



**CITY OF DALTON
VISIT THE WEBSITE FOR BIDDING
OPPORTUNITIES**

Website: (<https://www.daltonga.gov>)

Bidder must register with City of Dalton.

Email contact information vendor@daltonga.gov

**INVITATION TO
BID**

Bidder's Sealed Envelope shall be marked with the following information:

MILL CREEK RIVERWALK - PHASE II

City of Dalton Finance Department
300 West Waugh Street, Dalton, Georgia 30720

SCHEDULE OF EVENTS

DATES

Optional Pre-Bid Conference will be held at Dalton City Hall, Second Floor Conference Room:
300 W. Waugh Street
Dalton, Georgia 30720

**Wednesday,
November 2, 2022
at 2:00 pm**

Deadline for clarifications and questions.
All questions must be emailed to Allen Peterfreund, PE, allen.peterfreund@acp-ga.com

**Tuesday,
November 8, 2022 at
12:00 pm**

Clarifications and Questions will be posted on the City of Dalton's Website:
(<https://www.daltonga.gov>) as needed.

Deadline for Bid: Submittals delivered in person or mailed. **Submit 4 Copies**
Dalton City Hall, City Finance Department, 300 West Waugh Street, Dalton, Georgia 30720

**Tuesday,
November 15, 2022
at 9:00 pm
(Bids will be read aloud at 9:10 am
in the Dalton City Hall First Floor
Conference Room)**

INVITATION TO BID

MILL CREEK RIVERWALK – PHASE II

City of Dalton, Georgia



300 West Waugh Street, Dalton, Georgia
30720

Bid Submission Deadline: Tuesday, November 15, 2022 at 9:00 AM.

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- GDOT Encroachment Permit
- Stream Buffer Variance Permit
- EPD Safe Dams Permit

1 INFORMATION AND INSTRUCTIONS TO BIDDERS

1.1 Services Required:

This Invitation to Bid (“ITB”) from qualified Bidders (“Bidder” or “Bidders”) by City of Dalton (“City”) is to procure the following Services: Construction of a 6,369 lineal feet, 8 foot wide asphalt multi-use trail along the City of Dalton property and permanent easement in Dalton, Georgia (“Project”) with a bid alternate of a 1,647 lineal feet, 8 foot wide asphalt multi-use trail along the City of Dalton property and permanent easement in Dalton, Georgia (“Alternate”). The project will require the contractor to construct an asphalt trail, an asphalt parking lot, gravity walls, gabion walls, a timber boardwalk, drainage structures and fencing with an access gate. The bid alternate will require an asphalt trail and a pre-engineered bridge. The project begins at the Eagle Scout Trail Head located at 1027 Chattanooga Avenue, Dalton, Georgia 30720 and will end at a tie in to a gravel utility drive in Haig Mill Lake Park located at 161 Shiloh Way, Dalton, Georgia 30720.

1.2 Bid Package and Specifications:

The bid package and specifications are available on the City of Dalton’s website: <http://www.daltonga.gov>. The project specifications are the Georgia DOT Standard Specifications for Construction of Transportation Systems, 2021 Edition, 2016 Supplemental Specification and 2010 Americans with Disabilities ACT (ADA) Standards for Accessible Design.

1.3 Optional Pre-Bid Conference:

A optional pre-bid conference will be held on Wednesday, November 2, 2022 at 2:00PM.

1.4 Solicitation Method:

This solicitation is being conducted in accordance with all applicable provisions of the City of Dalton Code of Ordinances and the Georgia Public Works Construction Law. By submitting a Bid in reference to this solicitation, a Bidder acknowledges that it is familiar with all laws applicable to this solicitation, including, but not limited to, the City’s Code of Ordinances, State of Georgia and Federal Statutes and Laws which are all incorporated into this ITB by reference.

1.5 Minimum Qualifications:

Each bidder shall have the minimum experience set forth in this ITB. The City is requesting bids from well-qualified contractors who have built a minimum of three (3) asphalt trail projects with a 60 foot or more in distance pre-engineered bridge. **The successful Bidder shall self-perform 51% of the work** in this contract with equipment owned by his own organization. **Successful Bidder must provide proof of company owned equipment and a list trail projects.**

1.6 Approved Vendor with the City of Dalton:

Bidder shall complete the City of Dalton Vendor Packet and be an approved Active Vendor with the City. Applications can be obtained from the Finance Department or online at <https://www.daltonga.gov/finance/page/purchasing-and-vendor-information>.

1.7 No Offer by City and Firm Offer by Bidder:

This solicitation does not constitute an offer by the City to enter into an agreement and cannot be accepted by any Bidder to form an agreement. This solicitation is only an invitation for offers from interested Bidders and no offer shall bind the City. A Bidder’s offer is a firm offer and may not be withdrawn except as provided in this ITB, and in the City’s Code of Ordinances and other applicable law. The City of Dalton reserves the right to reject any and all bids.

1.8 Bid Duration:

Bids submitted in response to this ITB must be valid for a period of **sixty (60) calendar days** from the Bid Submission Deadline and must be marked as such.

1.9 Construction Contract:

The Contract for Construction will be signed with the City of Dalton. Construction must begin within ten (10) calendar days from issuance of notice to proceed (NTP). The project must be completed with **270** calendar days from issuance of NTP.

1.10 Liquidated Damages:

As compensation for the loss to the City of Dalton, if the work is not completed and accepted by the City of Dalton on or before the completion date, contractor will pay the City of Dalton as liquidated damages the \$300.00 for each day of delay beyond the contract period.

1.11 Inspection and Testing of Materials:

Inspection and Testing of materials will be **performed and paid by the City of Dalton**. All testing and inspections will be done in accordance with the requirements outlined in the GDOT Sampling, Testing, and Inspection Guide or other industry accepted standards.

1.12 Bid Submission and Deadline:

Responses to this ITB must be received by the City of Dalton Finance Department, 300 West Waugh Street, Dalton, Georgia 30720 no later than **9:00 a.m. on Tuesday, November 15, 2022**. **Bids will be read aloud in the Dalton City Hall First Floor Conference Room**. Any Bid received after this time will not be considered and will be rejected and returned.

1.13 Solicitation Questions; Prohibited Contacts:

Any questions regarding this ITB should be submitted by email to Allen Peterfreund, PE, at allen.peterfreund@acp-ga.com on or before **Tuesday, November 8, 2022 at 12:00 pm**. Questions received after the designated period may not be considered. Responses to these questions will be posted at <https://www.daltonga.gov>. It is the responsibility of each Bidder to obtain a copy of any Addendum issued for this solicitation by monitoring the City of Dalton website. No Bidder may rely on any verbal response to any question submitted concerning this ITB. All Bidders and representatives of Bidders are strictly prohibited from contacting any other City employees, City Officials, Elected Officials, or any third-party representatives of the City on any matter having to do with this ITB. All communications by any Bidder concerning this ITB must be made to Allen Peterfreund, PE at allen.peterfreund@acp-ga.com. **Bidder's must acknowledge the Addenda.**

1.14 Ownership of Bids:

Each Bid submitted to the City will become the property of the City. The City shall not be liable for any bid preparation costs incurred by Bidder.

1.15 Georgia Open Records Act:

Information provided to the City is subject to disclosure under the Georgia Open Records Act, O.C.G.A. § 15-18-70 et. seq. Pursuant to O.C.G.A. § 50-18-72(a)(34), “[a]n entity submitting records containing trade secrets that wishes to keep such records confidential under this paragraph shall submit and attach to the records an affidavit affirmatively declaring that specific information in the records constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 [O.C.G.A. § 10-1-760 et seq.]”.

1.16 Insurance and/or Bonding Requirements:

The Insurance and/or Bonding requirements for any Agreement that may be awarded pursuant to this ITB are set forth in this ITB: **Insurance:** Bidder must provide a copy of a current certificate of insurance evidencing any existing commercial general liability policies issued for Bidder.

Bonding: A Bid Bond of 5%, is required at the time of the Bid. The Performance Bond of 100% and a Payment Bond of 100% are required by the most successful bidder (Not due at the time of bid). The performance bond and payment bond must be 100% of the Contract Price with a surety company satisfactory to the City. The surety company of the successful Bidder must be listed in the Federal Register and licensed to write surety insurance in the State of Georgia. Bonds given shall meet the requirements of the law of the State of Georgia including, but not limited to, O.C.G.A. §13-10-1 and §36-91-21 et seq.

The Contractor shall be required to furnish the City with satisfactory proof of coverage of the insurance specified in the General Conditions. The City of Dalton is to be named as beneficiary on all certificate of insurance policies.

1.17 Sub-contractors and Manufacturers:

Bidders are required to submit, in writing, the addresses of any proposed subcontractors or equipment manufacturers listed in the Bid and may be required to submit other material information relative to proposed subcontractors. City reserves the right to disapprove any proposed subcontractors whose technical or financial ability, or resources, or experience are deemed inadequate.

1.18 Examination of Bid Documents:

Each Bidder is responsible for examining with appropriate care the complete ITB and all Addenda and for informing itself with respect to all conditions which might in any way affect the cost or the performance of any Services. Failure to do so will be at the sole risk of the Bidder, who is deemed to have included all costs for performance of the Services in its Bid.

- A. Each Bidder shall promptly notify City in writing should the Bidder find discrepancies, errors, ambiguities or omissions in the Bid Documents, or should their intent or meaning appear unclear or ambiguous, or should any other question arise relative to the ITB. Replies to such notices may be made in the form of an addendum to the ITB, which will be issued simultaneously to all potential Bidders.
- B. The City in accordance with applicable law, by addendum, modify any provision or part of the ITB at any time prior to the Bid due date and time. The Bidder shall not rely on oral clarifications to the ITB unless they are confirmed in writing by the City in an issued addendum.
- C. Each Bidder must confirm Addenda have been received and acknowledge receipt by executing the Acknowledgment of Addenda form provided with each Addendum.
- D. The CITY may waive any technicalities and formalities. The CITY reserves the right to cancel or change the ITB in its entirety. If the successful Bidder, who is awarded the contract, cannot provide to the CITY requirements to establish an agreement/contract, the CITY reserves the right to award the contract to the next firm that best meets the needs of the City.
- E. Bids may be disqualified by the City because of, but not necessarily limited to, the following reasons:
 - Failure to follow City's bid schedule.
 - Failure to return applicable compliance and/or specification sheets.
 - Failure to return applicable addenda.
 - Failure to provide information on alternates or equivalents, when allowed.
 - Failure to provide bid bond when specifically stated will result in automatic rejection.
 - Failure of bidder to sign all requested documents.
 - Failure to submit bid by deadline.
 - Failure of supplier to extend prices.

- Failure to hold firm pricing.
- Failure to meet specified delivery requirements.
- Prices for services or items that exceeds the department's budgeted amount allowed for those items.

1.19 *Illegal Immigration Reform and Enforcement Act:*

This ITB is subject to the Illegal Immigration Reform and Enforcement Act of 2011 (“Act”), formerly known as the Georgia Security and Immigration Compliance Act. Pursuant to Act, the Bidder must provide with its Bid proof of its registration with and continuing and future participation in the E-Verify Program established by the United States Department of Homeland Security. Completed Contractor Affidavit, Illegal Immigration Reform and Enforcement Act Forms must be submitted with the Bid at the time of submission. **Under state law, the City cannot consider any Bid which does not include the completed forms.** Where the business structure of a Bidder is such that Bidder is required to obtain an Employer Identification Number (EIN) from the Internal Revenue Service, Proponent must complete the Contractor Affidavit on behalf of, and provide a Federal Work Authorization User ID Number issued to, the Bidder itself. Where the business structure of a Bidder does not require it to obtain an EIN, each entity comprising Bidder must submit a separate Contractor Affidavit. It is not the intent of this notice to provide detailed information or legal advice concerning the Act. All Bidders intending to do business with the City are responsible for independently apprising themselves of and complying with the requirements of the Act and assessing its effect on City solicitations and their participation in those solicitations. For additional information on the E-Verify program or to enroll in the program, go to: <https://e-verify.uscis.gov/enroll>. Additional information on completing and submitting the Contractor Affidavit can be found preceding this form in this ITB.

1.20 *Conflict of Interest:*

Bidders are advised to read and familiarize themselves with the conflict of interest provisions of this ITB. The City reserves the right to issue ITBs for specific projects that are independent MILL CREEK RIVERWALK – PHASE II for the City of Dalton, Georgia. Except as stated in this ITB these Instructions, and the Notice to Bidders concerning Conflicts of Interests, successful Bidders under this ITB are not precluded from responding to such solicitations.

1.21 *Codes, Permits, Fees, Licenses and Laws:*

All permits, fees, arrangements for inspections, licenses, and costs incurred for the same shall be the sole responsibility of the successful Bidder. All materials, labor and construction must comply with all applicable rules and regulations of local, state and/or national codes, laws and ordinances of all authorities having jurisdiction over the project, which shall apply to the contract throughout and will be deemed to be included in the contract the same as though herein written out in full.

1.22 *Notice of Intent:*

A Notice of Intent “NOI” is required for this project, and is the responsibility of the contractor to submit to the EPD. The Contractor shall file the NOI as the operator. The City will NOT be party to the NOI. A GSWCC certified personnel Blue Card holder must be present on site at all times to represent the contractor.

BID PACKAGE
MILL CREEK RIVERWALK – PHASE II
City of Dalton, Georgia

2 INTRODUCTION

The project consists of the construction of a 6,369 lineal feet, 8 foot wide asphalt multi-use trail along the City of Dalton property and permanent easement in Dalton, Georgia with a bid alternate of a 1,647 lineal feet, 8 foot wide asphalt multi-use trail along the City of Dalton property and permanent easement in Dalton, Georgia. The project will require the contractor to construct an asphalt trail, an asphalt parking lot, gravity walls, gabion walls, a timber boardwalk, drainage structures and fencing with an access gate. The bid alternate will requires an asphalt trail and a pre-engineered bridge. The project begins at the Eagle Scout Trail Head located at 1027 Chattanooga Avenue, Dalton, Georgia 30720 and will end at a tie in to a gravel utility drive in Haig Mill Lake Park located at 161 Shiloh Way, Dalton, Georgia 30720.

2.1 BIDDING REQUIREMENTS

All Bids shall be in accordance with the Contract Documents and the current Georgia Department of Transportation (GDOT) State of Georgia Standard Specifications - Construction of Transportation Systems 2021 Edition, and Supplemental Specifications Book 2016 edition, and applicable Special Provisions and Supplemental Specifications. 2010 Americans with Disabilities ACT (ADA) Standards for Accessible Design and Architectural Barriers ACT (ABA) Accessibility Standards.

2.2 GDOT STANDARD SPECIFICATIONS

Use this link to download the latest Georgia Department of Transportation Standard Specifications.
<http://www.dot.ga.gov/PartnerSmart/Business/Source/specs/2021StandardSpecifications.pdf>

CONTROL OF MATERIALS

GDOT Section: 106

LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

GDOT Section: 107

PROSECUTION AND PROGRESS

GDOT Section: 108

MEASUREMENT AND PAYMENT

GDOT Section: 109

EROSION AND SEDIMENTATION CONTROL

GDOT Sections: 107,160,161,162, 163, 165,166,170,171,603,716

TRAFFIC CONTROL

GDOT Section: 150

WATER QUALITY MONITORING

GDOT Section: 167

CLEARING AND GRUBBING

GDOT Sections: 201,202,204,205,206,207,208

EARTHWORK

GDOT Sections: 209,210,211,212,214,215,216,217,218,219,221

GRADING COMPLETE

GDOT Sections: 109,201,202,204,205,206,207,208,209

CONCRETE STRUCTURES

GDOT Sections: 152,430,431,439,441,461,500,800,801,830,831,832,838,833,853,880,886

TIMBER STRUCTURES AND TIMBER PILES

GDOT Sections: 502, 520, 860, 861, 862, 863

PIPES AND STRUCTURES

GDOT Sections: 441,550

SIGNING AND MARKINGS

GDOT Sections: 500,636,652,653,830,870,910,911,913,914

FENCE

GDOT Section 500, 643, 645, 862, 863, 894

LANDSCAPING

GDOT Sections: 700,702,710

2.3 PROJECT SPECIFIC SPECIAL PROVISIONS

PEDESTRIAN BRIDGE

GDOT Section 534 Pedestrian Bridge

GALVANIZED CHAIN LINK FENCE

Dalton Utilities Section 323100 Galvanized Chain Link Fence

FIBER REINFORCED POLYMER (RFP) COMPOSITE STRUCTURAL SHAPES

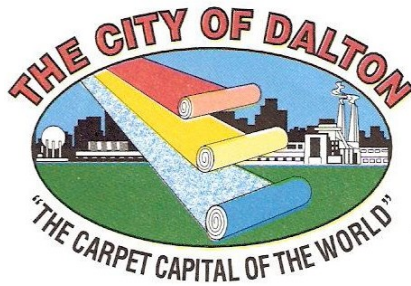
Section 999 – Fiber Reinforced Polymer (RFP) Composite Structural Shapes

2.4 SUB-CONSULTANTS AND SUB-CONTRACTORS

- A. Consultant shall ensure the responsibility standards for each of its Sub-Consultants and Sub-Contractors as listed below and in each part of this ITB (Invitation to Bid). Verification must include documentation that each Sub-Consultant or Sub-Contractor meets the responsibility criteria required to perform the work including any professional license, certification, insurance requirements of this ITB, any governmental agency having jurisdiction over the matter, or any law or regulation pertaining to the work or requirements. Contractor shall not furnish any statement, representation, or certification in connection with sub-consultants or sub-contractors that is materially false, deceptive, incorrect, or incomplete. Failure of the Bidder to provide information concerning the responsibility of any sub-consultant or sub-contractor may result in a finding that the Bidder is not responsible.
- B. All proposed sub-consultants and sub-contractors shall be listed in the Bidders response. Bidder shall ensure that all proposed sub-contractors have adequate personnel, past experience, adequate facilities, finances and business systems to perform the scope of services. The City reserves the right to approve all sub-contractors and sub-consultants.
- C. Consultant shall have the responsibility of verifying the existence, authenticity, and dates of expiration of all licenses required by all sub-consultants and sub-contractors engaged in the work of this ITB. The lack of a valid license for Consultant or any sub-consultant or sub-contractor shall be grounds for default, and for immediate termination for cause with prejudice as it relates to the Consultant, and the removal of any unlicensed entity from the project. In the event Consultant, a sub-consultant or sub-contractor is required to be licensed or certified as a condition precedent to providing goods or services under this ITB, the revocation or loss of such license or certification may result in immediate termination of the Consultant's contract effective as of the date on which the license or certification is no longer in effect.

