture content and will tend to pump, therefore, hindering the placement of new fill. In addition, the drying time, time period between rain events, and temperature is not conducive to scarify soils, allow to dry, and recompact. At this time, the decision should be made by the owner to try either to scarify/dry/compact the in-place soils, which could take time, or undercut and replace with suitable material, which could increase the sitework costs. Based on our experience, the amount of undercut could be an additional 1 to 2 feet (or greater in localized areas), whereas in drier weather, lesser amounts of undercutting may be necessary, if recompaction or stabilization of soils left in place can be achieved.

Some undercut soils are not always “unsuitable” soil and can be moisture conditioned and reused as fill in the deep areas, if drying conditions are favorable.

“Dry” Season

During the “dry” season, the surface soils have a lower moisture content and will tend to “bridge” or “crust” softer underlying soils. They will generally allow the placement of new fill, but the crust can break down if repeated passes with heavily loaded equipment is persistent. In addition, new fill from cuts or other sources may need to be moisture conditioned prior to compaction. The soils can dry significantly, requiring the addition of water for proper compaction. Water trucks should be used, as necessary, by the contractor to condition the soils within the required specifications.

Contractor Responsibility

The grading contractors have the option of performing their own evaluation of the site conditions to assess the excavation considerations based on the time of year a project is bid. We strongly suggest that the grading contractors conduct their own evaluation of the site conditions and material management requirements to effectively develop the site.

4.3 Fill Placement and Compaction Requirements

All fill materials in excavation areas should be placed in loose lifts not exceeding 8-inches in thickness for larger compacting equipment and 4-inch loose lifts for hand operated equipment with a maximum particle size of 3 inches.

Table 4.3.1 Compaction Requirements

Location	Test Method	Compaction Required (minimum)	Moisture Content
Entrance and Exit Pits	Modified Proctor (ASTM D1557)	93%	-/+3 percentage points of optimum moisture

Table 4.3.2 Structural Fill Requirements

Property	Requirement
Organic Material	≤ 5%
%Passing No. 200 Sieve	< 25%
Plasticity Index	≤ 25%
Maximum Dry Density	≥ 95 lb/ft ³
Maximum Particle Size	3 inches or less

Samples of the proposed fill materials, either from on-site or borrow, should be provided to the geotechnical engineer for Proctor testing and evaluation prior to placement. These soils will likely require moisture conditioning during reuse. Density tests should be performed to document compaction and moisture content of any earthwork involving soils and other applicable materials during placement. Density tests should be performed frequently, with a recommended minimum of one test per 10,000 square feet per lift in other areas. Fill material must meet the specified density and moisture requirements to be considered acceptable. If the granular material

is a coarse sand or gravel, of a uniform size, or has low fines content, compaction comparison to relative density may be more appropriate. In this case, granular materials should be compacted to at least 70% relative density (ASTM D4253 and D4254). Materials not amendable to density testing should be placed and compacted to a stable condition observed by the Geotechnical Engineer or representative.

4.4 Grading and Drainage

We recommend an effective site drainage system be installed prior to site preparation and grading. The drainage system may consist of perimeter ditches supplemented with parallel ditches and swales. All grades should provide effective drainage away from excavations during and after construction and should be maintained throughout the life of the utility.

4.5 Subgrade Restoration

Typically, due to the movement of heavy equipment and weather conditions, the subgrade soil becomes disturbed during construction. As a result, the on-site soils will have a tendency to lose shear strength and support capability. Therefore, additional effort on the contractor's part will be required to reduce traffic and limit disturbance of soils. It is essential that the subgrade be restored to a properly compacted condition based on optimum moisture and density requirements.

4.6 Lateral Earth Pressures

Walls with unbalanced backfill levels on opposite sides, such as temporary shoring, should be designed for earth pressures at least equal to values indicated in the following table. Earth pressures will be influenced by structural design of the walls, conditions of wall restraint, methods of construction, and/or compaction and the strength of the materials being restrained.

