

September 22, 2016

Mr. John McClure
Harper County - Road & Bridge Department
103 West Steadman
Anthony, KS 67003

SUBJECT: Proposal for Geotechnical Engineering & Construction QA Services
2016 County Road Stabilization Projects
Harper County, Kansas
GSI Proposal P167308 Revision 1

Dear Mr. McClure:

GSI Engineering, LLC (GSI) is pleased to present this proposal to provide the geotechnical engineering and construction quality assurance services for the above-referenced project. This proposal is based upon a preliminary understanding of your requirements as outlined on your e-mailed map of road locations and as developed from our telephone conversation on June 21, 2016.

GSI is committed to providing a high level of service to its clients. If a change in the proposed scope of work is requested, we are prepared to consider appropriate modifications, subject to the standards of care to which we adhere as professionals. Modifications such as changes in scope, methodology, scheduling, and contract terms and conditions beyond that which is described in this proposal may result in additional risks assumed by you and may require adjustments to our fee.

PROJECT DESCRIPTION

The proposed project encompasses approximately 16 miles of existing county roadways located at near the cities of Waldron (6.5 miles), Harper (4.5 miles), Anthony (3 miles) and Bluff City (2 miles) in Harper County, Kansas. We understand the project will consist of investigating the existing road material and soil subgrade, preparing a chemically stabilized subgrade recommendation using Super Slurry, cement kiln dust, or fly ash amendment and providing construction quality assurance services during construction of the roads. We understand that the stabilized subgrade will subsequently be paved with hot mix asphalt or chip seal.

SCOPE OF SERVICES

Geotechnical Investigation Services

GSI will request a utility clearance through Kansas One-Call. The client will be responsible for locating and marking nonmember utilities or private utilities not located by Kansas One-Call. GSI is not responsible for loss or damage resulting from unmarked utilities.

We will mobilize a truck mounted drill rig, support truck and 2-person drill crew to advance borings at selected intervals along each section of roadway. The borings will be performed on the road



shoulders to limit the disruption of traffic. Traffic control will consist of MUTCD TA-6 for Shoulder Work with Minor Encroachment. A copy of the proposed traffic control plan is attached for reference. We anticipate low traffic volume on the roads and as such, do not anticipate the need for flaggers.

We propose to explore the subsurface conditions along these county roads by drilling a boring at ½ mile intervals to a depth of approximately 2 feet below grade. Logs of the subsurface conditions encountered in the borings will be recorded by our field personnel at the time of subsurface exploration. Bulk samples will be obtained and will be returned to our laboratory for testing and analysis. The borings will be backfilled with soil upon completion of the sampling program.

The samples obtained will be visually classified by a geotechnical engineer in accordance with ASTM D 2487 and laboratory testing will be performed including Atterberg Limits (ASTM D4318) and No. 200 Sieve Wash (ASTM D1140) to determine the consistency of the soils throughout the individual roadway sections. Similar soil conditions will be grouped together and an analysis of the selected stabilization material will be conducted by varying the percentage of chemical amendment and performing Moisture-Density Relationships (ASTM D698) and unconfined compressive strength (ASTM D 1633) testing. The actual type and number of tests will depend on the number of differing soil types that we encounter.

We will present our opinions and recommendations in a written report which will include a map of the boring locations, logs of the explorations and laboratory test results. We will submit an electronic copy (pdf format) and one bound hard copy of the final report.

Construction Quality Assurance Services

During the soil stabilization process, a GSI materials testing technician will be on site to monitor the soil mixing depth, the incorporation of the chemical stabilization agent, to measure the soil moisture content and perform density testing of the compacted material. The technician will also observe the subsequent micro-cracking process which should occur with 24 to 72 hours after compaction is completed to ensure the material is covered with three passes of the vibratory roller.

SCHEDULE

We can begin the geotechnical exploration within approximately 5 to 7 working days after your authorization to proceed (weather permitting). We anticipate completion of the final report within two weeks from the completion of our field work. We will provide verbal updates as information is developed in order to expedite the project schedule.

FEES AND CONDITIONS

Our services will be performed in accordance with the attached General Conditions. The fee for the geotechnical engineering services described herein is a lump sum of \$7,520.00.