2.5 INTENT TO AWARD

- A. The City reserves the right to make one (1) award or no award of the Mill Creek Riverwalk – Phase II, Dalton, Georgia 30720
- B. If the successful Bidder is terminated, the City reserves the right to make an award to the next lowest responsive and responsible Bidder.
- C. **Responsibility** - The determination of the Bidder's responsibility will be made by the City based on whether the Bidder meets the following minimum standard requirements:
 - Has the appropriate and adequate technical experience that is required.
 - Has adequate personnel and equipment to perform the work expeditiously.
 - Ability to comply with the required or proposed delivery and installation schedule.
 - Has a satisfactory record of performance.
 - The ability of Bidder to provide future maintenance and/or service.
 - Has adequate financial means to meet obligations incidental to the work.
 - Such other factors as the City deem to be pertinent to either the bid or the contract.
- D. **Responsiveness** - The determination of the Bidder's responsiveness will be made by the City based on a consideration of whether the Bidder has submitted complete bid documents meeting bid requirements without irregularities, exclusions, special conditions, or alternatives bids for any item unless specifically requested in the solicitation.



3 CONTRACT TERMS AND CONDITIONS

3.1 STATEMENT OF WARRANTY

Bidder's Statement of Warranty should include all applicable manufacturers' warranties and the Bidder's warranty in regard to equipment, materials and workmanship. This statement shall include the terms, conditions and the period of one (1) year warranty coverage. Any exclusion(s) must be clearly stated.

The successful Bidder will promptly correct all Work rejected by the City as faulty, defective, or failing to conform to the bid Specifications. The Bidder will bear all costs of correcting or replacing such rejected Work.

3.2 GENERAL CONDITIONS

OWNER

City of Dalton
300 West Waugh Street
Dalton, Georgia 30720

DESIGN ENGINEER

American Consulting Professionals, LLC
243 North Hamilton Street, Suite 2
Dalton, Georgia 30720 Allen Peterfreund, PE

It is the intent of the parties that nothing contained herein shall be interpreted to assign to the Design Engineer any status under this Contract other than that of an independent contractor.

3.3 REGULATORY REQUIREMENTS

All work shall be done in conformance with the rules and regulations of the local authority having jurisdiction. The Owner's Representative is responsible for obtaining and paying for the building permits. The Contractor is responsible for obtaining and paying for all applicable development fees and permits.

3.4 ACCESS TO THE SITE AND USE OF THE PREMISES

The space available to the Contractor for the performance of the work, either exclusively or in conjunction with others performing other construction as part of the project, is shown on the drawings.

Other areas are off limits to all construction personnel. Storage areas will be available on site.

Do not install, or allow to be installed, signs other than specified sign(s) and signs identifying the principal entities involved in the project.

Successful bidder shall coordinate with the City on permitted access points to the project work area.

3.5 PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held at a time and place designated by the Project Manager, for the purpose of identifying responsibilities of the Owner's Representative and the Design Engineer's personnel and explanation of administrative procedures

The Contractor shall also use this meeting for the following minimum agenda:

- Construction schedule
- Use of areas of the site
- Delivery and storage
- Safety
- Security
- Cleaning up

The Contractor shall also provide at this meeting Subcontractor procedures relating to:

- Submittals
- Change orders
- Applications for payment.
- Record documents

Attendees shall include:

- The Primary Design Consultant and any Sub-consultants
- The Contractor and its Superintendent
- Major subcontractors, suppliers, and fabricators
- Others interested in the work

3.6 SECURITY PROCEDURES

- Limit access to the site to persons involved in the work only.
- Provide secure storage for materials for which the Owner has made payment and which are stored on site.
- Secure completed work as required to prevent loss.

3.7 COORDINATION

If necessary, inform each party involved, in writing, of procedures required for coordination; include requirements for giving notice, submitting reports, and attending meetings.

3.8 ACCESS TO WORK

The Owner, Design Engineer, and the Owner's Representative shall at all times have access to the Work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access.

3.9 SUBMITTAL PERIOD FOR PRODUCTS AND SUBSTITUTIONS

Substitutions: Where items of equipment or materials are specifically identified herein by a manufacturer's name, model, or catalog number, only such specific item may be used in the Base Bid. If the Bidder wishes to use items of equipment or materials other than those named in his Base Bid, the Bidder shall apply in writing for the Owner's approval of substitution at least ten (10) days prior to opening of bids, submitting with his request for approval complete descriptive and technical data on the items or item he proposes to furnish. Approved substitutions will be listed in the Addendum issued to all Bidders prior to opening of bids.

3.10 MEASUREMENTS AND DIMENSIONS

Before ordering material or doing work, which is dependent for proper size or installation upon coordination with conditions, the Contractor shall verify all dimensions by taking measurements at the project site and shall be

responsible for the correctness of same. No consideration will be given any claim based on the differences between the actual dimensions and those indicated on the Drawings. Any difference which may be found must be submitted to the Owner for resolution before proceeding with the Work.

If a minor change in the Work is found necessary due to actual field conditions, the Contractor shall submit detailed drawings and written notification of the problems necessitating such departure for approval by the City before making the change. If the Contractor fails to make such request, no excuse will thereafter be entertained for Contractor's failure to carry out work in the required manner or provide required guarantees, warranties, or bonds and Contractor shall not be entitled to any change in the Contract Sum or the Contract Time on account of such failure.

If any portion of the Contract Documents shall be in conflict with any other portion, the various documents comprising the Contract Documents shall govern in the following order of precedence: Contract, Modifications issued after execution of the Contract; the General Conditions of the Contract; Supplementary Conditions; the Specifications; the Drawings; as between schedules and information given on the drawings, the schedules shall govern; as between figures given on Drawings and the scaled measurements, the figures shall govern; as between large-scale Drawings and small-scale Drawings, the larger scale shall govern.

3.11 STORAGE FACILITIES AND WORK AREAS

The Contractor shall cooperate with the Owner in any required use of its property and arrange for storage of materials on job site in such areas as are mutually agreed upon. The Contractor shall allot suitable and proper space to his Subcontractors for the storing of their materials and for the erection of their sheds and tool houses. Should it be necessary at any time to move materials, sheds, or storage platforms, the Contractor shall move same as and when directed, at his own expense.

3.12 IMPROVEMENTS ON PUBLIC PROPERTY

The Contractor shall pay all highway fees and for all damages to sidewalks, streets, or other public property, or to public utilities. Contractor shall secure all permits, authorizations, and certificates of inspection or occupancy that may be required by authorities having jurisdiction over the Work. Said certificates shall be delivered to the Owner upon completion of the Work.

The Contractor shall pay all required material disposal fees and shall dispose of all materials in accordance with all applicable laws and regulations. The Contractor shall be responsible for all costs associated with improper disposal of materials, including any clean-up costs, fines or penalties, whether levied against the Contractor or the Owner.

3.13 MANUFACTURERS' CERTIFICATIONS

The Owner may require, and the Contractor shall furnish if required to do so, certificates from manufacturers to the effect that the products or materials furnished by them for use in the Work comply with the applicable specified requirements for the materials or products being furnished.

3.14 SAMPLES

The Contractor shall furnish with reasonable promptness all samples as directed by the Owner's Representative for approval for conformance with the design concept of the Project and for compliance with the information stated in the Contract Documents. The Work shall be in accordance with approved samples.

3.15 AS-BUILT DRAWINGS

The Contractor shall, upon completion of the Work, furnish a marked set of Drawings indicating the field changes, as actually installed and as specified under these sections of the Specifications, and deliver them to the Owner.

3.16 MAINTENANCE MANUAL

Contractor shall, prior to completion of Contract, deliver to the Owner's Representative two copies of a manual, assembled and bound, presenting for the Owner's guidance full details for care and maintenance of visible surfaces

and of equipment included in Contract. Contractor shall, for this manual, obtain from Subcontractors literature of manufacturers relating to equipment, including motors; also furnish cuts, wiring diagrams, instruction sheets and other information pertaining to same that will be useful to the Owner in over-all operation and maintenance. Where the above-described manuals and data are called for under separate sections of the Specifications, they are to be included in the manual described in this article.

3.17 ASSIGNMENT

The contract created by the award to the successful Bidder shall not be sold, not be assigned or transferred, in whole or in part hereof, by the Bidder by process or operation of law or in any other manner whatsoever, including intra-corporate transfers or reorganizations between or among a subsidiary of the Bidder, or with a business entity which is merged or consolidated with the Bidder or which purchases a majority or controlling interest in the ownership or assets of the Bidder without the prior written consent of the City.

3.18 NONDISCRIMINATION

Notwithstanding any other provision of the contract, during its performance the Bidder, for itself, its heirs, personal representatives, successors in interest and assigns, as part of the consideration of this Contract does hereby covenant and agree, that:

No person on the grounds of race, color, religion, sex or national origin shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination.

In the furnishing of services or materials no person shall, on the grounds of race, color, religion, sex or national origin, be excluded from participation in, or denied the benefits of, such activities, or otherwise be subjected to discrimination.

3.19 PERFORMANCE OF CONTRACT

The City reserves the right to enforce the Bidder's performance in any manner prescribed by law or deemed to be in the best interest of the City in the event of breach or default of the resulting contract award. It will be understood that time is of the essence in the Bidder's performance.

The successful Bidder shall execute the entire Work described in the Contract Documents, except to the extent specifically indicated in the Contract documents to be the responsibility of others.

The Bidder accepts the relationship of trust and confidence established by the award of this solicitation. The Bidder covenants with the City to utilize its best skill, efforts and judgment in furthering the interest of the City; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the work in the best way and most expeditious and economical manner consistent with the interest of the City.

All purchases for goods or services are subject to the availability of funds for this Contract.

3.20 DEFAULT AND TERMINATION

Termination by City. The Contract resulting from this ITB shall be subject to termination by the City at any time if, in the opinion of the City, the Bidder fails to carry out the Contract provisions of any one or more of the following events:

- The default by the Bidder in the performance of any of the terms, covenants or conditions of the Contract, and the failure of the Bidder to remedy, or undertake to remedy with sufficient forces and to the City's reasonable satisfaction. The City shall provide the Bidder with notice of any conditions which violate or endanger the performance of the Contract. If, after such notice, the Bidder fails to remedy such conditions within thirty (30) days or a shorter time period as set forth in any such notice, to the satisfaction of the City, the City may exercise its option in writing to terminate the Contract without further notice to the Bidder and order the Bidder to stop work immediately, vacate the premises, and to cancel ordered products and/or services with no expense to the City.

- Bidder files a voluntary petition in bankruptcy, including a reorganization plan, makes a general or other assignment for the benefit of creditors, is adjudicated as bankrupt or if a receiver is appointed for the benefit of creditors, is adjudicated as bankrupt or if a receiver is appointed for the property or affairs of the Bidder and such receivership is not vacated within thirty (30) days after the appointment of such receiver.
- Bidder's failure to conduct services according to the approved bid specifications.
- Bidder's failure to keep, perform, or observe any other term or condition of the Contract.
- Bidder's performance of the Contract is unreasonably delayed.
- Should the successful Bidder fail to provide the materials or services when ordered, and in accordance with the General Terms and Conditions, Specifications and any other requirements contained herein, the City reserves the right to purchase commodities or services covered by this bid elsewhere if available from an alternate source.

Termination for Convenience. The City may, at its sole option, terminate the Contract with or without cause at any time upon thirty (30) days written notice by certified mail to the Bidder without prejudice to any other right or remedy it may have.

3.21 FORCE MAJEURE

Neither party shall be held to be in breach of the Contract resulting from this ITB because of any failure to perform any of its obligations hereunder if said failure is due to any act of God, fire, flood, accident, strike, riot, insurrection, war, or any other cause over which that party has no control. Such party shall give notice and full particulars of such Force Majeure in writing to the other party within a reasonable time after occurrence of the event and the obligation of the party giving such notice shall endeavor to remove or overcome such inability with all reasonable dispatch. The COVID-19 pandemic is not considered a cause of force majeure.

3.22 WAIVER

The waiver of any breach, violation or default in or with respect to the performance or observance of the covenants and conditions contained herein shall not be taken to constitute a waiver of any subsequent breach, violation or default in or with respect to the same or any other covenant or condition hereof.

3.23 INVOICES

Invoices and/or statements should not be faxed but signed originals must be emailed or mailed directly to:

City of Dalton

Caitlin Sharpe – Director, Dalton Parks and Recreation Department

904 Civic Drive

Dalton, Georgia 30721

Phone: 706-278-5404

csharpe@daltonga.gov

The following information must appear on all invoices submitted:

- Name and address of the successful Bidder;
- Detailed breakdown of all charges for the services or products delivered stating the applicable period of time;
- City's Purchase Order Number and Bid Package number; and
- Signature of authorized Bidder's Project Manager certifying the accuracy of the quantities presented for payment.

Invoices shall be based upon actual services rendered, actual work performance and/or products delivered.

3.24 PAYMENT

Payment shall be tendered to the successful Bidder upon acceptance and approval by the City for satisfactory compliance with the general terms, conditions and specifications of the bid; by completed services; verification of

delivery of products; assurance that the product/service performs as specified and warranted; and receipt of a valid invoice.

- **Application for Payment is due on or before the first Wednesday of the month.** The Contractor shall submit an application for payment for work completed during one calendar month ending on the last day of the month. If application is received after the 1st Wednesday, payment will be paid the following month. Original invoice(s) can be mailed or emailed to: [Caitlin Sharpe, 904 Civic Drive Dalton, Georgia 30721, csharpe@daltonga.gov](mailto:Caitlin.Sharpe@daltonga.gov)

The amount of **Retainage Schedule** shall be as follows:

- Five (5%) percent of each progress payment shall be withheld as retainage for the life of the project, including change orders and other authorized additions provided in the Contract is due;
- When the Work is substantially complete (operational or beneficial occupancy) and City determines the Work to be reasonably acceptable, the Contractor shall submit an invoice or other documents as may be required and receive payment thereof within thirty (30) days. If there are any remaining incomplete minor items, an amount equal to two hundred (200%) percent of the value of each item, as determined by City, shall be withheld until such items are completed.
- This Contract is governed by O.C.G.A. § 13-10-2-80, which requires that the Contractor, within ten(10) days of receipt of retainage from City, pass through payments to Subcontractors and reduce each Subcontractor's retainage accordingly. The Code provision also requires Subcontractors to pass through payments to Lower Tier Subcontractors and reduce each lower tier contractor's retainage. Therefore, City, in its discretion, may require the Contractor to submit satisfactory evidence that all payrolls, material bills, or other indebtedness connected with the Work have been paid before making any payment.
- Within sixty (60) days after the Work is fully completed and accepted by City, the balance due hereunder shall be paid; provided, however, that final payment shall not be made until said Contractor shall have completed all work necessary and reasonably incidental to the Contract, including final cleanup and restoration. All claims by the Contractor for breach of contract, violation of state or federal law or for compensation such claims shall be forever barred. In such event no further payment to the Contractor shall be deemed to be due under this agreement until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to City.

3.25 SUBSTANTIAL COMPLETION

Substantial Completion shall mean that stage in the progression of the Work when the Work is sufficiently complete in accordance with this Contract that the City can enjoy beneficial use and occupancy of the Work and can utilize the Work for its intended purpose. Partial use or occupancy of the Project shall not result in the Project being deemed substantially complete, and such partial use or occupancy shall not be evidence of Substantial Completion.

3.26 BONDING AND INSURANCE REQUIREMENTS

A. Bonding

1. **BID BOND:** Bidders shall post a bid bond, certified check or money order made payable to the City in the amount of five percent (5%) of the bid price.
2. Whenever a bond is provided, it shall be executed by a Surety licensed to write surety insurance in the State of Georgia.
3. **PERFORMANCE BOND/ PAYMENT BOND:** Bidder shall give a Contract Performance bond and a Payment bond of one hundred percent (100%) of the bid price, for the use of all persons doing work or furnishing skills, tools, machinery, or materials under or for the purpose of the resulting Contract, in accordance with the applicable provisions of Georgia state law, including but not limited to, O.C.G.A. § 13-10-1 and § 36-91-21 et seq. The life of these bonds shall extend through the life of the Contract including a sixty (60) day maintenance period (where applicable) and a twelve month (12) guarantee period after the completion of Work performed under the resulting Contract.

4. It is further agreed between the parties hereto that if at any time after the execution of the Contract and the surety bonds, the City shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bonds cease to be adequate to cover the performance of the Work, the Contractor shall, at its sole expense and within five (5) days after the receipt of notice from the City to do so, furnish additional bond or bonds in such form and amount and with such surety or sureties as shall be satisfactory to the City.

B. INDEMNIFICATION

Bidder shall agree to indemnify, defend, save and otherwise hold harmless City of Dalton, its elected and appointed officials, departments, agencies, boards, authorities, directors, officers, employees, and volunteers against and/or from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs, attorneys' fees and any other costs associated and/or related in any way to any claim or litigation for or on account of any property damage, injury or death to any person or action related to such brought by any person and/or estate which may arise or which may be alleged to have arisen out of or in connection with the work covered by this contract, except to the extent that such loss results from the sole negligent act of City of Dalton. This indemnity provision shall include activities required for compliance with all applicable environmental laws, ordinances, and regulations in effect during the term of this Agreement and continue for a period of two years after termination thereof. The successful Bidder shall agree to protect City of Dalton from claims involving infringements of patents and/or copyrights. The unauthorized use of patented articles is done at the risk of the Bidder. This indemnity includes any claim or amount arising out of or recovered under the Workers' Compensation laws of the State of Georgia or arising out of the failure of such vendor to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. It is agreed that Bidder will be responsible for primary loss investigation, defense and judgment costs where this indemnification is applicable. Bidder shall agree to waive all rights of subrogation and/or financial recovery of any kind in favor of City of Dalton its departments, all elected and appointed officials, to include, but not limited to, its commissioners, directors, officers, agents, boards, volunteers and employees for losses arising or alleged to have arisen out of any work performed in relation to the contract.