Walls that need to have little horizontal movement at the top should be designed for "at rest" earth pressure conditions. Walls that are free to deflect should be designed for "active" earth pressure conditions. The "passive" earth pressure state should be used for soils supporting the retaining structure, such as toe backfill. The recommended design lateral earth pressures do not include a factor of safety.

A drainage system should be provided near or at the base of the walls to collect and remove groundwater or seepage and to prevent buildup of hydrostatic pressures. The below grade structures should be designed to resist hydrostatic pressures up to the planned high-water levels.

Using a select backfill material can significantly reduce the horizontal loads on the wall as well as improve the effectiveness of the wall drainage system. Compaction of backfill behind walls should be performed by appropriate manual equipment. The wall should be properly braced and heavy equipment should not be allowed behind the wall. No equipment or construction loads should be allowed within 10 feet of retaining walls or half the distance of the freestanding wall-height. This will help prevent any surcharge loads from adding lateral earth pressures above that recommended to the retaining wall.

The following table presents recommended values of earth pressure coefficients for the materials encountered:

Table 4.6.1: Lateral Earth Pressure Coefficients

Soil Parameter	Soil Type			
	SM, SC	SP, SW	CL	GW, GP ¹
Soil Unit Weight (pcf)	115	120	115	130
Buoyant Unit Weight (pcf)	53	58	53	68
Angle of Internal Friction, Φ, deg	30	32	--	38
Cohesion, c, (psf)	--	--	800	--
At rest Pressure Coefficient, K_o	0.50	0.47	1.00	0.38
Active Pressure Coefficient, K_a	0.33	0.31	1.00	0.24
Passive Pressure Coefficient, K_p	3.00	3.25	1.00	4.20
At-rest Equivalent Fluid Pressure, pcf (Above GWT, below GWT²)	58	56	115	50
	89	89	115	88
Active Equivalent Fluid Pressure, pcf (Above GWT, below GWT²)	38	37	115	31
	80	80	115	78
Passive Equivalent Fluid Pressure, pcf (Above GWT, below GWT²)	345	391	115	546
	221	251	115	348

1. Provided if well graded or poorly graded gravel backfill is used

2. GWT - Ground Water Table

The design values and recommendations presented above assume that the material behind the wall will be horizontal with no surcharge loads. Depending on the section modulus of sheeting selected, final loading, etc., the sheeting system may require supplemental bracing to maintain stability. If surface area is available, ground control may be accomplished with a combined slope/shoring configuration. If side slopes or open cut excavations are considered, a slope stability analysis will be necessary. The slope stability analysis should account for the potential of groundwater inflow, including steady state conditions and storm events.

The ground support system (with or without slopes) should conform to OSHA Standard 29 CFR 1926.652 – Requirements for Protective Systems. The design of the excavation support system should be based on the soils within the study area and parameters provided above. The excavation support and dewatering systems should be designed concurrently by an engineer in the state of Georgia, employed by the contractor, and familiar with this type of work.

5.0 REPORT LIMITATIONS

The recommendations submitted are based on the available soil information obtained by GMC and the preliminary design information provided to us.

The findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

We emphasize that this report was prepared for design and informational purposes only and may not be sufficient to prepare an accurate construction budget. Contractors reviewing this report should acknowledge that the recommendations contained herein are for design and informational purposes only. In no case should this report be utilized as a substitute for the development of specific earthwork specifications.

The information contained in this report is not intended, nor is sufficient, to aid in the design of segmental or mechanically stabilized earth (MSE) retaining walls. Segmental or MSE wall designers and builders should not rely on this report and should perform independent analysis to determine all necessary soil characteristics for use in their wall design, including but not limited to, soil shear strengths, bearing capacities, global stability, etc.