The construction quality assurance services will be provided in accordance with the following unit fee schedule.



Table 1 – Unit Fee Schedule, Estimated Quantities and Total Estimated Cost

Description	Est. Qty.	Unit Fee	Extended Cost
Materials Testing Technician (10 hour day)	34	\$550.00/day	\$18,700.00
Materials Testing Technician (5 hour day)	5	\$285.00/day	\$1,425.00
Travel Mileage or Per diem	39	\$130.00/day	\$5,070.00
ASTM D 698 – Standard Proctor	If Req.	\$140.00/each	\$0.00
Total Estimated Cost			\$25,195.00

The total estimated cost for materials testing services is based on stabilizing approximately one lane mile of road per 10 hour day and 5 half days of micro-cracking. Our invoicing will be based on the unit rates presented and the actual services rendered.

Any work required beyond the scope of that proposed above will be undertaken only after receiving your prior authorization and after an adjustment has been made to our fee to cover the additional work.

Please note that our fees are due within 30 days of the presentation of our invoice. If payment within 30 days is not possible, we should be contacted prior to commencing work to develop an acceptable payment schedule.

LIMITATIONS

During the course of the performance of GSI’s services, hazardous materials may be discovered. GSI will assume no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury which results from pre-existing hazardous materials being encountered or present on the project site or from the discovery of such hazardous materials. You will be asked to sign an agreement indemnifying GSI from liability or loss arising out of the services covered by this proposal, including liability or loss in connection with pre-existing hazardous materials.

CLOSURE

GSI appreciates the opportunity to submit this proposal, and we look forward to working with you on this project. If you are in agreement with the terms of this proposal, please sign and return the enclosed service agreement. A fully executed copy will be returned to you. If you have any questions or need additional information, please contact GSI’s Wichita office.

Respectfully submitted,
 GSI Engineering, LLC

David A. Edwards, P.E.
 Senior Vice President

Thomas C. Kettler, Jr., P.E.
 Senior Engineer

Attachments: Geotechnical Service Agreement and General Conditions (3)

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GSI ENGINEERING, LLC
Geotechnical Services Agreement

GSI Proposal Number P167308 Revision 1

PARTIES

This Agreement is made on Thursday, September 22, 2016, between

Harper County - Road & Bridge Department and
103 West Steadman
Anthony, KS 67003

GSI Engineering, LLC
4503 East 47th Street South
Wichita, Kansas 67210-1651

hereinafter called "Client"

hereinafter called "Consultant"

PROJECT DESCRIPTION

Client engages Consultant to provide Geotechnical Engineering Services in connection with the 2016 County Road Stabilization Projects project in Harper County, Kansas.

SCOPE OF SERVICES

Consultant agrees to perform Geotechnical Engineering Services in accordance with attached Proposal No. P167308 dated September 22, 2016. Client agrees that all services not expressly included are excluded from Consultant's Scope of Services.

COMPENSATION

Client agrees to compensate Consultant for the referenced services:
The geotechnical investigation for a lump sum of \$7,520.00 and;
Construction Quality Assurance services in accordance with the included fee schedule, with a total estimated cost of \$25,195.00.

Client and Consultant acknowledge that each has read and agrees to the attached General Conditions, which are incorporated herein and made a part of this Agreement and apply to all services performed by Consultant.

Client: Harper County - Road & Bridge Department Consultant: GSI Engineering, LLC