Bidder shall procure and maintain, until all of their obligations including any warranty periods under the Contract have been satisfied or otherwise discharged, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Bidder, Bidder's agents, representatives, employees or subcontractors.

C. INSURANCE

The insurance requirements herein are minimum requirements for the Contract and in no way limit the indemnity covenants contained in the Contract. The City of Dalton in no way warrants that the minimum limits contained herein to be sufficient to protect the Bidder from liabilities that might arise out of the performance of the work under the contract by the Bidder, its agents, representatives, employees or subcontractors. Bidder is free to purchase additional insurance.

Bidder shall complete the City of Dalton Vendor Packet and be an approved Active Vendor with the City. Applications can be obtained from the Finance Department or online at <https://daltonga.gov/finance/page/vendor-packets>.

MINIMUM SCOPE AND LIMITS OF INSURANCE (Bidder shall provide coverage with limits of liability not less than those stated below.)

1. **Comprehensive or Commercial form General Liability Insurance - Limits of Liability**
 - i. \$2,000,000.00 General Aggregate
 - ii. \$1,000,000.00 Each Occurrence - combined single limit for bodily injury and property damage.
2. **Business Automobile Liability Insurance - Limits of Liability**
 - i. \$1,000,000.00 Each Accident - combined single limit for bodily injury and property damage to include uninsured and underinsured motorist coverage
3. **Worker's Compensation:**
 - i. Worker's Compensation Statutory Limits

ii. Employer's Liability

1. Bodily Injury by Accident - \$100,000 each accident
2. Bodily Injury by Disease - \$500,000 policy limit
3. Bodily Injury by Disease - \$100,000 each employee

4. **Course of Construction Insurance - 100% of the completed value of the work.**

5. **Professional Service Insurance-Errors & Omissions - Including consultants, counselors, engineers, attorney, accountants, etc.**

- i. Minimum \$1,000,000 per claim.

6. **Cancellation Notice:**

With the exception of (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this contract in the insurance policies above shall require (30) days written notice to City. Such notice shall be sent by certified mail, return receipt requested directly to City.

7. **Acceptability of Insurers:**

Insurance is to be placed with duly licensed or approved non-admitted insurers in the State of Georgia with an "A.M. Best" rating of not less than A- VII. City of Dalton in no way warrants that the above-required minimum insurer rating is sufficient to protect the Bidder from potential insurer insolvency.

8. **Verification of Coverage:**

Bidder shall furnish City of Dalton with certificates of insurance as required by the Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates of insurance and endorsements are to be received and approved by City of Dalton before work commences. Each insurance policy required by the Contract must be in effect at or prior to commencement of work under the contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by the Contract, or to provide evidence of renewal, is a material breach of contract.

9. **Insurance Approval:**

Any modification or variation from the insurance requirements in the contract shall be made by City of Dalton whose decision shall be final. Such action may or may not require a formal Contract amendment or may be made by administrative action.

City of Dalton contacts all listed Brokers and/or Insurance Carriers to verify coverages and endorsements. Any mistakes on the Certificate of Insurance and/or Endorsements may be addressed at such time as well.

10. **SubContractor:**

It is the sole responsibility of the general Bidder to ensure all subcontractors working under the general Bidder have separately procured any and all types and limits of insurance that is required under any and all pertinent local, state, federal, ordinances or resolutions that is suitable for the particular trade that the sub-Bidder is performing. It is also the sole responsibility of the general and/or prime Bidder to ensure any and all subcontractors or vendors carry types and limits of insurance not less than those listed herein and that the subcontractors and/or vendors carry and/or procure endorsements to waive all subrogation rights against and name "City of Dalton, its appointed and elected Officials, departments, agencies, boards, commissions, its officers, agents, employees and volunteers" as additional insureds.

4 PROJECT SPECIFIC SPECIAL PROVISIONS

Included as part of the ITB and attached are as follows:

Section 534 – Pedestrian Bridge

Section 323100 – Galvanized Chain Link Fence

Section 999 – Fiber Reinforced Polymer (RFP) Composite Structural Shapes

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

SPECIAL PROVISION

Section 534—Pedestrian Pre-Engineered Bridge

534.1 General Description

This Specification covers the design, materials, fabrication, transportation, erection, measurement, and payment for a Pedestrian Bridge complete in place.

534.1.01 Definitions

The Pedestrian Bridge is that portion of the bridge above the top of the cap, excluding cheek walls, and consists of a simply supported, open top, steel through-truss span that is compatible with the bridge substructure. The Pedestrian Bridge includes anchor bolts, bearing assemblies, composite deck and concrete surface per manufacturer requirements.

534.1.02 Related References

A. Standard Specifications

Section 105—Control of Work

Section 106—Control of Materials

Section 500—Concrete Structures

Section 501—Steel Structures

Section 511—Reinforcement Steel

B. Referenced Documents

AASHTO Standard Specifications for Highway Bridges, 34th Edition, 2014 as indicated on the Plans.

AASHTO LRFD Specifications for Design of Pedestrian Bridges, 2nd Edition

AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 7th Edition

American Institute of Steel Construction (AISC), Manual of Steel Construction, 13th Edition.

534.1.03 Submittals

A. Plans

Submit plans, calculations, and specifications to the Engineer for approval prior to beginning fabrication and construction. Sign and seal plans, calculations, and specifications by a registered professional engineer currently licensed to practice in the State of Georgia.

B. Contractor and Fabricator Qualifications

Contractor or Subcontractor Must Have a Minimum five (5) years experience in Steel Bridge Fabrication and a minimum of five (5) successful bridge projects, of similar construction, each of which has been in service at least three (3) years. List the location, bridge size, owner, and a contact for reference for each project.

Bridge(s) shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Major Steel Bridges” as set forth in the AISC Certification Program. Quality control shall be in accordance with procedures outlined for AISC certification.

534.2 Design Criteria

A. Geometry

Provide the following:

1. Inside clear width between handrails of 8'- 0", as shown on the Plans.
2. The length as shown on the Plans.

B. Loading

Include the following loads in the design:

1. Self-weight.
2. Uniformly distributed load of 90 pounds per square foot (4.07 kN/m²).
3. A moving concentrated load equal to AASHTO 2.5 Ton Max load, 4000lb max axle loading; no impact. Per Structural Design.

534.3 Materials

A. Structural Steel

Use unpainted structural steel.

Fabricate structural steel in accordance with ASTM A 709 Grade 50W (A 709M Grade 345) for plates and structural shapes, and ASTM A 606 (A 606M) or ASTM A 847 (A 847M) for tubular sections.

Minimum yield strength is equal to or greater than 50,000 psi (345 MPa).

The minimum material thickness for structural steel members shall be in accordance with the provisions of Article 10.8 of the AASHTO Standard Specification for Highway Bridges except that the minimum material thickness of closed structural tubular members is 1/4 inch (6 mm).

B. Concrete

Use Class A concrete placed in accordance with the Plans. (3500 psi @ 28days)

All exposed concrete faces shall have an Ashlar Form Liner Finish.

C. Composite Steel Floor Deck

Use a galvanized steel composite floor deck with a minimum thickness of .0336 inch (.85mm) (22 gage). Manufacture the composite floor deck by a member of the Steel Deck Institute.

D. Bolts

Bolt field splices with type 3 High Strength ASTM A 325 (A 325M) or ASTM A 490 (A 490M) bolts.

E. Accessories

1. Railing

Use railings with a smooth outside surface without protrusions and depressions. Attach railing forty two (42) inches (1067 mm) above the floor deck in accordance with the AASHTO Specifications. Grind-smooth the ends of all angles that are provided as part of the railing assembly. Use only tubes with closed ends.

4. Toe Plate

Attach a five (5) inch (125 mm) steel channel two (2) inches (50 mm) above the floor deck.

534.4 Construction Requirements

534.4.01 Personnel

General Provisions 101 through 150.

534.4.02 Equipment

General Provisions 101 through 150.

534.4.03 Preparation

General Provisions 101 through 150.

534.4.04 Fabrication

A. Fabrication

- 1. Workmanship

Perform the fabrication, welding, shop connections, and workmanship in accordance with Section 501 of the Georgia

- 2. D.O.T. Specifications.

Welding

Perform all field welding by certified welders that have in their possession a current welding certification card issued by the Georgia D.O.T. Office of Materials and Research and in accordance with section 501 of the Georgia D.O.T. Specifications.

- 3. Camber

Fabricate each truss to produce a 1.0% positive camber after all dead loads have been applied.

- 4. Finish

Sand blast all prominently exposed surfaces of weathering steel in accordance with the Steel Structures Painting Council (SSPC) Surface Preparation Specification No. 6 "Commercial Blast Cleaning". Finish per plans is shown as weathered steel.

B. Delivery and Erection

- 1. Notify the Project Engineer two weeks in advance of delivery of the bridge superstructure unit.
- 2. Install anchor bolts in accordance with the manufacturer's recommendations.

534.4.05 Quality Assurance

Furnish a warranty against defects in material and workmanship for a period of ten (10) years from the manufacturer.

534.4.06 Contractor Warranty and Maintenance

General Provisions 101 through 150.

534.5 Measurement

This work will be measured for payment on a Lump Sum basis, complete and accepted in place.

534.6 Payment

This work will be paid for at the Contract Price per pedestrian bridge complete in place. Payment includes all material (structural steel, high strength bolts, composite steel deck forms, concrete, bearing assemblies, anchor bolts, and labor, equipment, and crane necessary to complete the fabrication and installation of bridge.

Payment will be made under:

Item No. 534	Pedestrian Bridges	Lump Sum
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DALTON UTILITIES

SPECIAL PROVISION

Section 323100 – Galvanized Chain Link Fence

Scope:

The work under this Section consists of furnishing all labor, equipment and materials required to install galvanized coated chain link fencing and accessories as shown in the plans and as specified. An electronic gate shall be installed at approximate station 57+14.00 (Const. Baseline of Main Alignment) as shown in the plans. Gate shall be card operated with the ability to open from remote location.

Submittals:

- A. Changes in specifications may not be made after the bid date.
- B. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- C. Product data: Manufacturer's catalog cuts indicating material compliance and specified

Warranty:

- A. Provide Manufacturer's standard 12 year limited warranty.

Products:

- A. Manufacturer:
 - 1. Products from qualified manufacturers having a minimum of five years' experience manufacturing galvanized coated chain link fencing will be acceptable by the Owner as equal, if approved in writing, fourteen days prior to bidding, and if they meet the following specifications for design, size gauge of metal parts and fabrication.
 - 2. Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.
 - 3. Approved Manufacturer: Master Halco, Inc., or approved equal.

Master Halco
4000 W. Metropolitan Drive, Suite 400
Orange, CA 92868
Phone (800) 229-5615 Fax (714) 385-0107
- B. Chain Link Fence Fabric:
 - 1. Galvanized wire: Zinc coated Wire, ASTM A 392 – 2.0 oz/sf. [Wire Spec-A817-83, Class 1 or Class 2.
 - 2. Size: Helically wound and woven to height of 8-feet as indicated on drawings with 2-inch diamond mesh, 9 gauge, with a wire diameter of 0.148-inches and a breakload of 1000 lbf.
 - 3. Selvage of fabric shall be twisted at one selvage and knuckled at other selvage.
- C. Steel Fence Framing:
 - 1. Steel pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 30,000 psi (205 MPa); sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² (550 g/m²) of coated surface area.

2. Steel pipe - Type II: Cold formed and welded steel pipe complying with ASTM F 1043, Group IC, with minimum yield strength of 50,000 psi (344 MPa), sizes as indicated. Protective coating per ASTM F 1043, external coating Type B, zinc with organic overcoat, 0.9 oz/ft² (270 g/m²) minimum zinc coating with chromate conversion coating and verifiable polymer film. Internal coating Type B, minimum 0.9 oz/ft² (270 g/m²) zinc or Type D, zinc pigmented, 81% nominal coating, minimum 3 mils (0.08 mm) thick.
3. Formed steel ("C") sections: Roll formed steel shapes complying with ASTM F 1043, Group II, 45,000 psi (310 MPa) minimum yield strength steel; sizes as indicated. External coating per ASTM F 1043, Type A, minimum average 2.0 oz/ft² (601 g/m²) of zinc per ASTM A 123, or 4.0 oz/ft² (1220 g/m²) per ASTM A 525.
4. Steel square sections: [ASTM A 500, Grade B] Steel having minimum yield strength of 40,000 psi (275 MPa); sizes as indicated. Hot-dipped galvanized with minimum 1.8 oz/ft² (550 g/m²) of coated surface area.
5. End and Corner Post:
 - a. Outside Diameter: 2.875-inches
 - b. Wall Thickness: 0.203-inches
 - c. Weight: 9.11 lbs/ft
6. Line Post:
 - a. Outside Diameter: 2.375-inches
 - b. Wall Thickness: 0.154-inches
 - c. Weight: 3.65 lbs/ft
7. Rails and Braces:
 - a. Outside Diameter: 1.660-inches
 - b. Wall Thickness: 0.140-inches
 - c. Weight: 2.27 lbs/ft

Gates shall be installed where shown on the Drawings. The barbed wire supporting arms shall be extra long, galvanized pressed steel sleeve clamped to the top of each line post so as to incline outward at a 45° angle. Arms shall be formed with tongue for permanently attaching barbed wire topping. Arms shall be of sufficient strength to withstand a weight of 200 lbs. applied at the outer barbed wire strand.

D. Accessories:

1. Chain link fence accessories: [ASTM F 626] Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing. Fittings should match Master Halco specifications.
2. Card operated slide gates shall be cantilever type full width of the road. The gates shall be aluminum enclosed roller bearing type, factory lubricated with sealed bearings. The gate shall be supported entirely at the top. The one-piece track/frame member shall be a thick walled extrusion of corrosion resistant aluminum alloy, welded to the all-aluminum gate frame. Fabric shall be secured on all sides with tension rods and clips. The gate operator shall be Stanley Model ASJH or equal with card reader and magnetic vehicle detector, control system as shown on the Drawings. The gate motor shall be sized to properly operate the gate.. The gate and operator shall be furnished by and be the responsibility of the same manufacturer and the operator must be compatible with existing operators. Furnish arms and three strands of barbed wire for the top of the gate.
3. The gate operator shall be arranged with an exterior hand-automatic-off switch enclosed in a lockable NEMA 4 control box located at the gate operator. On automatic, the sliding gate shall operate as follows:
 - a. Entry:
 - Open from remote signal from existing Laboratory building and/or control room in fine screen building.
 - Open with card reader on pedestal.

- Close with loop detector. (Loop wiring in asphalt drive.)
 - Close with time delay relay. (When vehicle does not pass over loop.)
- b. Exit:
- Open with loop detector. (Loop wiring in asphalt drive.)
 - Close with loop detector. (Loop wiring in asphalt drive.)
 - Gate operator shall have local disconnect as required by electrical specifications.
4. Post caps: Formed steel or cast malleable iron weather tight closure cap for tubular posts. Provide one cap for each post. Cap to have provision for barbed wire when necessary. "C" shaped line post without top rail or barbed wire supporting arms do not require post caps. (Where top rail is used, provide tops to permit passage of top rail.)
 5. Top rail and rail ends: Pressed steel per ASTM F626, for connection of rail and brace to terminal posts.
 6. Top rail sleeves: 7" (178 mm) expansion sleeve with a minimum .137" wire diameter and 1.80" length spring, allowing for expansion and contraction of top rail.
 7. Wire ties: 9 gauge [0.148" (3.76 mm)] galvanized steel wire for attachment of fabric to line posts. Double wrap 13 gauge [0.092" (2.324 mm)] for rails and braces. Hog ring ties of 12-1/2 gauge [0.0985" (2.502 mm)] for attachment
 8. Brace and tension (stretcher bar) bands: Pressed steel, minimum 300 degree profile curvature for secure fence post attachment. At square post provide tension bar clips.
 9. Tension (stretcher) bars: One piece lengths equal to 2 inches (50 mm) less than full height of fabric with a minimum cross-section of 3/16" x 3/4" (4.76 mm x 19 mm). Provide tension (stretcher) bars where chain link fabric meets terminal posts.
 10. Tension wire: Galvanized coated steel wire, 6 gauge, [0.192" (4.8 mm)] diameter wire with tensile strength of 75,000 psi (517 MPa).
 11. Truss rods & tightener: Steel rods with minimum diameter of 5/16" (7.9 mm). Capable of withstanding a tension of minimum 2,000 lbs.
 12. Barbed wire:[ASTM A 121] Class 3, zinc coated steel wire double-strand, 12-1/2 gauge [0.099" (2.51mm)] twisted line wire with galvanized steel, 4 point barbs spaced approximately 5" (127mm) on center.
 13. Barbed wire supporting arms: Pressed steel arms with provisions for attaching 3 rows of barbed wire. Arms shall withstand 250 lb. (113.5kg) downward pull at the outermost end of arm without failure.
 - a. Provide [45°] [3 strands, single arm] [and] [6 strands double "V" arms].
 - b. Provide intermediate arms with hole for passage of top rail.
 14. Nuts and bolts are galvanized.

Standard –PDS (self-locking using horizontal bottom channel system)

E. Setting Materials:

1. Concrete: Minimum 28 day compressive strength of 3,000 psi (20 MPa).

OR

2. Drive Anchors: Galvanized angles, ASTM A 36 steel 1" x 1" x 30" (25 mm x 25 mm x 762 mm) galvanized shoe clamps to secure angles to posts.

Execution:

A. Examination

1. Verify areas to receive fencing are completed to final grades and elevations.
2. Ensure property lines and legal boundaries of work are clearly established.