APPENDIX

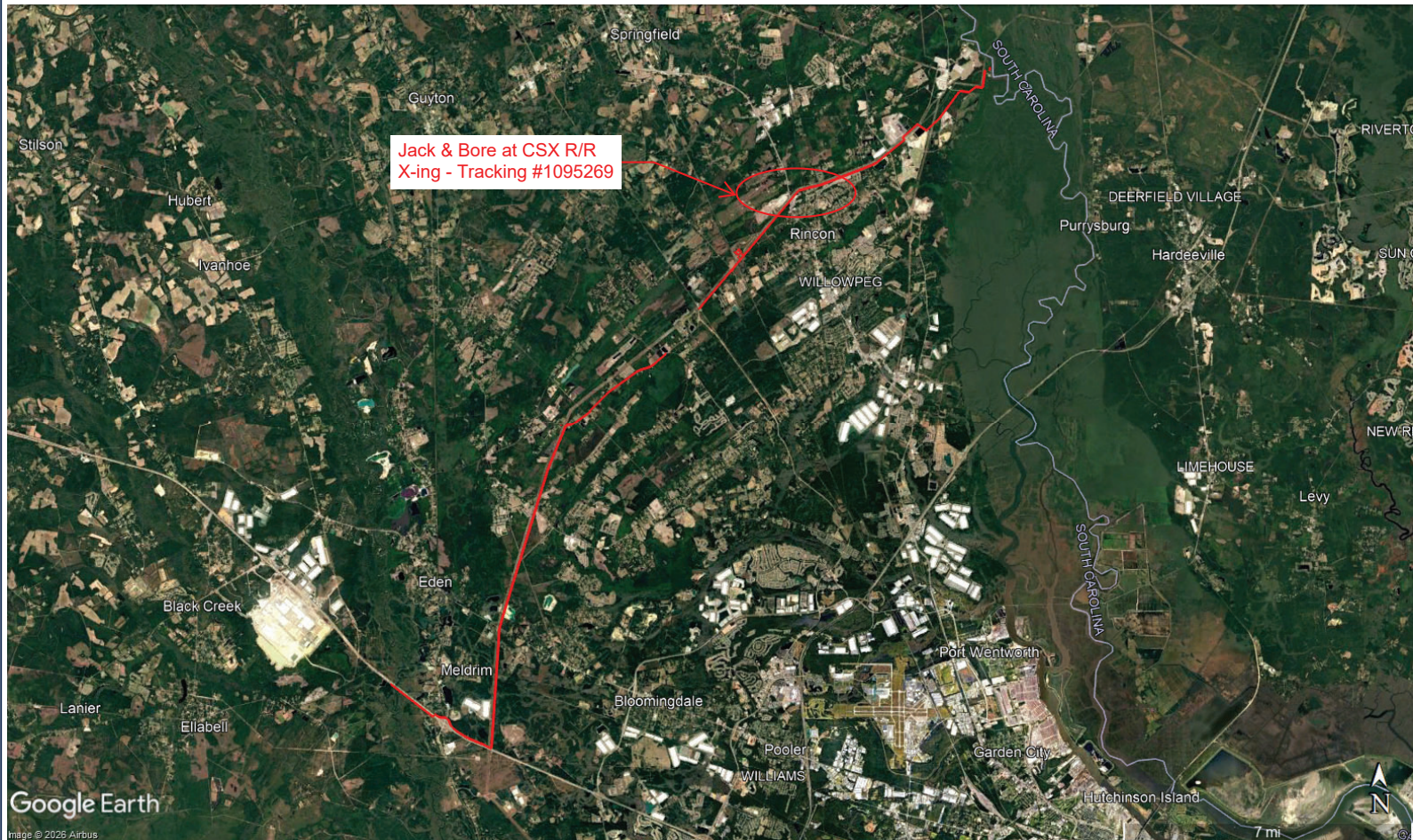
Site Location Plan

Test Location Plan

Soil Classification Chart

CPT and HAB Records