Signature: _____

Signature: _____

Print Name: _____

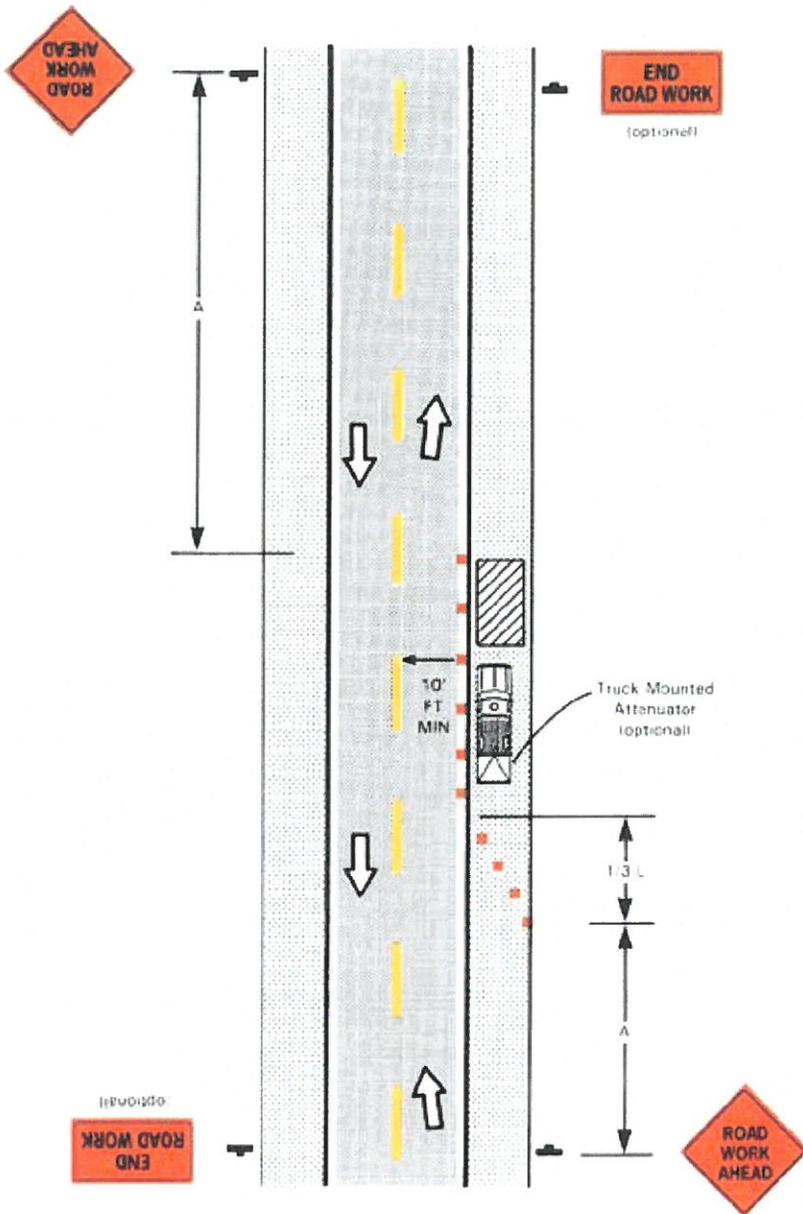
Print Name: Thomas C. Kettler, Jr., P.E.

Title: _____

Title: Senior Engineer

Date: _____

Date: _____





GENERAL CONDITIONS

SECTION 1: Independent Contractor

GSI Engineering, LLC (GSI) shall perform its services, drilling work or construction material testing work that requires providing only a technician (CMT Technician Work), as the case may be, as an independent contractor, with all of its employees under its sole discretion and control.

SECTION 2: Client Responsibilities

Unless otherwise agreed, the Client will furnish GSI with right-of-access to the site to conduct its services or drilling work. As applicable, Client shall provide and deliver all samples for testing or provide instruction to GSI on their storage or shipment to Client; but, in either case, such samples remain the property of the Client. Client further agrees to meet its obligations under Sections 3 through 5 of these general conditions.

SECTION 3: Site Conditions

The Client is responsible for providing accurate information of all underground structures and utilities located at the site. In performing its services or drilling work, GSI will take all reasonable precautions to avoid damage or injury to underground structures or utilities. The Client also agrees to defend, indemnify and hold GSI harmless from any claims, payments or other liability, including costs and attorney fees, incurred by GSI for damages to underground structures or utilities which are not called to GSI's attention or correctly shown on the plans furnished to GSI.