B. Chain Link Fence Framing Installation

1. Install chain link fence in accordance with ASTM F 567 and manufacturer's instructions.
2. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
3. Space line posts uniformly [at 10' (3048 mm) on center].
4. Concrete set [terminal] [and] [gate] posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" (152 mm) deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" (914 mm) below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
5. Drive Anchor [line] posts: With protective cap, drive post 36" (914 mm) into ground. Slightly below ground level install drive anchor shoe fitting. Install 2 diagonal drive anchors and tighten in the shoe.
6. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
7. Bracing: Install horizontal pipe brace at mid-height for fences 6' (1829 mm) and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
8. Tension wire: Provide tension wire at bottom of fabric [and at top, if top rail is not specified]. Install tension wire before stretching fabric and attach to each post with ties. Secure tension wire to fabric with 12-1/2 gauge [0.0985" (2.502 mm)] hog rings 24" (610 mm) oc.
9. Top rail: Install lengths, 21' (6400 mm). Connect joints with sleeves for rigid connections for expansion/contraction.
10. Center Rails (for fabric height 12' (3658 mm) and over). Install mid rails between posts with fittings and accessories.
11. Bottom Rails: Install bottom rails between posts with fittings and accessories.

C. Chain Link Fabric Installation

1. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Leave approximately 2" (50 mm) between finish grade and bottom selvage. Attach fabric with wire ties to line posts at 15" (381 mm) on center and to rails, braces, and tension wire at 24" (600 mm) on center.
2. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" (381 mm) on center.

D. Accessories

1. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.
2. Fasteners: Install nuts on side of fence opposite fabric side for added security.
3. Barbed wire: Uniformly space parallel rows of barbed wire on security side of fence. Pull wire taut and attach in clips or slots of each extension.

Clean Up:

Clean up debris and unused material, and remove from the site.

Payment:

No separate payment will be made for the work of this Section unless specifically noted. The cost of the work, and all cost incidental thereto, shall be included in the Proposal.

END OF SECTION

SPECIAL PROVISION

Section 999 – Fiber Reinforced Polymer (FRP) Composite Structural Shapes

SPECIAL PROVISION 999.0045 – FIBER REINFORCED POLYMER (FRP) COMPOSITE STRUCTURAL SHAPES

SECTION 999-0045 Fiber Reinforced Polymer (FRP) Composite Structural Shapes

999.0045.1 General Description

This Section covers material and fabrication requirements for fiber reinforced polymer (FRP) composite structural shapes.

999.0045.1.01 Definitions

General Provisions 101 through 150.

999.0045.1.02 Related References

A. Standard Specifications

Section 852—Miscellaneous Steel Materials

999.0045.1.03 Submittals

General Provisions 101 through 150.

999.0045.2 Materials

999.0045.2.01 Thermoset Pultruded Structural Shapes.

Thermoset pultruded structural shapes must meet the requirements in the materials section of the ASCE, Pre-Standard for Load & Resistance Factor Design (LRFD) of Pultruded Fiber Reinforced Polymer (FRP) Structures.

Manufactured components shall be inspected according to ASTM D3917 for dimensional tolerances and ASTM D4385 for visual defects.

Pultruded profiles located on bridge and overhead sign structures shall meet a flame spread index of Class B in accordance with ASTM E84 and meet the requirements of UL94 with a rating of V-1.

999.0045.2.02 Vacuum Infusion Processed (VIP) Structural Shapes:

A. Materials:

A. **Fibers:** Use commercial grade glass fibers that conform to ASTM D578. Glass fibers may be in any form such as rovings, woven fabrics, braided fabrics, stitched fabrics, continuous fiber mats, continuous strand mats, continuous filament mats (CFM), and chopped strand mats (CSM) of any size or weight.

Each structural element shall contain a minimum of 40% (by weight) of glass fibers oriented in a minimum of two directions in accordance with the manufacturer's requirements.

Tensile strength of glass fiber strands, yarns and rovings shall not be less than 290 ksi in accordance with ASTM D7290, determined by a tension test in accordance with ASTM D2343.

B. **Resin:** Use a commercial grade thermoset resin for fabricating shapes.

C. **Additives:** Additives such as fillers, promoters, accelerators, inhibitors, UV agents, and pigments, used in the processing or curing shall be compatible with the fiber and resin.

B. Physical and Mechanical Properties:

The physical properties of VIP FRP products shall conform to the requirements of Table 2-1. The characteristic mechanical properties of VIP FRP composite structural members, determined in accordance with ASTM D7290, shall equal or exceed the minimum requirements in Table 2-2 for shapes and Table 2-3 for plates.

Table 2-1 Required Physical Properties - VIP FRP		
Physical Property	Requirement	Test Method
Barcol Hardness	> 40	ASTM D2583
Glass Transition Temperature	> 180 F	ASTM D4065
Coefficient of Thermal Expansion	< 7.5 x 10 ⁻⁶ in/in/ F (longitudinal)	ASTM D696
Moisture Equilibrium Content	< 2%	ASTM D570, Section 7.4

Table 2-2 Required Mechanical Properties - VIP FRP Shapes		
Property	Minimum Requirement	Test Method
Longitudinal Tensile Strength	30,000 psi	ASTM D3039
Transverse Tensile Strength	7,000 psi	
Longitudinal Tensile Modulus	3 x 10 ⁶ psi	
Transverse Tensile Modulus	0.8 x 10 ⁶ psi	
Longitudinal Compressive Strength	30,000 psi	ASTM D6641
Longitudinal Compressive Modulus	3 x 10 ⁶ psi	
Transverse Compressive Modulus	1 x 10 ⁶ psi	
In-Plane Shear Strength	8,000 psi	ASTM D5379
In-Plane Shear Modulus	0.4 x 10 ⁶ psi	ASTM D5379
Interlaminar Shear Strength	3,500 psi	ASTM D2344

Table 2-3 Required Mechanical Properties -VP FRP Plates		
Property	Minimum Requirement	Test Method
Longitudinal Tensile Strength	20,000 psi	ASTM D3039
Transverse Tensile Strength	7,000 psi	
Longitudinal Tensile Modulus	1.8 x 10 ⁶ psi	
Transverse Tensile Modulus	0.7 x 10 ⁶ psi	
Longitudinal Compressive Strength	24,000 psi	ASTM D6641
Transverse Compressive Strength	15,500 psi	
Longitudinal Compressive Modulus	1.8 x 10 ⁶ psi	
Transverse Compressive Modulus	1 x 10 ⁶ psi	
Longitudinal Flexural Strength	30,000 psi	ASTM D790
Transverse Flexural Strength	13,000 psi	
Longitudinal Flexural Modulus	1.6 x 10 ⁶ psi	
Transverse Flexural Modulus	0.9 x 10 ⁶ psi	
In-Plane Shear Strength	6,000 psi	ASTM D5379
In-Plane Shear Modulus	0.4 x 10 ⁶ psi	
Interlaminar Shear Strength	3,500 psi	ASTM D2344

C. Fire, Smoke and Toxicity:

VIP profiles located on bridge and overhead sign structures shall meet a flame spread index of Class B in accordance with ASTM E84 and meet the requirements of UL94 with a rating of V-1.

D. Impact Tolerance:

Where impact resistance is stipulated, impact resistance shall be determined in accordance with ASTM D7136.

999.0045.2.03 Thermoplastic Structural Shapes.

A. General:

For the purpose of this specification, use the following definitions:

- D. Thermoplastic Structural Shapes (TSS) includes a thermoplastic matrix reinforced with chopped fiberglass filaments.
- E. Reinforced Thermoplastic Structural Shapes (RTSS) includes a thermoplastic matrix reinforced with chopped fiberglass filaments and continuous FRP reinforcing bars meeting the requirements of this Section. Steel reinforcing bars are not permitted.

B. Materials:

Use polyethylene made from recycled post-consumer or post-industrial thermoplastics. Mix the polyethylene with appropriate colorants, UV inhibitors, hindered amine light stabilizers, antioxidants, and chopped fiberglass reinforcement so that the resulting product meets the requirements specified in Table 3-1 for RTSS and Table 3-2 for TSS. Use a minimum of 15% (by weight) chopped fiberglass reinforcement for both TSS and RTSS. The thermoplastic matrix must not corrode, rot, warp, splinter or crack.

For RTSS members, the use of separate materials for skin and core is at the discretion of each manufacturer; however, both materials must meet the requirements in Table 3-1. The material surrounding the rebar within 1 inch from the rebar surface shall not contain voids greater than 3/4 inch diameter and extend no further than 2 inches along the length of the member. The cross section of the product shall not contain voids exceeding 1-1/4 inches in diameter and the sum of all voids greater than 3/8 inches in diameter shall not exceed 5% of the cross sectional area.

Extrude final product as one continuous piece with no joints or splices to the dimensions and tolerances in accordance with Table 3-3.

Reject any sections containing cracks or splits.

Table 3-1 RTSS Matrix		
Property	Test Method	Requirement
Density	ASTM D792	48–63 pcf
Water Absorption	ASTMD570	2 hrs: <1.0% weight increase 24 hrs: <3.0% weight increase
Brittleness	ASTM D746	Brittleness temperature < minus 40°C
Impact Resistance	ASTM D256, Method A (Izod)	>0.55 ft-lbs/in
Hardness	ASTM D2240	44-75 (Shore D)
Ultraviolet	ASTM D4329 UVA	500 hours <10% change in Shore D Durometer Hardness
Abrasion	ASTM D 4060	Weight Loss: <0.02 oz Cycles = 10,000 Wheel = CS17 Load = 2.2 lb

Chemical Resistance	ASTM D543	Sea Water: <1.5% weight increase Gasoline: <9.5% weight increase No. 2 Diesel: <6.0% weight increase
Tensile Properties	ASTM D638	2,200 psi at break min.
Compressive Modulus	ASTM D695	40 ksi min.
Static Coefficient of Friction	ASTM D1894	0.25, wet max.
Screw Withdrawal	ASTM D6117	400 lb (screw) min.

Table 3-2 TSS Matrix		
Property	Test Method	Requirement
Density	ASTM D792	50-65 pcf
Impact Resistance	ASTM D256 Method A (Izod)	> 2.0 ft-lbs/in
Hardness	ASTM D2240	44-75 (Shore D)
Ultraviolet	ASTM D4329 (UVA)	500 hours <10% change in Shore D Durometer Hardness
Chemical Resistance	ASTM D756 or ASTM D543	Sea Water: <1.5% weight increase Gasoline: <7.5% weight increase No. 2 Diesel: <6.0% weight increase
Tensile Properties	ASTM D638	3,000 psi at break min.
Static Coefficient of Friction	ASTM D2394	0.25, wet or dry min.
Nail Withdrawal or Screw Withdrawal	ASTM D6117	250 lb (nail) min. 400 lb (screw) min.
Scant Modulus at 1% Strain	ASTM D6109	150,000 psi min.
Flexural Strength	ASTM D6109	2,500 psi min.
Compressive Strength	ASTM D6108	2,200 psi min.
Compressive Strength Perpendicular to grain	ASTM D6108	700 psi min.

Table 3-3 Tolerances	
Dimension	Tolerance
Length	0/+6 inch
Width – RTSS	±1/2 inch
Width – TSS	±1/4 inch
Height – RTSS	±1/2 inch
Width – TSS	±1/4 inch

999.0045.2.04 Miscellaneous Hardware

Galvanize the following items according to Subsection 852.2.04.B.3, “Galvanizing”:

F. Bolts

G. Nuts

H. Washers

I. All hardware including (but not limited to) special couplings, dowels, and spikes

Repair damaged galvanized coatings according to Section 645.

Nails may be black or galvanized.

999.0045.2.04 Delivery, Storage, and Handling

A. Handling Timber:

Handle composite structural shapes carefully without dropping it, breaking the outer fibers, bruising it, or piercing it with tools. Handle with non-metallic slings.

B. Storing Materials:

Place all stored material in well-drained locations and keep these locations free from weeds and rubbish. Comply

J. Composite Structural Shapes: Close stack treated materials at least 12 in (300 mm) above the ground and pile them to prevent warping.

K. Composite Structural Shapes After Fabrication: Store these composite structural shapes so the members do not change dimensions before they are assembled.

L. Hardware and Miscellaneous Metal: Place metal material in covered storage and protect it from rust and other damage.

999.0045.3 Construction Requirements

999.0045.3.01 Quality Acceptance

General Provisions 101 through 150.

999.0045.3.02 Contractor Warranty and Maintenance

General Provisions 101 through 150.

999.0045.4 Measurement

A. Composite Structural Shapes

Composite Structural Shapes will be measured per thousand feet (cubic meter) board measure (MBM). Quantities in the structure will be computed based upon nominal sizes and the actual length in place.

B. Hardware

The cost of all hardware including screws, bolts, nuts, washers and all other hardware shall be included in the Contract Unit Price bid for Composite Structural Shapes.

999.0045.5 Payment

Composite Structural Shapes will be paid for at the Contract Unit Price bid per thousand feet board measure (MBM) (cubic meter), complete in place and accepted. The payment will be full compensation for material, labor, and equipment necessary to complete the Work as shown on the Plans and as described in this Specification. Payment includes incidentals and all costs, both direct and indirect.

Payment will be made under:

Item No. 502-1400	PLASTIC BRIDGE TIMBER	Per MBM (cubic meter)
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999.0045.5.01 Adjustments

General Provisions 101 through 150.

BID PACKAGE SUBMITTAL

(First Page of Submittal on Top)

MILL CREEK RIVERWALK – PHASE II



City of Dalton, Georgia

BID DATE November 15, 2022 at 9:00 AM

Base Bid Grand Total \$ _____ (in figures)

\$ _____ (Total Cost in Words)

Bid Alternate Grand Total \$ _____ (in figures)

\$ _____ (Total Cost in Words)

THIS FORM MUST BE SIGNED AND SUBMITTED TO BE CONSIDERED FOR AWARD	
COMPANY NAME:	Bid Pricing Duration (60 days) DATE:
MAILING ADDRESS:	PHONE:
CITY:	FEDERAL TAX ID:
STATE: ZIP:	
EMAIL:	TITLE OF AUTHORIZED REPRESENTATIVE:
PRINTED NAME:	AUTHORIZED SIGNATURE:

BID PACKAGE
MILL CREEK RIVERWALK – PHASE II
City of Dalton, Georgia

SUBMITTAL CHECKLIST
(Page 2 of Your Submittal)

1. Please use the following checklist to verify that all required information is included in your bid.
2. It is the sole responsibility of each bidder to ensure that their bid is inclusive of all Submittals outlined below or elsewhere in this ITB.
3. **Failure to submit any of the items below may cause rejection of the Bid**
4. Contractor shall submit **Four (4) Copies** of the Bid Package Submittal.
5. The City will not consider any bid that does not include completed **Illegal Immigration Reform and Enforcement Act Affidavit Form(s)**.

DOCUMENTATION DESCRIPTION	INITIAL IF INCLUDED
1. BID PACKAGE SUBMITTAL (SUBMIT AS COVERSHEET OF BID)	
2. SUBMIT CHECKLIST (THIS FORM)	
3. ADDENDA (IF APPLICABLE)	
4. COMPLETED AND APPROVED VENDOR PACKET	
A. W-9 FORM	
B. ILLEGAL IMMIGRATION REFORM AND ENFORCEMENT ACT – CONTRACTOR AFFIDAVIT	
C. ILLEGAL IMMIGRATION REFORM AND ENFORCEMENT ACT – SUBCONTRACTOR AFFIDAVIT	
D. INSURANCE AFFIDAVIT	
5. BID BOND	
6. BID PROPOSAL	
7. CONTRACT	
8. CONTRACTOR AFFIDAVIT AND AGREEMENT	

3. ADDENDA

The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated _____ , Signature _____

2. Addendum No. 2, dated _____ , Signature _____

3. Addendum No. 3, dated _____ , Signature _____

4. Addendum No. 4, dated _____ , Signature _____

5. Addendum No. 5, dated _____ , Signature _____

4. CITY OF DALTON VENDOR PACKET

Bidder shall complete the City of Dalton Vendor Packet and be an approved Active Vendor with the City. Applications can be obtained from the Finance Department or online at <https://daltonga.gov/finance/page/vendor-packets>

- A. W-9 FORM
- B. ILLEGAL IMMIGRATION REFORM AND ENFORCEMENT ACT – CONTRACTOR AFFIDAVIT
- C. ILLEGAL IMMIGRATION REFORM AND ENFORCEMENT ACT – SUBCONTRACTOR AFFIDAVIT
- D. INSURANCE AFFIDAVIT

5. **BID BOND**, page 1 of 2

BID BOND
(Five Percent of Bid)

KNOW ALL MEN BY THESE PRESENTS, that we, and undersigned _____

of the City of _____ State of _____ and County of _____

as Principal and _____

as Surety, are hereby held and firmly bound unto the CITY OF DALTON, GEORGIA as Owner in the penal sum of _____

Dollars (\$ _____) for the payment of which, well and truly to be made,

we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, _____.

The condition of the above obligation is such that whereas the Principal has submitted to the CITY OF DALTON, GEORGIA a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for the construction of the project entitled:

MILL CREEK RIVERWALK – PHASE II

NOW, THEREFORE,

- (a) If said bid shall be rejected or in the alternate,
- (b) If said bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (*properly completed in accordance with said bid*) and shall furnish a bond for his faithful performance of said contract and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void; otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bids, and said Surety does hereby waive notice of any such extension.

BID BOND (Continued), page 2 of 2

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Witness As To Principal

Principal

By _____ *SEAL*

Witness As To Principal

Surety

By _____ *SEAL*

By _____ *SEAL*
Attorney-in-Fact

6. **BID PROPOSAL**, page 1 of 3

BID PROPOSAL

Place _____

Date _____

Proposal of _____ (*hereinafter called "Bidder"*) a contractor organized and existing under the laws of the City of _____ State of _____ and County of _____, * an individual, a corporation, or a partnership doing business as _____

TO: CITY OF DALTON, GEORGIA
(*Hereinafter called "Owner"*)

Gentlemen:

The Bidder in compliance with your invitation for bids for the construction of **MILL CREEK RIVERWALK – PHASE II** having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents, within the time set forth herein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under this contract, of which this proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and be complete within 180 calendar days of dated NTP. Bidder further agrees to pay as liquidated damages the sum of \$300.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions under "Time of Completion and Liquidated Damages."