Field Testing Procedures

**Site Location Plan**

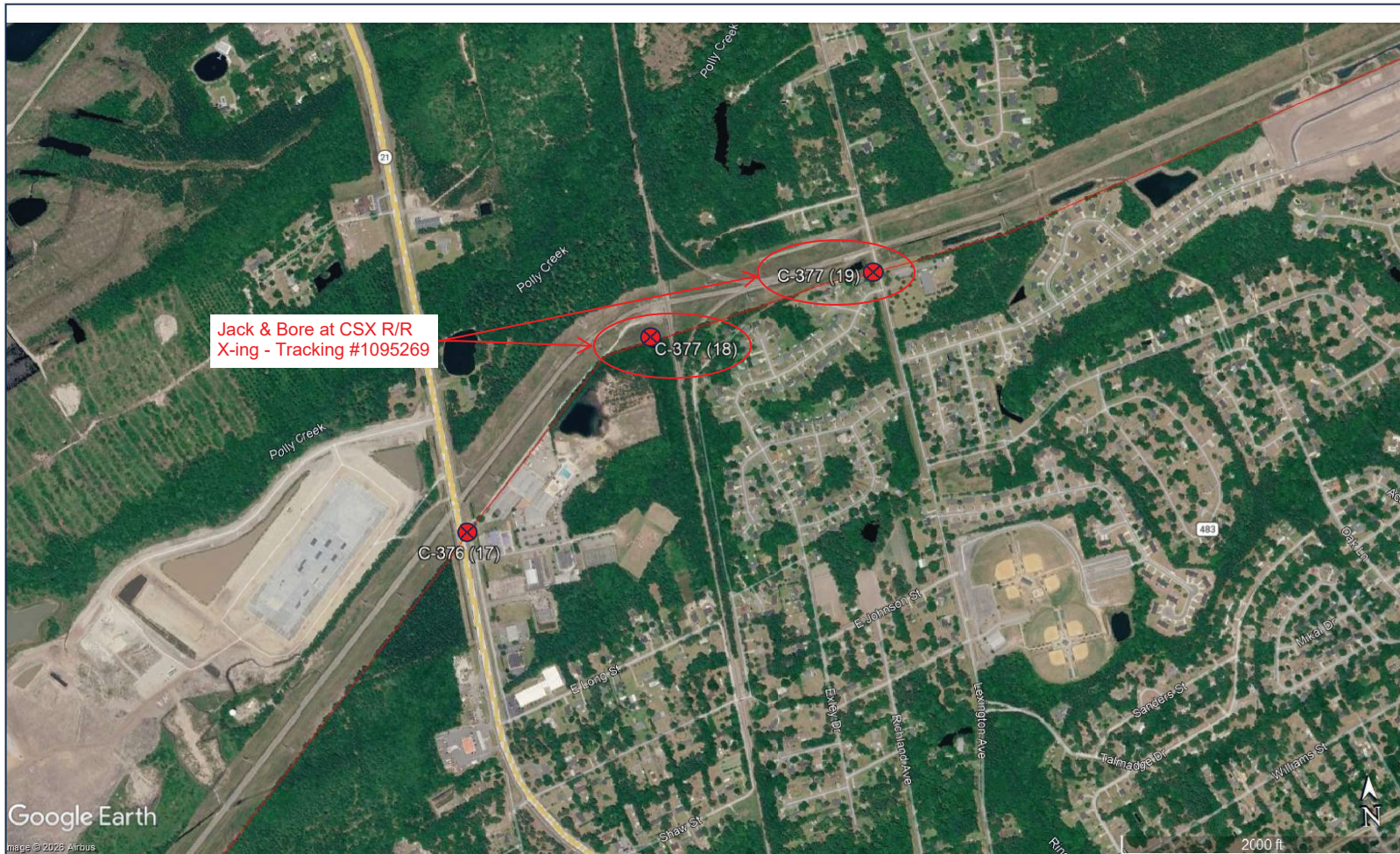
Effingham County Water Supply – Water Main Utility