To the extent enforceable, the Client must advise GSI of any known or suspected hazardous substances which may impact the services or drilling work that will be provided by GSI. For purposes of this section and Section 13, "hazardous substances" means any toxic substance, chemical, radioactivity, pollutant or any material that is identified now or in the future as hazardous under any federal, state or local law or regulation or is subject to special handling, disposal or clean-up. If during the course of providing its services or drilling work, GSI observes or suspects the existence of unanticipated hazardous substances, GSI may at its option terminate any further services or work on the project and notify Client of this condition. Services or work will be resumed only after a renegotiation of GSI's scope of services or work and its fees. If such renegotiation does not lead to an amendment to this Agreement that is satisfactory to GSI, GSI may at its option terminate this contract. Client further agrees that GSI is not, and has no responsibility as, a handler, generator, operator, treater, storer, transporter or disposer of any known or unknown hazardous substances found at the site. Therefore, Client shall undertake or arrange for the handling, removal, treatment, storage, transportation and disposal of all hazardous substances found or identified at the site.

SECTION 4: Schedule and Change Orders

The schedule for GSI's services, drilling work or CMT Technician Work is set forth in GSI's proposal. If Client makes a request for additional services or work, alters the planned deliverables or suspends GSI's services or work for any period of time or there are delays that occur due to causes not under GSI's control, the parties agree to equitably adjust the time for completion and the compensation for such services or work, including any necessary demobilization and subsequent remobilization, via a written change order. Unless otherwise agreed by the parties, such change orders must be in place before any services or work can recommence.

SECTION 5: Reports and Invoices

GSI will furnish 3 copies of any report to the Client. Additional copies will be furnished at the expense of the Client. GSI will submit invoices to the Client monthly and a final bill upon completion of its services or work, all on a time and material or rate basis. Payment is due upon presentation of GSI's invoice and is past due 30 days from the invoice date. Client agrees to pay a finance charge of 1 1/2% per month, but not exceeding the maximum rate allowed by law on past due accounts.

SECTION 6: Ownership of Documents

All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by GSI are instruments of service. Therefore, they shall remain the property of GSI unless there are other contractual arrangements made with Client.

SECTION 7: Confidentiality

GSI shall hold in confidence all business or technical information obtained from the Client or its affiliates provided that they are identified in writing by the Client as "confidential" at the time they are given to GSI or generated in the performance of its services or work.

GSI shall not disclose such information without the Client's consent except to the extent required for: 1) Performance of services or work under this Agreement; 2) Compliance with professional standards of conduct for preservation of public safety, health, and welfare; 3) Compliance with any court order, other governmental directive, or other compulsory process such as a subpoena; and/or 4) Protection of GSI against claims or liabilities arising from performance of services or work under this agreement. These obligations shall not apply to information in the public domain or lawfully acquired on a non-confidential basis from others.

SECTION 8: Testing and Observation

Client acknowledges that testing and observation are discrete procedures, are not continuous or exhaustive, and are being conducted to reduce the Client's risks; but, they cannot eliminate them. Therefore, these procedures indicate the conditions only at the locations, depths and times they were performed. But, in performing any of its services, drilling work or CMT Technician Work, GSI will not be responsible for:

- the quality and completeness of the Client or Client's contractor's work, as the case may be,
- Client's or Client's contractor's work adhering to the project documents,
- defects discovered in the Client's or Client's contractor's work,
- supervising or directing the work performed by Client or Client's contractor, and
- Client's or Client's contractor's means and methods.

Likewise, Client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys, or explorations are made by GSI and that the data, interpretations, and recommendations of GSI are based solely upon the data available to GSI. GSI will be responsible for those data, interpretations, and recommendations, but shall not be responsible for the interpretation by others of the information developed.

SECTION 9: Warranties

GSI warrants that its professional consulting services under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. For its drilling work or CMT Technician Work, GSI warrants they will be performed in a workmanlike manner. **No other warranties, express or implied, are made or intended by the proposal for these consulting services or work or by furnishing oral or written reports of the findings made.**

SECTION 10: Limitation of Liability

GSI's total aggregate liability to Client and all third parties, including all construction contractors and subcontractors at the site, arising out of its performance or breach of this Agreement shall not exceed \$50,000 or GSI's total fee for the services or work performed under this Agreement, whichever is greater. Notwithstanding any other provision of this Agreement to the contrary, GSI shall have no liability to the Client for contingent, consequential or other indirect damages including, without



GENERAL CONDITIONS

limitation, damages for loss of use, revenue or profit; operating costs and facility downtime; or other similar business interruption losses, however they may be caused. The limitations and exclusions of liability set forth in this Section shall apply regardless of the fault, breach of contract, tort (including the concurrent or sole and exclusive negligence), strict liability or otherwise of GSI, its employees, consultants or subcontractors.