Bidder acknowledges receipt of the following addenda:

* Strike out inapplicable terms

BID PROPOSAL (Continued), page 2 of 3

Amount shall be shown in figures

SEE FOLLOWING PAGES FOR BID PROPOSAL FORMS.

The prices submitted shall include all labor, materials, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

The undersigned further agrees that, in case of failure on his part to execute said contract and bond within ten (10) days after the award thereof, the check or bond accompanying his bid and the money payable thereon shall become the property of the Owner; otherwise, the check or bond accompanying this proposal shall be returned to the Bidder.

The Bidder declares that he understands that the quantities shown on the proposal are subject to adjustment by either increase or decrease, and that should the quantities of any of the items of work be increased, the undersigned proposes to do the additional work at the unit prices stated herein; and should the quantities be decreased, he also understands that payment will be made on actual quantities at the unit price bid and will make no claim for anticipated profits for any decrease in the quantities and that actual quantities will be determined upon completion of work, at which time adjustment will be made to the contract amount by direct increase or decrease.

Attached hereto is a bid bond or certified check on the _____ of _____ in the amount of _____ according to conditions under "Information For Bidders" and the provisions therein.

The full name and residence of persons or parties interested in the foregoing bids, as principals, are named as follows:

BID PROPOSAL (Continued), page 3 of 3

Date at:

The _____ day of _____, _____

Principal

By _____ *SEAL*

CITY OF DALTON
MILL CREEK RIVERWALK – PHASE II
BID FORMS

Bidders are cautioned that the quantities provided in Bid Item List are estimates. The City makes no guarantee as to the actual quantity that will be utilized during the Contract period.

Contractor shall perform their own quantity take offs for each Bid Item that includes all costs necessary to perform work. Any deviations in existing conditions that are not shown on the plans shall be brought to the attention of the Engineer of Record. Any Bid Item that is not listed in the Bid Item List but is shown on the Plan Documents shall be described and noted in the "Miscellaneous items" in the Base Bid List.

A unit price for each item offered shall be entered on the Bid Item List for each line item, and such price shall include total cost unless otherwise specified.

Bid Item 999-0001 (MONITORING, NOI, NOT, RECORD KEEPING & REPORTING NPDES to GA EPD) - A NOI is required for this project, and is the responsibility of the contractor to submit to the EPD. The Contractor shall file the NOI as the operator. The City will NOT be party to the NOI. A GSWCC certified personnel Blue Card holder must be present on site at all times to represent the contractor.

BASE BID FORM

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
TRAIL – SECTION 1					
999-0001	MONITORING, NOI, NOT, RECORD KEEPING & REPORTING NPDES to GA EPD	LS	LUMP		
210-0100	GRADING COMPLETE -	LS	LUMP		
206-0002	BORROW EXCAV, INCL MATL	CY	300		
310-1101	GR AGGR BASE CRS, INCL MATL	TN	1324		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	640		
441-0600	CONC HEADWALLS	CY	7		
550-1120	STORM DRAIN PIPE, 12 IN, H 1-10	LF	118		
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	36		
550-1360	STORM DRAIN PIPE, 36 IN, H 1-10	LF	19		
550-3000	ELLIPTICAL PIPE -	LF	56		
550-3100	ELLIPTICAL SAFETY END SECTION -	EA	2		
550-4212	FLARED END SECTION 12 IN, STORM DRAIN	EA	14		
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA	1		
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	EA	2		
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	SY	144		
603-7000	PLASTIC FILTER FABRIC	SY	369		
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY	225		
643-1132	CH LK FENCE, ZC COAT, 4 FT, 9 GA	LF	1498		
TOTAL ON SECTION 1					

PERMANENT EROSION CONTROL – SECTION 2					
700-6910	PERMANENT GRASSING	AC	2		
700-7000	AGRICULTURAL LIME	TN	6		
700-8000	FERTILIZER MIXED GRADE	TN	3		
700-8100	FERTILIZER NITROGEN CONTENT	LB	100		
700-9400	NATIVE RESTORATION AND RIPARIAN SEEDING	AC	1		
716-2000	EROSION CONTROL MATS, SLOPES	SY	1475		
TOTAL ON SECTION 2					
TEMPORARY EROSION CONTROL – SECTION 3					
163-0232	TEMPORARY GRASSING	AC	1		
163-0240	MULCH	TN	55		
163-0301	CONSTRUCT AND REMOVE CONSTRUCTION EXITS	EA	2		
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	8		
163-0528	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	LF	500		
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	LF	1590		
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	3604		
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	LF	250		
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	8		
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	2		
165-0310	MAINTENANCE OF CONSTRUCTION EXIT TIRE WASH AREA (PER EACH)	EA	1		
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	4		
167-1500	WATER QUALITY INSPECTIONS	MO	12		
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	3180		
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	7208		
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	4855		
TOTAL ON SECTION 3					

SIGNING AND MARKING – SECTION 4

636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	32		
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	SF	8		
636-2070	GALV STEEL POSTS, TP 7	LF	204		
652-5451	SOLID TRAFFIC STRIPE, 5 IN, WHITE	LF	171		
652-5701	SOLID TRAF STRIPE, 24 IN, WHITE	LF	8		
TOTAL ON SECTION 4					

RETAINING WALLS – SECTION 5

999-0045	GABION WALL	SF	180		
500-3201	CLASS B CONCRETE, RETAINING WALL	CY	54		
TOTAL ON SECTION 5					

BOARDWALK – SECTION 6

502-1200	BRIDGE TIMBER, TREATED	MBM	2.2		
502-1400	PLASTIC BRIDGE TIMBER	MBM	3.6		
500-3002	CLASS AA CONCRETE	CY	2		
511-1000	BAR REINF STEEL	LB	110		
520-2500	PILING, TIMBER - TREATED	LF	747		
TOTAL ON SECTION 6					

BASE BID - TOTALS PER SECTION

1	TRAIL				
2	PERMANENT EROSION CONTROL				
3	TEMPORARY EROSION CONTROL				
4	SIGNING AND MARKING				
5	RETAINING WALLS				
6	BOARDWALK				
TOTAL ESTIMATED CONSTRUCTION COST					

SEE BID ALTERNATE (NEXT PAGE)

BID ALTERNATE BID FORM

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
TRAIL – SECTION 1					
210-0100	GRADING COMPLETE -	LS	LUMP		
310-1101	GR AGGR BASE CRS, INCL MATL	TN	322		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	156		
515-2020	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	LF	64		
TOTAL ON SECTION 1					
PERMANENT EROSION CONTROL – SECTION 2					
700-6910	PERMANENT GRASSING	AC	1		
700-7000	AGRICULTURAL LIME	TN	1		
700-8000	FERTILIZER MIXED GRADE	TN	1		
700-8100	FERTILIZER NITROGEN CONTENT	LB	25		
700-9400	NATIVE RESTORATION AND RIPARIAN SEEDING	AC	1		
716-2000	EROSION CONTROL MATS, SLOPES	SY	53		
TOTAL ON SECTION 2					
TEMPORARY EROSION CONTROL – SECTION 3					
163-0232	TEMPORARY GRASSING	AC	1		
163-0240	MULCH	TN	8		
163-0300	CONSTRUCTION EXIT	EA	1		
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1743		
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	1		
165-0310	MAINTENANCE OF CONSTRUCTION EXIT TIRE WASH AREA (PER EACH)	EA	1		
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	4		
167-1500	WATER QUALITY INSPECTIONS	MO	12		
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	3485		
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	1684		
TOTAL ON SECTION 3					

SIGNING AND MARKING – SECTION 4					
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	16		
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	SF	3.2		
636-2070	GALV STEEL POSTS, TP 7	LF	108		
652-5701	SOLID TRAF STRIPE, 24 IN, WHITE	LF	8		
TOTAL ON SECTION 4					
PEDESTRIAN BRIDGE – SECTION 5					
207-0203	FOUND BKFILL MATL, TP II	CY	9		
500-3002	CLASS AA CONCRETE	CY	15		
511-1000	BAR REINF STEEL	LB	2754		
534-1000	PEDESTRIAN OVERPASS BRIDGE, STA	LS	1		
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY	101		
603-7000	PLASTIC FILTER FABRIC	SY	101		
TOTAL ON SECTION 5					

BID ALTERNATE - TOTALS PER SECTION		
1	TRAIL	
2	TEMPORARY EROSION CONTROL	
3	PERMANENT EROSION CONTROL	
4	SIGNING AND MARKING	
5	PEDESTRIAN BRIDGE	
TOTAL ESTIMATED CONSTRUCTION COST		

7. **CONTRACT**, page 1 of 2

THIS AGREEMENT made this the _____ day of _____, _____, by
and between the CITY OF DALTON, GEORGIA, hereinafter called "Owner",

and _____

a contractor doing business as an individual, a partnership, or a corporation* of the City

of _____, County of _____, and State of _____

hereinafter called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Owner, the Contractor hereby agrees to commence and complete the construction of the project entitled:

MILL CREEK RIVERWALK – PHASE II

hereinafter called the "Project", for the base bid sum of _____ Dollars and optional bid alternate sum of _____ dollars and all extra work in connection therewith, under the terms as stated in the Contract Documents, and at his (*its or their*) own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the proposal, the General Conditions of the Contract, the specifications and contract documents therefore as prepared by the Owner and as enumerated in Paragraph 2 of the General Conditions, all of which are made a part hereof and collectively constitute the Contract.

The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner. The Contractor further agrees to pay as liquidated damages the sum of \$300.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions under "Time of Completion and Liquidated Damages."

*Strike out inapplicable terms.

The Owner agrees to pay the Contractor in current funds for the performance of the contract, subject to additions and deductions as provided in the General Conditions of the Contract, and to make payments on account thereof as provided in "Payments to Contractor," of the General Conditions.

IN WITNESS WHEREOF, the parties to those presents have executed this contract in five (5) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

ATTEST:

City Clerk

Witness

ATTEST:

Secretary

Witness

CITY OF DALTON, GEORGIA

By: _____ *SEAL*

Title

CITY OF DALTON, GEORGIA

By: _____ *SEAL*

Title

Secretary of Owner should attest. If Contractor is corporation, secretary should attest. Give proper title of each person executing contract.

8. CONTRACTOR AFFIDAVIT AND AGREEMENT

EXHIBIT A

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with City of Dalton has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with City of Dalton, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10- 91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the City of Dalton at the time the subcontractor(s) is retained to perform such service.

The undersigned Contractor is using and will continue to use the federal work authorization program throughout the contract period.

EEV/Basic Pilot Program* User Identification Number

BY: Authorized Officer or Agent Date
(Contractor Name)

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE
DAY OF , 20

Notary Public
My Commission Expires:

* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the

U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

APPENDIX I – EXAMPLE BONDS

CONSTRUCTION PAYMENT BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (*Name and Address*):

OWNER (*Name and Address*):

CITY OF DALTON
P.O. BOX 1205
DALTON, GEORGIA 30722

CONSTRUCTION CONTRACT:

Date: _____

Amount: _____

Description (*Name and location*):

MILL CREEK RIVERWALK – PHASE II

SURETY (*Name and Principal place of Business*):

BOND:

Date: _____

Amount: _____

Bond Number: _____

EXAMPLE CONSTRUCTION PAYMENT BOND (Continued), page 2 of 4

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner and for the use and protection of all subcontractors and persons supplying labor, materials, machinery, and
2. With respect to the Owner, this obligation shall be null and void if the Contractor:
 - 2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2. Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (*at the address described in Paragraph 11*) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
4. The Surety shall have no obligations to Claimant unless the Claimant has substantially complied with the requirements of O.C.G.A. 36-82-104 by giving the notices provided for therein. Each Claimant failing to substantially comply with said Code Section shall be deemed to have waived the protection of the payment bond. No Claimant shall file an action for payment against the Owner, Contractor or Surety, except in accordance with this section.
 - 4.1. Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (*at the address described in Paragraph 12*) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
 - 4.2. Claimants who do not have a direct contract with the Contractor:
 1. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed: and
 2. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
 3. Not having been paid within the above 30 days, have sent a written notice to the Surety (*at the address described in Paragraph 12*) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

EXAMPLE CONSTRUCTION PAYMENT BOND (Continued), page 3 of 4

6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
 - 6.1. Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and that basis for challenging any amounts that are disputed.
 - 6.2. Pay or arrange for payment of any undisputed amounts.
7. The Surety's total obligation shall not exceed the amount of this Bond and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
11. No suit or action on this bond shall be instituted by a Claimant after expiration of one (1) year from the completion of the contract and the acceptance of the work by the public entity responsible therefor.
12. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on this Bond.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in the Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.
14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

EXAMPLE CONSTRUCTION PAYMENT BOND (Continued), page 4 of 4

15. DEFINITIONS

- 15.1. Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- 15.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONTRACTOR AS PRINCIPAL

SURETY

Company: _____

Company: _____

_____(Corp. Seal)

_____(Corp. Seal)

Signature: _____

Signature: _____

Name and Title: _____

Name and Title: _____

CONSTRUCTION PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (*Name and Address*):

OWNER (*Name and Address*):

CITY OF DALTON
P.O. BOX 1205
DALTON, GEORGIA 30722

CONSTRUCTION CONTRACT:

Date: _____

Amount: _____

Description (*Name and location*):

MILL CREEK RIVERWALK – PHASE II

SURETY (*Name and Principal place of Business*):

BOND:

Date: _____

Amount: _____

Bond Number: _____

EXAMPLE CONSTRUCTION PERFORMANCE BOND, page 2 of 4

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
 - 3.1. The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2. The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1. Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
 - 4.2. Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
 - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
 - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 1. After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefore to the Owner; or

EXAMPLE CONSTRUCTION PERFORMANCE BOND, page 3 of 4

2. Deny liability in whole or in part and notify the Owner citing reasons therefor.

5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
 - 6.1. The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 6.2. Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
 - 6.3. Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

EXAMPLE CONSTRUCTION PERFORMANCE BOND, page 4 of 4

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

- 12.1. Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 12.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3. Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- 12.4. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONTRACTOR AS PRINCIPAL

SURETY

Company: _____

Company: _____

_____ (Corp. Seal)

_____ (Corp. Seal)

Signature: _____

Signature: _____

Name and Title: _____

Name and Title: _____

APPENDIX II – GEOTECHNICAL REPORT

May 6, 2022

American Consulting Professionals, LLC
243 N. Hamilton Street, Suite 2
Dalton, GA 30720

ATTENTION: Mr. Allen Peterfreund, P.E.
Allen.Peterfreund@acp-ga.com

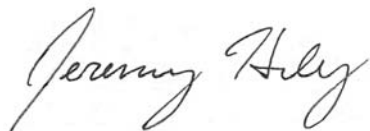
Subject: **REPORT OF GEOTECHNICAL EXPLORATION**
Mill Creek Riverwalk – Phase 2
Dalton, Georgia
GEOServices Project No. 41-21818

Dear Mr. Peterfreund:

We are submitting the results of the geotechnical exploration performed for the subject project. The geotechnical exploration was performed in general accordance with GEOS Proposal No. 14-21312, dated May 7, 2021. The following report presents our findings and recommendations for the proposed riverwalk in Dalton, Georgia.

GEOServices sincerely appreciates the opportunity to serve as your geotechnical consultant. Should you have any questions regarding this report, or if we can be of any further assistance, please contact us at your convenience.

Sincerely,
GEOServices, LLC



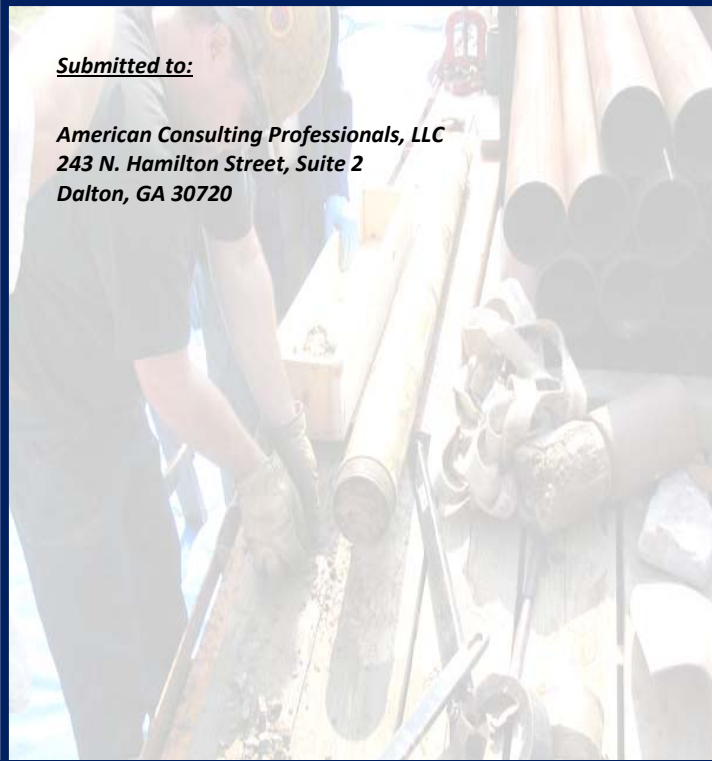
Jeremy T. Haley, P.E. (TN)
Geotechnical Engineer



Joshua R. Watson, P.E., C.W.I.
Geotechnical Engineer / Designer
PE# 045868

Submitted to:

**American Consulting Professionals, LLC
243 N. Hamilton Street, Suite 2
Dalton, GA 30720**



REPORT OF GEOTECHNICAL EXPLORATION

MILL CREEK RIVERWALK – PHASE 2

Dalton, Georgia

Submitted by:

**GEOServices, LLC
6607 Mountain View Road, Suite 139
Ooltewah, TN 37363**

**Phone (423) 614-6471
FAX (423) 614-6479**



**GEOSERVICES, LLC
PROJECT NO. 41-21818**

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this geotechnical exploration was to characterize the subsurface conditions for the design and construction of the proposed Mill Creek Riverwalk in Dalton, Georgia. This report provides recommendations for general site preparation, excavation and fill requirements, and foundation recommendations for the proposed riverwalk.