GSAV250004

R. Wakeford

4/30/2026

LEGEND: Water Main Utility



Test Location Plan

Effingham County Water Supply – Water Main Crossings

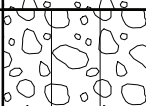
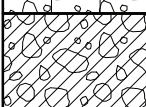
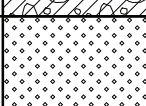
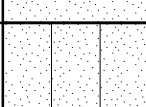
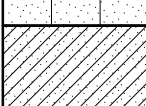
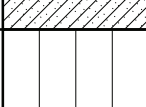
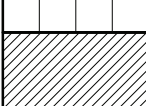
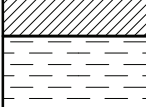
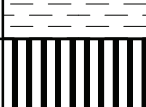
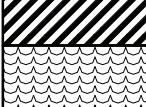
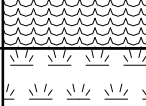
GSAV250004 R. Wakeford 4/30/2026

LEGEND:



Approximate Test Locations

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

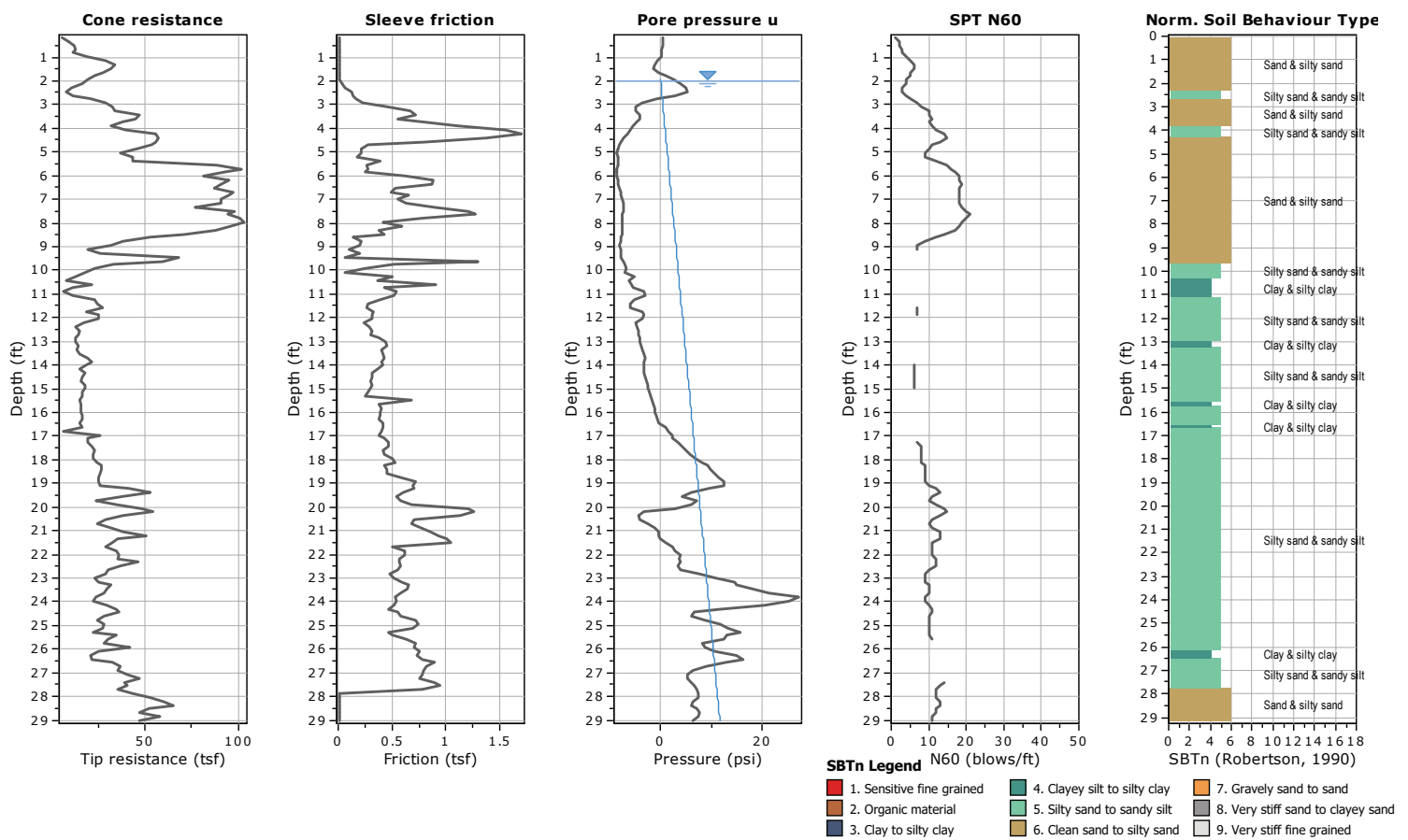


Goodwyn Mills Cawood LLC
 997 Morrison Dr. Suite 102
 Charleston, SC 29403
<http://www.gmcnetwork.com>

Project: Effingham Water Supply - Water Main - Road and RR Crossings
Location: Effingham County, GA

CPT: CPT-18

Total depth: 29.03 ft, Date: 4/7/2026
 Surface Elevation: 66.00 ft, Est. GWL: 2.00 ft
 Coords: lat 32.310187° lon -81.239864°