SECTION 11: Insurance

GSI represents that it and its staff are protected by worker's compensation insurance. GSI has coverage under public liability and property insurance policies which GSI deems to be adequate. It is the policy of GSI to require certificates of insurance from all consultants or subcontractors employed by GSI. Certificates for all such policies of insurance will be provided to Client upon request in writing. Client also agrees to protect its employees by worker's compensation insurance, including waiving its rights against GSI for any claims for injuries to its employees.

SECTION 12: Termination and Suspension

This Agreement may be terminated by either party upon 7 days written notice in the event of substantial failure by the other party to perform according to the terms of this Agreement. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. Client may elect to suspend GSI's services or work upon written notice. In the event of termination or suspension, GSI shall be paid for services or work performed to the effective date of termination or suspension plus reasonable termination or suspension expenses. These expenses shall include all direct costs of GSI required to complete analyses and records necessary to complete its files and may also include a report of the services or work performed to the effective date of termination or suspension.

SECTION 13: Indemnity

Subject to the other terms of this Agreement, GSI agrees to indemnify and hold Client harmless from third party property damages and bodily injury to the extent they are proximately caused by GSI's negligence in performing its services or work.

Since GSI's compensation under this Agreement is not commensurate with the potential risk of injury or loss that may be caused by exposures to hazardous substances or other dangerous substances or conditions, the Client waives any claim against GSI and agrees, to the extent enforceable, to defend, indemnify and save GSI, its employees and consultants or subcontractors harmless from any claim, liability, defense costs, attorney fees or expert witness fees for injuries or losses sustained by any party from such exposures allegedly arising out of GSI's performance of its services or work.

SECTION 14: Dispute Resolution Procedures

If a dispute arises out of this Agreement that does not involve termination or suspension, the parties will endeavor to settle it by direct discussions between their authorized representatives. If they are not able to resolve the dispute, the parties will endeavor to settle the dispute by mediation under the then current Construction Industry Mediation Rules of the American Arbitration Association. If the dispute cannot be settled by mediation within 60 days of its request, either party may take whatever action allowed by law. Unless otherwise agreed in writing by the parties, GSI will continue to perform its services or work and Client will continue to make payment per the terms of this Agreement during these dispute proceedings.

SECTION 15: Safety & Restoration

GSI is solely responsible for the health and safety of its employees, and disclaims any responsibility or authority over the safety of any third parties engaged in the performance of any work for the Client at the site. Therefore, GSI will provide its employees all personal protective

clothing and equipment that is required to perform their services or work safely and according to all applicable local, state and federal laws and regulations.

While GSI will take all reasonable precautions to minimize any property damage at the site, Client understands that in the normal course of GSI performing its services or work some property damage may occur. Therefore, Client waives any such claims against GSI.

SECTION 16: Miscellaneous Provisions

Neither party may assign its interest in this Agreement without the written consent of the other party. This Agreement is for the exclusive benefit of Client and GSI and not for the benefit of any third party except to the extent specifically provided in this Agreement.

These general conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice to proceed, or like document regarding GSI's services or work. This Agreement represents the entire agreement between the parties and supersedes all prior written or oral negotiations. If any provision of this Agreement is found to be unenforceable, that provision will be deemed stricken and reformed to comply with the law.

If it is necessary for GSI to retain counsel to enforce any provision of these general conditions, Client agrees to pay all attorney's fees and cost incurred by GSI. Client consents to the jurisdiction, law and venue of the location of the site where the services or work are performed or GSI's offices, if the services or work is exclusively performed there.

The parties' rights and remedies regarding this Agreement, whether in contract, tort or otherwise, shall be exclusively those expressly set forth in this Agreement. The waiver of any term or breach of this Agreement by either party will not operate as a subsequent waiver of the same term or breach.

GSI GC – 3.2010