1.2 PROJECT INFORMATION AND SITE DESCRIPTION

Project information was provided by Mr. Allen Peterfreund with American Consulting Professionals, LLC. We were also provided with a preliminary set of construction drawings prepared by American Consulting Professionals, LLC. The site for the proposed riverwalk is located along Mill Creek in Dalton, Georgia. The project is set to consist of a new riverwalk path stretching from near Chattanooga Avenue to west of North Thornton Avenue. The proposed construction areas currently exist as a small nature trail along Mill Creek and are mostly wooded. The majority of the new riverwalk path will be asphalt paved; however, there are several areas where this will differ. There are areas where the path will cross a ditch or extended over portions of the creek. In these areas, a new pedestrian boardwalk will be constructed. These pedestrian bridges will likely be supported on a timber pile system in the span. Based on the structural loading provided by American Consulting Professionals, we anticipate maximum axial pile loads will be on the order of 4 kips for the boardwalk.

In addition to the normal pathway, the project is set to consist of a new bridge just to the west of North Thornton Avenue, where Mill Creek intersects with one of its subsidiaries. This bridge will likely be some form of Contech design supported on shallow foundations. We were asked to perform a geotechnical exploration in an effort to explore the subsurface materials and assist the design team with recommendations for the proposed construction.

1.3 SCOPE OF STUDY

This geotechnical exploration involved a site reconnaissance, field drilling, laboratory testing, and engineering analysis. The following sections of this report present discussions of the field exploration, site conditions, and conclusions and recommendations. Following the text of this report, Appendix A presents figures and test boring records. Appendix B presents a summary of laboratory test results.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, subsurface water, or air, on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

2.0 EXPLORATION AND TESTING PROGRAMS

2.1 FIELD EXPLORATION

The site subsurface conditions were explored with a total of four (4) soil test borings (B-1 through B-4). Two of the borings (B-1 and B-2) were performed at the location for the proposed bridge, one of the borings (B-3) was performed at the location for Boardwalk 2, and one of the borings (B-4) was performed at the location for Boardwalk 1. The boring locations and depths were selected by GEOServices and Amercian Consulting personnel in conjunction with the preliminary construction drawings prepared by American Consulting. Boring locations are shown on the Boring Location Plan, Figure 3 of Appendix A. The boring locations were located and staked in the field by GEOServices personnel. Drilling was performed on January 13, 2022. The depths reference the ground surface elevations at the site that existed at the time of the exploration. The borings were advanced using 3.25-inch inside diameter hollow stem augers (HSA) with a Geoprobe tracked drill rig. The drill crew worked in general accordance with ASTM D6151 (HSA Drilling). Sampling of overburden soils was accomplished using the standard penetration test procedure (ASTM D1586). The borings were backfilled with soil cuttings before leaving the site. Detailed test boring records are presented in Appendix A.

In split-spoon sampling, a standard 2-inch O.D. split-spoon sampler is driven into the bottom of the boring with a 140-pound hammer falling a distance of 30 inches. The number of blows required to advance the sampler the last 12 inches of the standard 18 inches of total penetration is recorded as the Standard Penetration Resistance (N-value). These N-values are indicated on the boring logs at the testing depth and provide an indication of the relative density of granular materials and strength of cohesive materials.

2.2 LABORATORY TEST PROGRAM

Soil samples collected during drilling were transported to our laboratory for visual classification and laboratory testing. The following laboratory testing was performed on select samples to determine various properties of the soil:

- Atterberg Limits (ASTM D4318): Two (2) Atterberg limits tests were performed for this project. These tests help us to confirm our visual classifications according to the Unified Soil Classification System (USCS). The plastic limit and liquid limit represent the moisture content at which a cohesive soil changes from a semi-solid to a plastic state and from a plastic state to liquid state, respectively.
- Natural Moisture Content (ASTM D2216): Moisture content determinations were performed on fifteen (15) samples for this project. The natural moisture content is defined as the ratio of the weight of water present in the soil to the dry weight of soil.

The test results are presented on individual laboratory data sheets and a Soil Data Summary, both enclosed in Appendix B.

3.0 SUBSURFACE CONDITIONS

3.1 GEOLOGIC CONDITIONS

The project site, as most of north Georgia, lies in the Appalachian Valley and Ridge Physiographic Province. The Province is characterized by elongated, northeasterly-trending ridges formed on highly resistant sandstones and shales. Between ridges, broad valleys and rolling hills are formed primarily on less resistant limestones, dolomites and shales.

Published geologic information indicates that the proposed construction area is underlain by limestones of the Chickamauga Group. The Chickamauga Group is comprised mostly of limestone with minor amounts of shale. Weathering of the Chickamauga Group generally produces a medium to high plasticity clay soil with minor amounts of chert gravel.

Since the bedrock formation at the site contains carbonate rock, the site is susceptible to the typical carbonate hazards of irregular weathering, cave and cavern conditions, and overburden sinkholes. Carbonate rock, while appearing very hard and resistant, is soluble in slightly acidic water. This characteristic, plus differential weathering of the bedrock mass, is responsible for the hazards. Of these hazards, the occurrence of sinkholes is potentially the most damaging to overlying soil supported structures. In north Georgia, sinkholes occur primarily due to differential weathering of the bedrock and "flushing" or "raveling" of overburden soils into the cavities in the bedrock. The loss of solids creates a cavity or "dome" in the overburden. Growth of the dome over time or excavation over the dome can create a condition in which rapid, local subsidence or collapse of the roof of the dome occurs.

3.2 SUBSURFACE CONDITIONS

3.2.1 Surficial Materials

A surficial layer of topsoil ranging from 4 to 6 inches in thickness was encountered in each of the four borings. Beneath this surficial layer, existing fill soils and residual soils were encountered to auger refusal and/or boring termination depths ranging from 7.8 to 20 feet.

3.2.2 Existing Fill

Beneath the surficial layers in two of the four borings (B-1 and B-2), existing fill soils were encountered to a depth of approximately 3 feet. Fill is generally classified as material that has been transported and placed by man. The fill soils generally consisted of dark gray brown clays with varying amounts of rock fragments and organics. The N-values of the fill soils ranged from 6 to 7 blows per foot (bpf), indicating a consistency of firm. The natural moisture content of the fill soils was 28 percent.

3.2.3 Residual Soils

Beneath the fill soils in two of the four borings (B-1 and B-2) and beneath the surficial topsoil layer in the remaining two borings (B-3 and B-4), residual soils were encountered to auger refusal and/or boring termination depths ranging from 7.8 to 20 feet. Residual soils are generally classified as soils which have been formed in place from the weathering of the underlying bedrock. The residual soils generally consisted of red brown, tan, brown, and gray clays with varying amounts of chert fragments, rock fragments, black mottling, and sand. The N-values of the residuum ranged from 8 to 25 blows per foot (bpf), indicating a consistency of firm to very stiff. The residuum was generally stiff in consistency. The firm soils were generally isolated to a single sample in the upper layers in boring B-4. The natural moisture contents of the residuum ranged from 17 to 53 percent. Atterberg limits testing on two select samples of the residuum revealed liquid limits (LL) of 32 and 52 percent and plasticity indices (PI) of 14 and 24 percent, respectively. These soils are classified as CL (lean clay) and CH (fat clay) in general accordance with the Unified Soil Classification System.

3.2.4 Subsurface Water

Subsurface water was not observed in any of the four borings at the time of drilling. Subsurface water levels may fluctuate due to seasonal changes in precipitation amounts and the adjacent Mill Creek. Additionally, discontinuous zones of perched water may exist within the overburden and/or at the contact with bedrock. The groundwater information presented in this report is the information that was collected at the time of our field activities.

3.2.5 Auger Refusal Conditions

Auger refusal materials were encountered in two of the four borings (B-1 and B-2) at depths of 8.2 and 7.8 feet, respectively, during field exploration. Refusal is a designation applied to any material that cannot be penetrated by the power auger. Auger refusal may indicate dense gravel or cobble layers, boulders, rock ledges or pinnacles, or the top of continuous bedrock.

3.2.6 General

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in Appendix A should be reviewed for specific information at individual boring locations. The depth and thickness of the subsurface strata indicated on the boring cross-sections were generalized from and interpolated between test locations. The transition between materials will be more or less gradual than indicated and may be abrupt. Information on actual subsurface conditions exists only at the specific boring locations and is relevant to the time the exploration was performed. Variations may occur and should be expected between boring locations. The stratification lines were used for our analytical purposes and, unless specifically stated otherwise, should not be used as the basis for design or construction cost estimates.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 SITE ASSESSMENT

The results of the field exploration indicate that the site is adaptable for the proposed construction, however, there are some challenges associated with the development of this site. These challenges include the existing fill soils, the potentially difficult excavations, and the underlying karst geology.

4.1.1 Existing Fill Soils

Existing fill was encountered in two of the four borings (B-1 and B-2) to a depth of approximately 3 feet. We are not aware of, nor have we been provided with testing records for the fill. Accordingly, there are certain risks associated with construction on these types of fill. The risk primarily consists of excessive and/or non-uniform settlement caused by extensive zones or pockets of soft, loose, or uncompacted material.

The boring data indicates the fill consists of dark gray brown clays with varying amounts of rock fragments and organics. The N-values of the fill soils ranged from 6 to 7 blows per foot (bpf), indicating a consistency of firm. Typically, an engineered fill would have N-values in excess of 8 to 10 bpf and would be generally free of deleterious material. Based on our observations of the fill, the fill appears to have been subjected to limited compactive efforts, and does contain deleterious material in the form of organics. Therefore, we would recommend that the existing fill not be relied upon for structural support of the new bridge without some form of remediation. With this we would recommend that all of the fill soils directly beneath the proposed bridge foundations be removed and replaced with suitable structural soil fill or dense graded aggregate. It should be noted that the existing fill can change abruptly and variances in the depth of the existing fill could be encountered between boring locations. Also, depending on the final bearing elevation for the proposed bridge foundations, these fill soils may be removed during normal foundation excavation activities.

4.1.2 Potentially Difficult Excavations

Auger refusal materials were encountered in two of the four borings (B-1 and B-2) at depths ranging from 7.8 to 8.2 feet. At the time of this report, proposed foundation bearing elevations for the proposed bridge have not been finalized. Based on the existing grades, we anticipate that these refusal elevations will be below bearing elevations for the proposed foundations. However, it is possible that rock may be encountered within these foundation excavations. This is especially likely where excavations are greater than 7 to 8 feet from the existing ground surface elevation. Based on the subsurface auger refusal conditions, these auger refusal materials will likely require difficult excavation techniques such as excavators with rock teeth, hammering, or blasting.

4.1.3 Karst Geology

A certain degree of risk with respect to sinkhole formation and subsidence should be considered with any site located within geologic areas underlain by potentially soluble rock units. While a rigorous effort to assess the potential for sinkhole formation on this site was beyond the scope of this evaluation, our borings did not encounter obvious indications of sinkhole development. Additionally, a review of the USGS topographic map of the area did not reveal the presence of any closed depressions, which may denote past sinkhole activity, in the vicinity of the project site. Based on these findings and our experience with this formation at other sites, we consider that this site has no greater risk for sinkhole activity than other sites in the immediate vicinity of this site.

4.2 SITE PREPARATION

4.2.1 Subgrade

Gravel, topsoil, rock fragments greater than 6 inches, unsuitable existing fill and other debris should be removed from the proposed construction areas. In previously developed areas, it is often common to find buried zones of construction debris. If these materials are encountered, they should be undercut and replaced at the discretion of the geotechnical engineer.

After completion of any stripping operations and any required excavations to reach subgrade level, we recommend that the subgrade be proofrolled with a fully-loaded, tandem-axle dump truck or other pneumatic-tired construction equipment of similar weight. The geotechnical engineer or his qualified representative should observe proofrolling. Areas judged to perform unsatisfactorily should be remediated at the geotechnical engineer's discretion. Typically, remedial options consist of undercutting and replacement with structural soil fill or dense graded aggregate. There is a high likelihood that the upper soils currently covering the site will require some scarifying and drying due to exposure to weather (precipitation and freeze/thaw) for an extended period of time.

4.2.2 Structural Soil Fill

Material considered suitable for use as compacted fill should be clean soil free of organics, trash, and other deleterious material, containing no rock fragments greater than 6 inches in any one dimension. Preferably, borrow material to be used as structural soil fill should have a standard Proctor maximum dry density of 90 pounds per cubic foot (pcf) or greater and a plasticity index (PI) of 35 percent or less. All material being used as soil fill should be tested and confirmed by the geotechnical engineer to be in accordance with the project requirements before being placed. Structural fill should be placed in loose, horizontal lifts not exceeding 8 inches in thickness. Each lift should be compacted to at least 95 percent of maximum dry density per the standard Proctor method (ASTM D698) and within the range of minus 2 percent to plus 3 percent of the optimum moisture content. Each lift should be compacted and tested by geotechnical personnel to confirm that the contractor's method is capable of achieving the project requirements before placing any subsequent lifts. Any areas which have become soft or frozen should be removed before additional structural fill is placed.

4.2.3 Compacted Crushed Stone Fill

Compacted crushed stone fill should be Group 1 Aggregates in accordance with Section 815 of the Georgia Department of Transportation specifications. The crushed stone fill should be placed in loose, horizontal lifts not exceeding 10 inches in loose thickness. Each lift should be compacted to

at least 98 percent of maximum dry density per the standard Proctor method (ASTM D698). Each lift should be compacted and tested by geotechnical personnel to confirm that the contractor's method is capable of achieving the project requirements before placing any subsequent lifts.

4.3 FOUNDATIONS

4.3.1 Shallow Foundations

Shallow bearing foundations for the proposed boardwalks and bridges are anticipated to bear in stiff or better newly placed fill soils, remediated soils, or residual soils. The recommended allowable bearing pressure for design of soil-bearing foundations is 2,500 pounds per square foot (psf). We recommend that continuous foundations be a minimum of 18 inches wide and isolated spread footings be a minimum of 24 inches wide to reduce the possibility of a localized punching shear failure. All exterior footings should be designed to bear at least 12 inches below finished exterior grade to protect against frost heave.

Foundation subgrade observations should be performed by a GEOServices geotechnical engineer, or his qualified representative, so that the recommendations provided in this report are consistent with the site conditions encountered. This is of elevated importance due to the existing fill soils encountered at the project site. A dynamic cone penetrometer (DCP) is commonly utilized to provide information that is compared to the data obtained in the geotechnical report. Where unacceptable materials are encountered, the material should be excavated to stiff, suitable soils or remediated at the geotechnical engineer's direction. Typical remedial measures consist of undercutting, overexcavation, or combinations thereof.

4.3.2 Timber Pile Foundations

The spans for the proposed boardwalks are anticipated to be supported by 6-inch diameter (tip) timber piles. Based on the type of construction and our calculations, we anticipate that the minimum embedment for the 6-inch diameter (tip) piles will be on the order of 8 feet. If structural loading differs from that listed in this report, GEOServices should be given the

opportunity to provide further design recommendations for the pile foundations, if necessary. If piles cannot be driven to this minimum embedment due to the underlying bedrock layer, then pre-drilling of pilot holes will be required. Pile capacities should not exceed an allowable stress of about 1.1 kips per square inch based on the tip diameter of the pile. Once the specific pile type and hammer type is selected, the contractor should provide a driving plan to achieve the desired capacities without overstressing the timber piles.

4.3.3 Seismic Conditions

International Building Code, 2018

The project site is located approximately 287 miles from the New Madrid seismic source zone as designated by the United States Geologic Survey. In accordance with the International Building Code, 2018, we have provided the following table of seismic design information. After evaluating the subsurface conditions at each boring individually, it was determined that each structure would be located within seismic site class D and seismic design category C. A table follows, showing the calculated spectral response accelerations for both a short and 1-second period.

Table 1 – Seismic Conditions Summary

Structure	S_s g	S₁ g	S_{DS} G	S_{D1} G
Mill Creek Riverwalk	0.526	0.123	0.484	0.193

4.4 LATERAL EARTH PRESSURES

Based on the provided information, we anticipate that retaining wall structures may need to be constructed in order to allow for the proposed riverwalk path. Therefore, we are providing equivalent fluid pressures for three backfill conditions for cantilever-type walls. These are 1) active earth pressure for granular backfill (clean sand or gravel), 2) at-rest earth pressure for granular backfill, and 3) at-rest earth pressure for fine-grained (silt or clay) backfill.

Condition 1 - The active earth pressure for granular backfill (free draining) will result in an equivalent fluid pressure of 30 pounds per cubic foot (pcf). If the granular backfill is to develop active earth pressure conditions, walls must be flexible and/or free to rotate or translate at the top approximately one inch laterally for every 20 feet of wall height.

Condition 2 - The at-rest earth pressure for granular backfill (free draining) will result in an equivalent fluid pressure of 45 pcf. For retaining walls that will not rotate or translate, such as building walls or other walls rigidly connected to structures, at-rest conditions will develop.

Condition 3 - Walls backfilled with fine-grained material (silt or clay) should be designed using the at-rest earth pressure whether restrained at the top, or not. Fine-grained soils typically creep over time which produces additional lateral stresses to the wall. The equivalent fluid pressure for this case is 70 pcf.

In all cases, forces from any expected surcharge loading including sloping backfill should be added to the equivalent fluid pressures. The walls should be properly drained to remove water or hydrostatic pressure should be added to the design pressure. Also, all backfill for the walls should be placed in accordance with the structural fill recommendations described hereinafter.

Table 2 – Earth Pressure Summary

Earth Pressure Condition	Backfill Type	Unit Weight (pcf)	Earth Pressure Coefficient
Active (Ka)	Granular	105	0.271
	On-Site Silts and Clays	120	0.390
At-Rest (Ko)	Granular	105	0.426
	On-Site Silts and Clays	120	0.562
Passive (Kp)	Granular	105	3.690
	On-Site Silts and Clays	120	2.561

Note: In each instance the earth pressure coefficients provided are unfactored.