BORING NUMBER CPT-18

PAGE 1 OF 1

CLIENT Effingham County

PROJECT NAME Effingham Water Supply Water Main Crossings

PROJECT NUMBER GSAV250004

PROJECT LOCATION Effingham County, GA

DATE STARTED 4/1/26

COMPLETED 4/1/26

GROUND ELEVATION 66 ft

HOLE SIZE 4"

DRILLING CONTRACTOR Whitaker Contracting

GROUND WATER LEVELS:

DRILLING METHOD HAND AUGER

AT TIME OF DRILLING ---

LOGGED BY R. Wakeford

CHECKED BY

AT END OF DRILLING ---

NOTES 24-hour groundwater reading

AFTER DRILLING 2.00 ft / Elev 64.00 ft

2.GMC HAND AUGER (DCP) GSAV250004 EFFINGHAM WATER SUPPLY WATER MAIN CROSSINGS.GPJ GMC DATA TEMPLATE.GDT 4/30/26

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	DCP BLOW COUNTS (1-3/4" Increment)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
66	0		Organic Laden Material (OLM), 9"									
65	1		POORLY GRADED SAND (SP), dark gray									
64	2		POORLY GRADED SAND (SP), light brown, brown									
63	3		POORLY GRADED SAND (SP), orange, light brown - wet									
62	4		Hand Auger was terminated at 4.0 feet.									
61	5											
60	6											