For rigid, cast-in-place concrete walls, a friction factor of 0.35 between foundation concrete and the bearing soils may be used when evaluating friction. If a stone leveling course is utilized beneath the foundation, a friction factor of 0.50 between foundation concrete and the dense graded aggregate base may be used when evaluating friction. Also, an ultimate passive earth pressure resistance of well-compacted soil fill can be utilized to resist sliding (in conjunction with friction). However, to limit deformation when relying on passive strength, we recommend using a minimum safety factor of 3.0 applied to the ultimate passive resistance value. Additionally, this is based on the upper 2 feet of soil being neglected during the calculation of passive resistance.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 EXCAVATIONS

Excavations should be sloped or shored in accordance with local, state, and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. The contractor is usually solely responsible for site safety. This information is provided only as a service and under no circumstances should GEOServices be assumed to be responsible for construction site safety.

As previously mentioned, auger refusal materials were encountered in two of the four borings (B-1 and B-2) at depths ranging from 7.8 to 8.2 feet. At the time of this report, proposed foundation bearing elevations for the proposed bridge have not been finalized. Based on the existing grades, we anticipate that these refusal elevations will be below bearing elevations for the proposed foundations. However, it is possible that rock may be encountered within these foundation excavations. This is especially likely where excavations are greater than 7 to 8 feet from the existing ground surface elevation. Based on the subsurface auger refusal conditions, these auger refusal materials will likely require difficult excavation techniques such as excavators with rock teeth, hammering, or blasting.

5.2 MOISTURE SENSITIVE SOILS

The fine-grained soils encountered at this site will be sensitive to disturbances caused by construction traffic and changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. Construction traffic patterns should be varied to prevent the degradation of previously stable subgrade. In addition, plastic soils which become wet, may be slow to dry and thus significantly retard the progress of grading and compaction activities. We caution if site grading is performed during the wet weather season, methods such as discing and allowing the material to dry will be required to meet the required compaction recommendations. It will, therefore, be

advantageous to perform earthwork and foundation construction activities during dry weather. Climate data for Dalton, Georgia obtained from Weatherbase indicate in the following table the average monthly precipitation. The average amount of precipitation does not vary much throughout the year. However, December through March is typically the difficult grading period due to the limited drying conditions that exist.

Table 3 – Average Precipitation Summary

Month	Monthly Precipitation Average (Inches)	Month	Monthly Precipitation Average (Inches)
January	5.6	July	5.2
February	5.2	August	4.1
March	5.8	September	4.4
April	4.6	October	3.1
May	4.4	November	4.4
June	4.5	December	4.8

5.3 DRAINAGE AND SURFACE WATER CONCERNS

To reduce the potential for undercut and construction induced sinkholes, water should not be allowed to collect in the foundation excavations or on prepared subgrades of the construction area either during or after construction. Undercut or excavated areas should be sloped toward one corner to facilitate removal of any collected rainwater, subsurface water, or surface runoff. Positive site surface drainage should be provided to reduce infiltration of surface water around the perimeter of any structures. The grades should be sloped away from the structures and surface drainage should be collected and discharged such that water is not permitted to infiltrate the backfill areas of the structure.

5.4 SINKHOLE CONSIDERATIONS

There is some inherent risk associated with building on any site underlain by carbonate rock. This risk can be reduced but not eliminated by preparing the site as described in this report. At this site, control of surface water during construction and over the project life will be very important to reduce the potential for sinkhole development. If a sinkhole develops, the appropriate corrective action is dependent on the size and location of the sinkhole. As described herein, GEOServices should be retained to observe site and subgrade preparation activities. If sinkhole conditions are observed, the type of corrective action is most appropriately determined by GEOServices on a case-by-case basis.

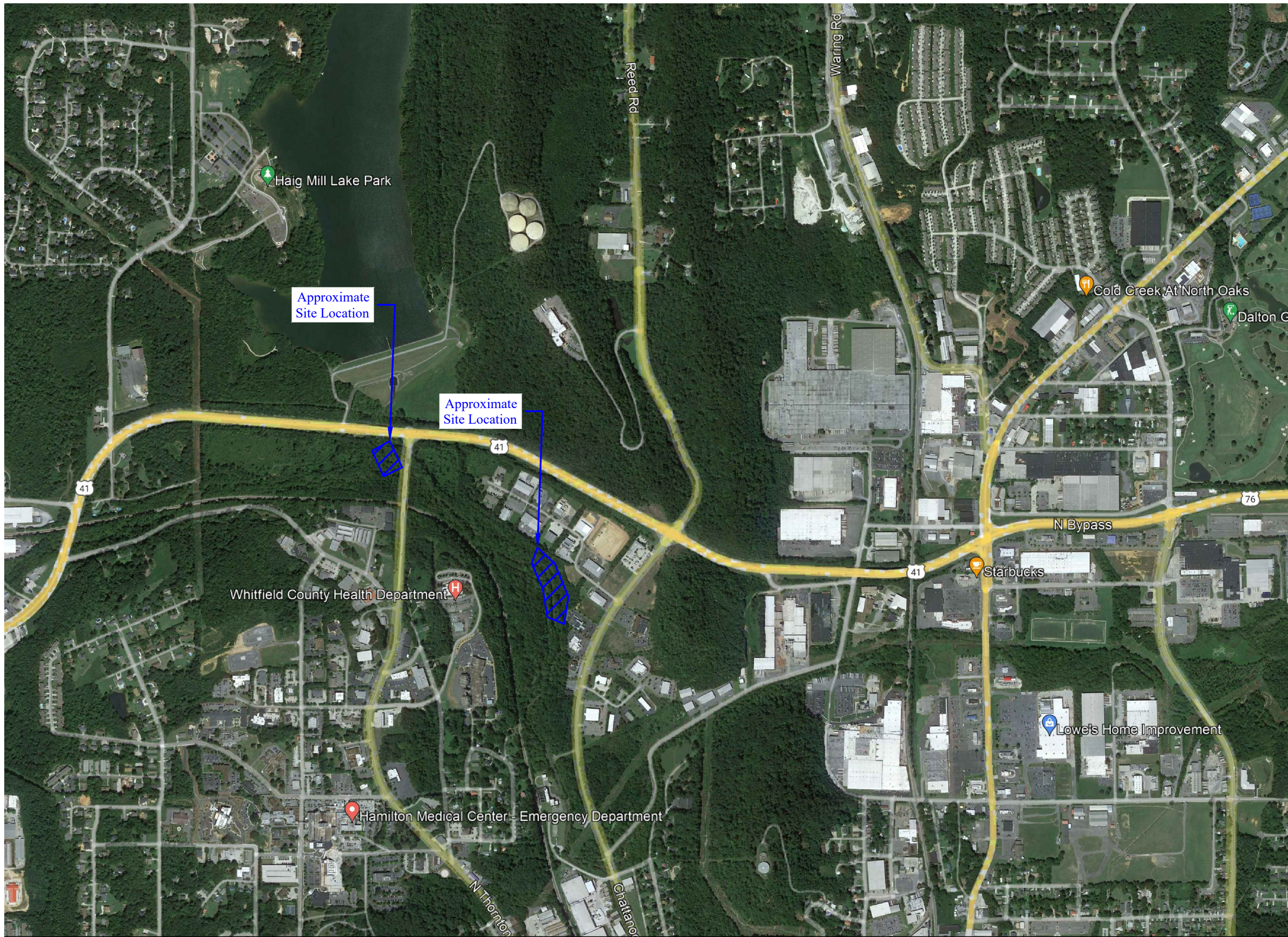
6.0 LIMITATIONS

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. This report is for our geotechnical work only, and no environmental assessment efforts have been performed. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the exploration. The nature and extent of variations between the borings will not become evident until construction. We recommend that GEOServices be retained to observe the project construction in the field. GEOServices cannot accept responsibility for conditions which deviate from those described in this report if not retained to perform construction observation and testing. If variations appear evident, then we will re-evaluate the recommendations of this report. In the event that any changes in the nature, design, or location of the project are planned, the conclusions and recommendations contained in this report will not be considered valid unless the changes are reviewed and conclusions modified or verified in writing. Also, if the scope of the project should change significantly from that described herein, these recommendations may have to be re-evaluated.

APPENDIX A

Figures and Test Boring Records



NOTES:

1.) BASE MAP PROVIDED BY GOOGLE EARTH PRO (08/28/19).

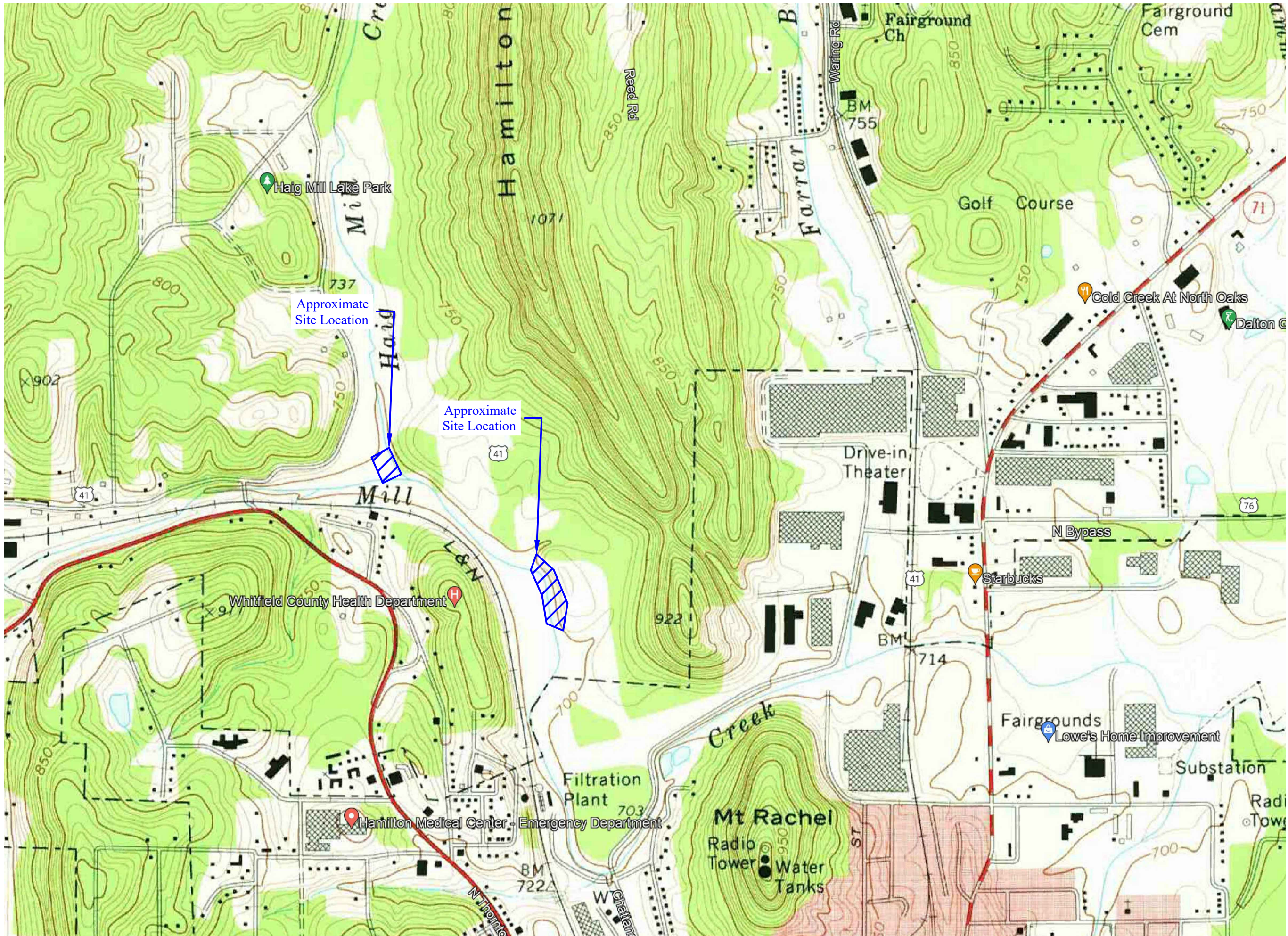
SITE VICINITY MAP
Mill Creek Riverwalk - Phase 2

Dalton, Georgia

DRAWN BY:	AET
APPROVED BY:	JTH
SCALE:	NTS
JOB NO.:	41-21818
DATE:	1/18/2022

GES
Geoservices, LLC - Geotechnical and Materials Engineers
 Phone: (423) 614-6471
 Fax: (423) 614-6479
 5359 North Lee Highway
 Cleveland, Tennessee 37312

FIGURE 1



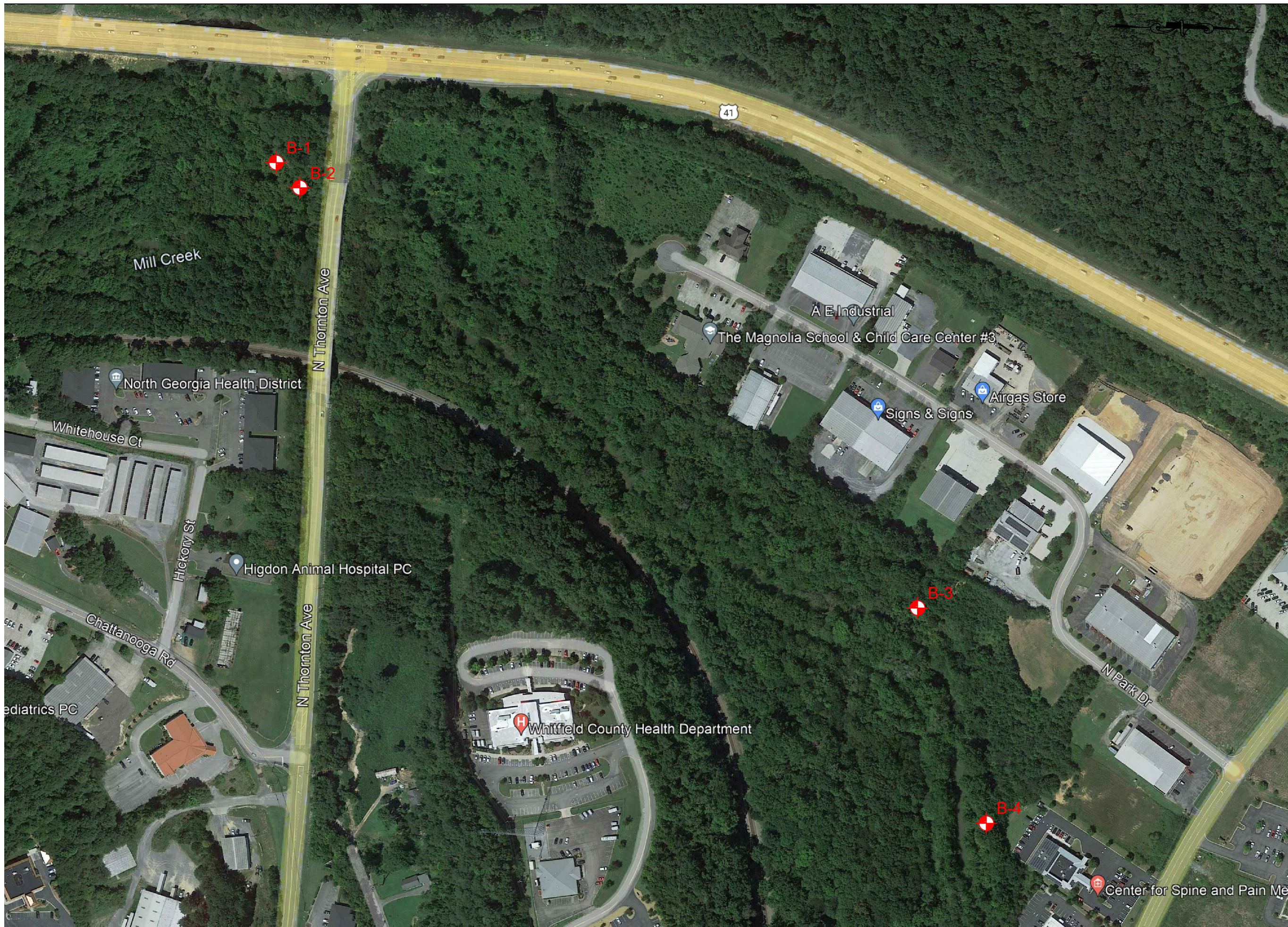
NOTES:
 1.) BASE MAP PROVIDED BY USGS TOPOGRAPHIC MAP (1972) - DALTON NORTH QUADRANGLE (GA).

USGS TOPOGRAPHIC MAP
 Mill Creek Riverwalk - Phase 2
 Dalton, Georgia

DRAWN BY:	AET
APPROVED BY:	JTH
SCALE:	NTS
JOB NO.:	41-21818
DATE:	1/18/2022

GES
 Geoservices, LLC - Geotechnical and Materials Engineers
 Phone: (423) 614-6471
 Fax: (423) 614-6479
 5550 North Lee Highway
 Cleveland, Tennessee 37312

FIGURE 2



NOTES:

- 1.) BORING LOCATIONS ARE SHOWN IN GENERAL ARRANGMENT ONLY.
- 2.) DO NOT USE BORING LOCATIONS FOR DETERMINATIONS OF DISTANCES OR QUANTITIES.
- 3.) BASE MAP PROVIDED BY GOOGLE EARTH PRO (8/28/19).