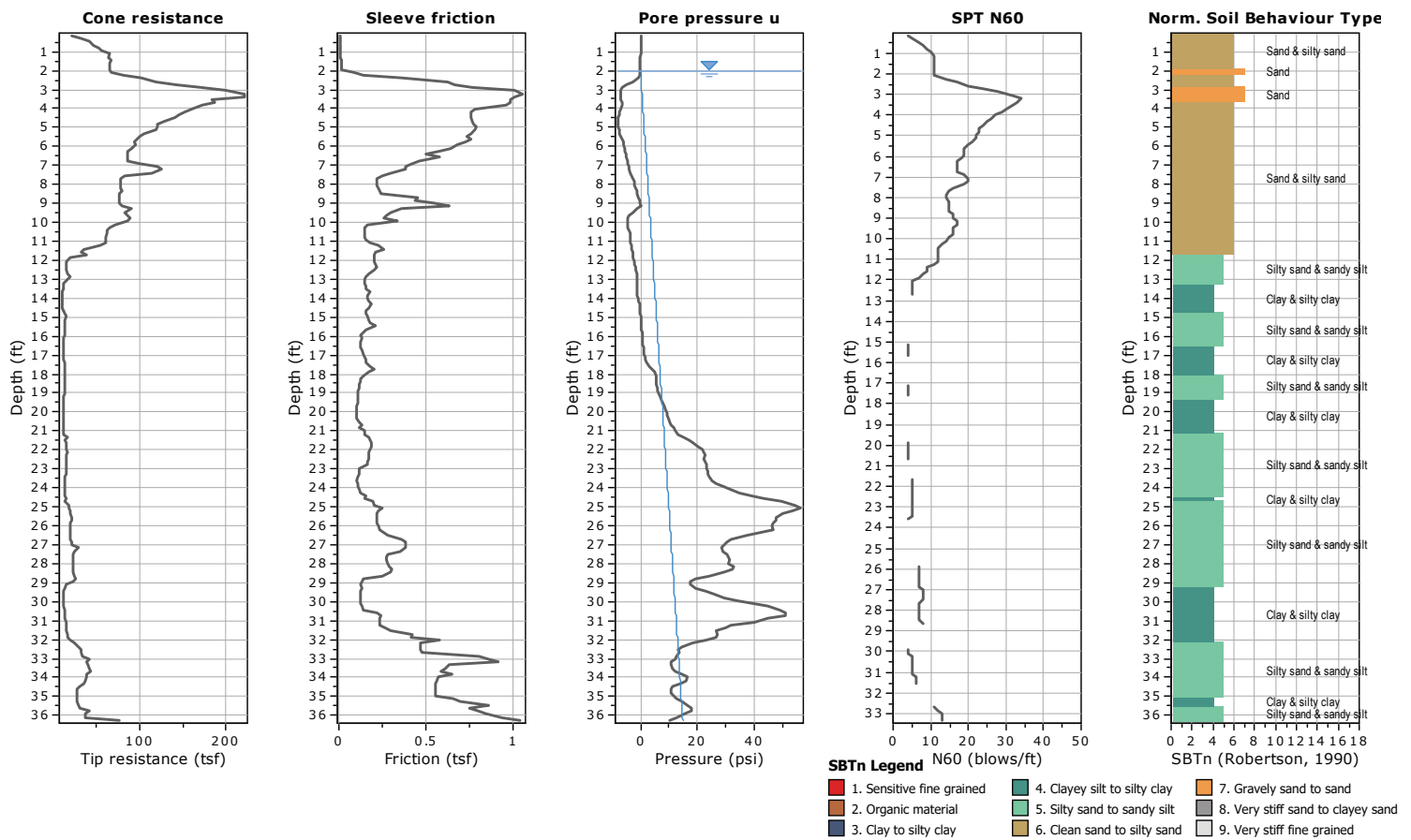


Goodwyn Mills Cawood LLC
 997 Morrison Dr. Suite 102
 Charleston, SC 29403
<http://www.gmcnetwork.com>

Project: Effingham Water Supply - Water Main - Road and RR Crossings
Location: Effingham County, GA

CPT: CPT-19

Total depth: 36.26 ft, Date: 4/7/2026
 Surface Elevation: 67.00 ft, Est. GWL: 2.00 ft
 Coords: lat 32.311303° lon -81.234726°





BORING NUMBER CPT-19

PAGE 1 OF 1

CLIENT Effingham County

PROJECT NAME Effingham Water Supply Water Main Crossings

PROJECT NUMBER GSAV250004

PROJECT LOCATION Effingham County, GA

DATE STARTED 4/1/26

COMPLETED 4/1/26

GROUND ELEVATION 67 ft

HOLE SIZE 4"

DRILLING CONTRACTOR Whitaker Contracting

GROUND WATER LEVELS:

DRILLING METHOD HAND AUGER

AT TIME OF DRILLING ---

LOGGED BY R. Wakeford

CHECKED BY

AT END OF DRILLING ---

NOTES 24-hour groundwater reading

AFTER DRILLING 2.00 ft / Elev 65.00 ft

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	DCP BLOW COUNTS (1-3/4" Increment)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
									LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
67	0		Organic Laden Material (OLM), 6"									
			POORLY GRADED SAND (SP), dark brown									
66	1											
			POORLY GRADED SAND (SP), gray, light brown									
65	2											
64	3											
63	4		Hand Auger was terminated at 4.0 feet.									
62	5											
61	6											



FIELD TESTING PROCEDURES

Cone Penetrometer Test (CPT) Sounding

The cone penetrometer test soundings (ASTM D 5778) were performed by hydraulically pushing an electronically instrumented cone penetrometer through the soil at a constant rate. As the cone penetrometer tip was advanced through the soil, nearly continuous readings of point stress, sleeve friction and pore water pressure were recorded and stored in the on-site computers. Using theoretical and empirical relationships, CPT data can be used to determine soil stratigraphy and estimate soil properties and parameters such as effective stress, friction angle, Young's Modulus and undrained shear strength.

The consistency and relative density designations, which are based on the cone tip resistance, q_t for sands and cohesive soils (silts and clays) are as follows:

<u>SANDS</u>		<u>SILTS AND CLAYS</u>	
Cone Tip Resistance, q_t (tsf)	Relative Density	Cone Tip Resistance, q_t (tsf)	Consistency
<20	Very Loose	<5	Very Soft
20 – 40	Loose	5 – 10	Soft
40 – 120	Medium Dense	10 – 15	Firm
		15 – 30	Stiff
120 – 200	Dense	30 – 60	Very Stiff
>200	Very Dense	>60	Hard

CPT Correlations

References are in parenthesis next to the appropriate equation.

General

p_a = atmospheric pressure (for unit normalization)

q_t = corrected cone tip resistance (tsf)

f_s = friction sleeve resistance (tsf)

$R_f = 100\% * (f_s/q_t)$

u_2 = pore pressure behind cone tip (tsf)

u_0 = hydrostatic pressure

$B_q = (u_2 - u_0)/(q_t - \sigma'_{v0})$

$Q_t = (q_t - \sigma'_{v0}) / \sigma'_{v0}$

$F_r = 100\% * f_s / (q_t - \sigma'_{v0})$

$I_c = ((3.47 - \log Q_t)^2 + (\log F_r + 1.22)^2)^{0.5}$

N-Value

$$N_{60} = (q_t/p_a) / [8.5(1 - I_c/4.6)] \quad (6)$$

(6) Jefferies, M.G. and Davies, M.P., (1993), "Use of CPTu to estimate equivalent SPT N60", ASTM Geotechnical Testing Journal, Vol. 16, No. 4



CPT Soil Classification Legend

SBTn legend	
1. Sensitive fine grained	6. Clean sand to silty sand
2. Organic material	7. Gravely sand to sand
3. Clay to silty clay	8. Very stiff sand to clayey sand
4. Clayey silt to silty clay	9. Very stiff fine grained
5. Silty sand to sandy silt	

Robertson's Soil Behavior Type (SBT), 1990			
Group #	Description	Ic	
		Min	Max
1	Sensitive, fine grained	N/A	
2	Organic soils - peats	3.60	N/A
3	Clays - silty clay to clay	2.95	3.60
4	Silt mixtures - clayey silt to silty clay	2.60	2.95
5	Sand mixtures - silty sand to sandy silt	2.05	2.60
6	Sands - clean sand to silty sand	1.31	2.05
7	Gravelly sand to dense sand	N/A	1.31
8	Very stiff sand to clayey sand (High OCR or cemented)	N/A	
9	Very stiff, fine grained (High OCR or cemented)	N/A	

Soil behavior type is based on empirical data and may not be representative of soil classification based on plasticity and grain size distribution.

Relative Density and Consistency Table			
SANDS		SILTS and CLAYS	
Cone Tip Stress, qt (tsf)	Relative Density	Cone Tip Stress, qt (tsf)	Consistency
Less than 20	Very Loose	Less than 5	Very Soft
20 - 40	Loose	5 - 15	Soft to Firm
40 - 120	Medium Dense	15 - 30	Stiff
120 - 200	Dense	30 - 60	Very Stiff
Greater than 200	Very Dense	Greater than 60	Hard