☒ LOCATION OF SOIL TEST BORING

BORING LOCATION PLAN
Mill Creek Riverwalk - Phase 2

Dalton, Georgia

DRAWN BY:	AET
APPROVED BY:	JTH
SCALE:	NTS
JOB NO.:	41-21818
DATE:	1/18/2022

GEOS
Services, LLC - Geotechnical and Materials Engineers

Phone: (423) 614-6471
 Fax: (423) 614-6479

5359 North Lee Highway
 Cleveland, Tennessee 37312

FIGURE 3

GENERAL NOTES

FINE AND COARSE GRAINED SOIL PROPERTIES

PARTICLE SIZE

BOULDERS:	GREATER THAN 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	4.74 mm to 75 mm
COARSE SAND:	2 mm to 4.74 mm
MEDIUM SAND:	0.425 mm to 2 mm
FINE SAND:	0.075 mm to 0.425 mm
SILTS & CLAYS:	LESS THAN 0.075 mm

COARSE GRAINED SOILS (SANDS & GRAVELS)

N-VALUE	RELATIVE DENSITY
0 - 4	VERY LOOSE
5 - 10	LOOSE
11 - 30	MEDIUM DENSE
31 - 50	DENSE
OVER 50	VERY DENSE

FINE GRAINED SOILS (SILTS & CLAYS)

N-VALUE	CONSISTENCY	Qu, PSF
0 - 2	VERY SOFT	0 - 500
3 - 4	SOFT	500 - 1000
5 - 8	FIRM	1000 - 2000
9 - 15	STIFF	2000 - 4000
16 - 30	VERY STIFF	4000 - 8000
OVER 31	HARD	8000 +

STANDARD PENETRATION TEST (ASTM D1586)

THE STANDARD PENETRATION TEST AS DEFINED BY ASTM D1586 IS A METHOD TO OBTAIN A DISTURBED SOIL SAMPLE FOR EXAMINATION AND TESTING AND TO OBTAIN RELATIVE DENSITY AND CONSISTENCY INFORMATION. THE 1.4 INCH I.D./2.0 INCH O.D. SAMPLER IS DRIVEN 3-SIX INCH INCREMENTS WITH A 140 LB. HAMMER FALLING 30 INCHES. THE BLOW COUNTS REQUIRED TO DRIVE THE SAMPLER THE FINAL 2 INCREMENTS ARE ADDED TOGETHER AND DESIGNATED THE N-VALUE. AT TIMES, THE SAMPLER CAN NOT BE DRIVEN THE FULL 18 INCHES. THE FOLLOWING REPRESENTS OUR INTERPRETATION OF THE STANDARD PENETRATION TEST WITH VARIATIONS.

BLOWS/FOOT (N-VALUE)

DESCRIPTION

25.....25 BLOWS DROVE SAMPLER 12" AFTER INITIAL 6" SEATING
75/10".....75 BLOWS DROVE SAMPLER 10" AFTER INITIAL 6" SEATING
50/PR.....PENETRATION REFUSAL OF SAMPLER AFTER INITIAL 6" SEATING

SAMPLING SYMBOLS

ST:	UNDISTURBED SAMPLE
SS:	SPLIT SPOON SAMPLE
CORE:	ROCK CORE SAMPLE
AU:	AUGER OR BAG SAMPLE

SOIL PROPERTY SYMBOLS

N:	STANDARD PENETRATION, BPF
M:	MOISTURE CONTENT %
LL:	LIQUID LIMIT %
PI:	PLASTICITY INDEX %
Qp:	POCKET PENETROMETER VALUE, TSF
Qu:	UNCONFINED COMPRESSIVE STRENGTH, TSF
DUW:	DRY UNIT WEIGHT, PCF

ROCK PROPERTIES

ROCK HARDNESS



ROCK QUALITY DESIGNATION (RQD)

PERCENT	QUALITY
90 TO 100	EXCELLENT
75 TO 90	GOOD
50 TO 75	FAIR
25 TO 50	POOR
0 TO 25	VERY POOR

VERY SOFT:	ROCK DISINTEGRATES OR EASILY COMPRESSES TO TOUCH: CAN BE HARD TO VERY HARD SOIL.
SOFT:	ROCK IS COHERANT BUT BREAKS EASILY TO THUMB PRESSURE AT SHARP EDGES AND CRUMBLES WITH FIRM HAND PRESSURE.
MODERATELY HARD:	SMALL PIECES CAN BE BROKEN OFF ALONG SHARP EDGES BY CONSIDERABLE HARD THUMB PRESSURE: CAN BE BROKEN BY LIGHT HAMMER BLOWS.
HARD:	ROCK CAN NOT BE BROKEN BY THUMB PRESSURE, BUT CAN BE BROKEN BY MODERATE HAMMER BLOWS.
VERY HARD:	ROCK CAN BE BROKEN BY HEAVY HAMMER BLOWS.

PROJECT NAME Mill Creek Riverwalk
 DATE 1/13/22
 DRILLING CONTRACTOR Tri-State Drilling
 DRILLING METHOD Hollow Stem Auger
 GROUND ELEVATION --- PROPOSED FFE ---
 REFUSAL Depth 8.2 ft
 TOP OF ROCK Depth 8.2 ft
 BEGAN CORING ---
 FOOTAGE CORED (LF) ---
 BOTTOM OF HOLE Depth 8.2 ft

GEOServices PROJECT# 41-21818
 PROJECT LOCATION Dalton, Georgia
 LOGGED BY A. Thomas ON-SITE REP. ---
 LATITUDE / LONGITUDE ---
 NORTHING / EASTING ---
 GROUND WATER LEVELS:
 AT END OF DRILLING ---
 AFTER 1 HOUR ---
 AFTER 24 HOURS ---



DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
0			TOPSOIL (4 inches)						
			LEAN CLAY (CL) with organics and rock fragments - dark gray brown, dark brown, and red brown; firm; moist (FILL)	SS 1		2-4-2 (6)	28		
			LEAN CLAY (CL) with sand and chert fragments - brown and gray; very stiff; very moist to moist (RESIDUUM)	SS 2		1-6-19 (25)	19	32	14
5				SS 3		7-10-14 (24)	17		

Refusal at 8.2 feet.
 Bottom of borehole at 8.2 feet.

NOTES:

PROJECT NAME Mill Creek Riverwalk
 DATE 1/13/22
 DRILLING CONTRACTOR Tri-State Drilling
 DRILLING METHOD Hollow Stem Auger
 GROUND ELEVATION --- PROPOSED FFE ---
 REFUSAL Depth 7.8 ft
 TOP OF ROCK Depth 7.8 ft
 BEGAN CORING ---
 FOOTAGE CORED (LF) ---
 BOTTOM OF HOLE Depth 7.8 ft

GEOServices PROJECT# 41-21818
 PROJECT LOCATION Dalton, Georgia
 LOGGED BY A. Thomas ON-SITE REP. ---
 LATITUDE / LONGITUDE ---
 NORTHING / EASTING ---
 GROUND WATER LEVELS:
 AT END OF DRILLING ---
 AFTER 1 HOUR ---
 AFTER 24 HOURS ---



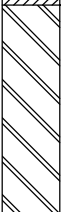
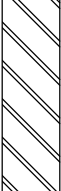


DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
0			TOPSOIL (4 inches)						
			LEAN CLAY (CL) with organics and rock fragments - dark gray brown, dark brown, and red brown; firm; moist (FILL)	SS 1		3-3-4 (7)			
			LEAN CLAY (CL) with sand and chert fragments - brown and gray; stiff to very stiff; very moist to moist (RESIDUUM)	SS 2		3-5-7 (12)			
5				SS 3		6-9-10 (19)			

Refusal at 7.8 feet.
 Bottom of borehole at 7.8 feet.

NOTES:

PROJECT NAME Mill Creek Riverwalk
 DATE 1/13/22
 DRILLING CONTRACTOR Tri-State Drilling
 DRILLING METHOD Hollow Stem Auger
 GROUND ELEVATION --- PROPOSED FFE ---
 REFUSAL ---
 TOP OF ROCK ---
 BEGAN CORING ---
 FOOTAGE CORED (LF) ---
 BOTTOM OF HOLE Depth 20.0 ft

GEOservices PROJECT# 41-21818
 PROJECT LOCATION Dalton, Georgia
 LOGGED BY A. Thomas ON-SITE REP. ---
 LATITUDE / LONGITUDE ---
 NORTHING / EASTING ---
 GROUND WATER LEVELS:
 AT END OF DRILLING ---
 AFTER 1 HOUR ---
 AFTER 24 HOURS ---


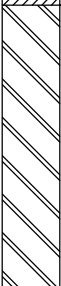

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
0			TOPSOIL (6 inches)						
			LEAN CLAY (CL) with chert fragments - red brown and tan; very stiff; moist (RESIDUUM)	SS 1		4-7-10 (17)	25		
			LEAN TO FAT CLAY (CL-CH) with sand, trace amounts of sandstone fragments, and a slight shale structure - red brown and brown; very stiff to stiff; moist to very moist (RESIDUUM)	SS 2		5-8-11 (19)	27		
				SS 3		3-6-6 (12)	37		
				SS 4		3-5-5 (10)	30		
			FAT CLAY (CL) with trace amounts of rock fragments and black mottling - brown and tan; stiff; very moist (RESIDUUM)	SS 5		2-4-6 (10)	48		
				SS 6		4-5-5 (10)	52		

NOTES:

Bottom of borehole at 20.0 feet.

PROJECT NAME Mill Creek Riverwalk
 DATE 1/13/22
 DRILLING CONTRACTOR Tri-State Drilling
 DRILLING METHOD Hollow Stem Auger
 GROUND ELEVATION --- PROPOSED FFE ---
 REFUSAL ---
 TOP OF ROCK ---
 BEGAN CORING ---
 FOOTAGE CORED (LF) ---
 BOTTOM OF HOLE Depth 20.0 ft

GEOServices PROJECT# 41-21818
 PROJECT LOCATION Dalton, Georgia
 LOGGED BY A. Thomas ON-SITE REP. ---
 LATITUDE / LONGITUDE ---
 NORTHING / EASTING ---
 GROUND WATER LEVELS:
 AT END OF DRILLING ---
 AFTER 1 HOUR ---
 AFTER 24 HOURS ---

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
0			TOPSOIL (4 inches)						
			LEAN CLAY (CL) with chert fragments - red brown and tan; stiff; moist (RESIDUUM)	SS 1		4-6-7 (13)	27		
			LEAN TO FAT CLAY (CL-CH) with rock fragments - red brown and tan; firm to stiff; moist (RESIDUUM)	SS 2		3-4-4 (8)	33	52	24
5				SS 3		5-5-6 (11)	36		
			FAT CLAY (CH) with trace amounts of rock fragments - brown and tan; stiff to very stiff; moist to very moist (RESIDUUM)	SS 4		4-7-7 (14)	42		
10				SS 5		6-7-6 (13)	50		
15				SS 6		5-8-10 (18)	51		
20									

NOTES:

Bottom of borehole at 20.0 feet.

APPENDIX B

Soil Laboratory Data

SOIL DATA SUMMARY
Mill Creek Riverwalk Phase 2 - Dalton, Georgia
GEOservices Project No. 41-21818
January 20, 2022

Boring Number	Sample Number	Depth (feet)	Natural Moisture Content	Atterberg Limits			Soil Type
				LL	PL	PI	
B-1	1	1.0-2.5	27.8%				
	2	3.5-5.0	18.8%	32	18	14	CL
	3	6.0-7.5	17.2%				
B-3	1	1.0-2.5	25.0%				
	2	3.5-5.0	26.9%				
	3	6.0-7.5	36.6%				
	4	8.5-10.0	30.4%				
	5	13.5-15.0	47.6%				
	6	18.5-20.0	52.4%				
B-4	1	1.0-2.5	27.2%				
	2	3.5-5.0	32.6%	52	28	24	CH
	3	6.0-7.5	35.8%				
	4	8.5-10.0	41.9%				
	5	13.5-15.0	49.8%				
	6	18.5-20.0	51.4%				

APPENDIX III – PERMITS



Russell R. McMurry, P.E., Commissioner
One Georgia Center
600 West Peachtree Street, NW
Atlanta, GA 30308
(404) 631-1000 Main Office

7/18/2022

Megan Elliott
300 W Waugh Street
Dalton, GA, 30722

Dear Applicant,

RE: 7410 - Special Encroachment - Limited - A-313-007574-6, 00000300, 19.45 - 19.50, Whitfield

Your permit application to perform specified work within the right of way limits of the above referenced State Highway has been duly executed on behalf of the Department of Transportation. However, construction work as approved by the permit must begin within 90 days of this approval letter or the permit will be void. Your permit copy has been forwarded to Teddy H. Stanfield, Area Permit Inspector. His/her address is District Six- Cartersville, 1313 North Tibbs Road, Dalton, GA, 30720. His/her phone number is 706-272-2211

It will be necessary for you or your representative to contact the Area Permit Inspector to claim your permit copy and identification sign, discuss the beginning of construction date, and methods of complying with permit requirements. He/She will set the time that he/she can furnish personnel for the required supervision of your work. Please contact him/her at least 24 hours in advance of your planned construction beginning time. It is suggested that you contact her/her by telephone before any personal visits. Your approved permit and a copy of the approved plans are required to be kept on the construction site at all times during construction.

With this approval, as the applicant, you agree to make any utility relocation or adjustments deemed necessary by the Area Permit Inspector, and abide by the special requirements attached to the application.

Please notify the Area Permit Inspector upon completion of work under this permit so that a final inspection may be conducted. Upon approval of completed work, you will be released from the performance bond or escrow. You should request said inspection only after you feel that all work has been completed in compliance with all requirements and a satisfactory stand of grass has been obtained. No work under this permit is to be considered accepted by the Department until you are so notified in writing by the District Engineer.

Special Requirements: None

Yours very truly,

District Engineer D6
District Engineer



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

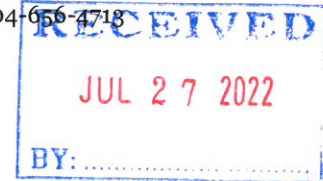
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office

2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334

404-656-4718



July 18, 2022

Mr. Andrew Parker
City of Dalton
PO Box 1205
Dalton, GA 30720

RE: Request for Variance under the Provisions of O.C.G.A. § 12-7-6(b)(15)
Dalton Riverwalk
Whitfield County

Dear Mr. Parker:

The Georgia Environmental Protection Division (EPD) has reviewed your stream buffer variance application for the above-referenced project. The review was conducted to consider the potential impacts of the proposed project's encroachment on buffers to State waters within the context of the Georgia Erosion and Sedimentation Act and the potential impact to State waters within the context of Georgia's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges Associated with Construction Activities. This review, and the variance granted herein, is limited to only the request(s) in the application that you submitted for permission to conduct land-disturbing activities within 25-foot areas located immediately adjacent to the banks of State waters where vegetation has been wrested by normal stream flow or wave action. To the extent that your buffer variance application includes a request to conduct land-disturbing activities within 25 feet of State waters where there is no vegetation that has been wrested by normal stream flow or wave action, such request has not been considered by EPD, and the related activity is not addressed in the variance granted herein.

Pursuant to Ga. Comp. R. and Regs. 391-3-7-.05(2)(f) and subject to the conditions and contingencies described further below, authorization is hereby granted to encroach within the 25-foot buffer adjacent to State waters as delineated in your application dated April 18, 2022. ***Buffer impacts authorized by this variance must be completed within five years of the date of this approval letter. If the approved buffer impacts cannot be completed prior to the expiration date, a time extension must be requested in writing at least 90 calendar days prior to the expiration date with justifiable cause demonstrated.***

Authorization for the above referenced project is subject to the following conditions and contingencies:

- 1) All graded slopes 3:1 or greater must be hydroseeded and covered with Georgia DOT approved wood fiber matting or coconut fiber matting. If not hydroseeded, Georgia DOT approved matting that has been incorporated with seed and fertilizer must be used. All slopes must be properly protected until a permanent vegetative stand is established;
- 2) The amount of land cleared during construction must be kept to a minimum;

- 3) All disturbed areas must be seeded, fertilized and mulched as soon as the final grade is achieved. Also, these disturbed areas must be protected until permanent vegetation is established;
- 4) A double row of Georgia DOT type "C" silt fence or an approved high performance silt fence must be installed between the land disturbing activities and State waters where appropriate;
- 5) Buffer variance conditions must be incorporated into any Land Disturbing Activity Permit issued by Whitfield County for this project;
- 6) This project must be conducted in strict adherence to the approved erosion and sedimentation control plan and any Land Disturbing Activity Permit issued by Whitfield County; and
- 7) The applicant must purchase 516 stream mitigation credits from within the same 8-digit HUC as the buffer impacts and the sales receipt verifying the credit purchase shall be forwarded to the EPD by return receipt certified mail (or similar service) or delivery receipt email by the applicant to document buffer mitigation compliance at least 14 days prior to any land disturbance on site. Proof of delivery and receipt is the applicant's responsibility.

The granting of this approval does not relieve you of any obligation or responsibility for complying with the provisions of any other law or regulations of any federal, local or additional State authority, nor does it obligate any of the aforementioned to permit this project if they do not concur with its concept of development/control. As a delegated "Issuing Authority," Whitfield County is expected to ensure that the stream buffer variance requirements are met for this project and is empowered to be more restrictive in this regard.

If you have questions concerning this letter, please contact Brian Kent, Erosion and Sedimentation Control Unit, Nonpoint Source Program, at (470) 604-9419.

Sincerely,



Richard E. Dunn
Director

RED:bk

cc: Alexander Ottley, River to Tap Inc
Allen Peterfreund, American Consulting Professionals, LLC
Chris Hester, Whitfield County
Jim Hakala, Wildlife Resources Division, Region 1 Fisheries Management
Robert Amos, Georgia Soil and Water Conservation Commission
Kevin Dallmier, EPD Mountain District Manager

File: BV-155-22-01



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch

2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

July 29, 2022

Gregg Hudock, P.E.
Golder Associates, Inc.
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

Subject: Lower Haig Mill Reservoir Dam
Whitfield County
Permit # 155-021-04970

Dear Mr. Hudock:

We are in receipt of your letter dated July 27, 2022, concerning the proposed Mill Creek Riverwalk to be constructed by the City of Dalton around the perimeter of the subject dam. It is our understanding that you have been involved with the project to minimize or avoid impacts to the dam.

We concur that, as designed, the proposed Mill Creek Riverwalk will not impact the dam or its spillway, and no coordination with our office will be required. If the design changes such that there may be impacts to the dam or the spillway, then further review may be required by our office at that time.

If you have any questions, please contact me at 470-524-0663 or at david.griffin@dnr.ga.gov.

Sincerely,

David M. Griffin, P.E.
Program Manager
Safe Dams Program

cc: David Oxford, Dalton Utilities
Mark Buckner, P.E., Dalton Utilities
Keith Coffey, Dalton Utilities
Andrew Parker, City of Dalton
Allen Peterfreund, P.E., American Consulting Professionals, Inc.