

July 21, 2025

Chuck Sandro
Healthy Pine River
525 N. State Street
Alma, MI 48801



Consulting
Engineers and
Scientists

RE: Alma State Street Dam Feasibility Study, Alma, Michigan

Dear Mr. Sandro:

GEI Consultants of Michigan, P.C. (GEI) appreciates the opportunity to provide a proposal for engineering and consulting services regarding the dam feasibility study for the State Street Dam on the Pine River in Alma, Michigan. The dam is classified as a Significant Hazard dam by EGLE Dam Safety. The 2022 inspection report noted inadequate spillway capacity, minor erosion on the embankment slope, and concrete cracks and spalling. These issues persist due to limited maintenance funding and pose ongoing risks.

In addition, the dam has negatively impacted the Pine River by contributing to sediment accumulation, excess nutrients, and algal blooms, degrading water quality and creating hazardous conditions for residents. Restoring the river's natural hydrology could help mitigate these risks, making a dam removal feasibility study an essential step.

To better inform the City and community of anticipated costs, the City has requested funding through the EGLE Dam Risk Reduction Grant Program (DRRGP) to conduct a disposition feasibility study. GEI proposes to complete the study on behalf of the City.

This proposal summarizes our understanding of the project, proposed scope of services, related fees, and conditions of engagement to complete the dam disposition feasibility study.

Project Description

The State Street Dam was originally constructed in 1938. The dam, located on the Pine River owned and operated by the City of Alma, creates a water supply reservoir which also functions as a recreational lake providing fishing, swimming, and boating opportunities.

The dam consists of a 75-foot long left earthen embankment, a 105-foot wide principal spillway, and a 175-foot long right earthen embankment. The earthen embankments serve as the roadbed for State Street. The principal spillway structure consists of a concrete gravity structure with three bays, each containing a 31-foot wide by 5-foot high steel drum gate. A low-level inlet exists in the right abutment of the principal spillway structure. The dam has a structural height of 18 feet, a hydraulic height of 18.2 feet, and maintains approximately 9 feet of head with 5.5 feet of freeboard, creating a 140-acre impoundment under normal flow conditions.

This study will allow the City of Alma the opportunity to move forward in trying to properly manage the liability of the dam and restore the river. The primary objectives of this feasibility study are to assess the costs and engineering considerations for dam removal and address potential environmental and community impacts associated with each option. The study will examine three options including 1) long-term dam and impoundment management (no-action alternative), 2) partial dam removal with river restoration, and 3) complete dam removal with river restoration. Key components of the feasibility study include a detailed engineering investigation, potential dam deconstruction and stream restoration schematic designs, reservoir sediment characterization,

and desktop evaluations to assess sediment, hydrologic, environmental and infrastructure impacts. It should be noted that Option 1 will primarily rely on previous investigations, analyses and capital outlay plans for the dam, provided by the City.

A critical aspect of the project is community engagement, which will be achieved through a public survey to gauge community priorities and concerns, targeted community outreach and education, and multiple public meetings to gather feedback and support for future construction. This component of the project is being led by the City and its partners with support from GEI.

Scope of Services

GEI is pleased to provide a team with extensive experience designing and implementing dam safety improvement and dam removal projects throughout the State. Through this experience we have developed a client focused, data driven and efficient process for evaluating complex projects and developing permittable projects. Throughout this project, we will be coordinating with HPR and City staff to apprise of progress and solicit feedback on critical design decisions.

Through this study, the community will gain a greater understanding of the long term impacts, risks, and life-cycle costs for three potential scenarios, 1) long-term dam and impoundment management (no-action alternative), 2) partial dam removal with river restoration, and 3) complete dam removal with river restoration. For this study, GEI proposes to complete the following tasks:

- Task 1 – Data Collection and Review
 - Task 1.1 Sediment Sampling
 - Task 1.2 Site Visit
 - Task 1.3 Data Review
 - Task 1.4 Desktop Investigations
- Task 2 – Feasibility Study
 - Task 2.1 Hydraulic Modelling
 - Task 2.2 Alternative Development
 - Task 2.3 Impact Evaluation
 - Task 2.4 Cost Estimates
 - Task 2.5 Stakeholder and Public Engagement
- Task 3 – Project Management and Meetings

Task 1: Data Collection and Review

Task 1.1 Sediment Sampling

GEI will partner with TriTerra to conduct screening-level sediment sampling effort to evaluate the physical and chemical characteristics of the impounded sediments and inform the feasibility and cost of dam removal. At this phase, Triterra will conduct field measurements to assess sediment thickness at previously investigated transect locations. The evaluation will be performed using appropriate probing, coring, or visual assessment methods to characterize sediment thickness. Triterra can confidently investigate at least six of the 11 transect locations based on current assessments, with the potential for more depending on field conditions.

Additionally, five (5) samples will be collected to develop a general understanding of sediment within the impoundment. One composite sample will be collected from up to 5 of the transect locations. The sediment samples will be submitted for laboratory analysis of polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs) and Michigan 10 metals. A cost allowance to evaluate fine/coarse lead and hexavalent chromium and a sieve analysis for each composite sample are also included in the proposed cost.

Deliverable: The results of the sediment sampling and characterization will be documented in the Feasibility Study Report.

Task 1.2 Site Visit

GEI will conduct a site visit to the State Street Dam and surrounding project area to document current conditions, support data collection efforts, and inform alternative development. Site visits will include visual inspection of the dam structure, embankments, spillway, and extents of the impoundment. Additional visual inspections include bridge crossings at N Luce Rd and Harrison Rd and the impact of the impoundment on Ennis Rd. Our team will also identify potential access points for construction or sediment removal and evaluate opportunities and constraints for river and floodplain restoration. Field observations will be used to verify desktop findings and to guide sediment sampling, hydraulic modeling, and conceptual design.

Deliverable: Key findings and photographs from the field observations will be included in the Feasibility Study Report.

Task 1.3 Data Review

During this task the GEI team will review readily available information for the dam, impoundment and Pine River to inform the field investigations and engineering analyses phases. Data that is anticipated to be reviewed includes the following:

- Dam safety inspection reports
- Hydrologic and Hydraulic Analysis Studies
- Structure As-Built Drawings of the Dam and of the State Street bridge
- Historic maps and images
- Existing Field Documentation
- Water Quality
- USGS LiDAR data

Deliverable: Based on the results of the data review, our understanding of the dam and impoundment will be summarized in the Feasibility Study Report.

Task 1.4 Desktop Investigations

In addition to managing sediments and the flow of water, dam removal projects also often require evaluation and potentially mitigation of other environmental impacts. These potential impacts include wetlands, threatened and endangered species, and cultural resources. Additionally, other factors that can impact the cost of implementing a dam removal project include infrastructure, like bridges and utilities, and real estate. During the feasibility study, a desktop screening level investigation will be performed, pulling readily available data such as environmental resource maps, parcel maps, and utility and bridge plans, to identify other project concerns, and cost estimates incorporated for addressing the potential impacts.

Deliverable: Results of the desktop investigations will be summarized in the Feasibility Study Report.

Task 2: Feasibility Study

Task 2.1 Hydraulic Modelling

A hydraulic model for existing and potential future conditions alternatives will be developed for the stretch of the Pine River approximately 2 miles upstream of the State Street Dam to 500 feet downstream of the State Street Dam. The model will be developed using HEC-RAS and will include approximately 30 cross sections to define the river channel and floodplain. Cross sections

for each dam and river crossing will be included using available as-built, survey data, and MiSAIL data. GEI assumes the City or project partners can provide as-built drawings or similar of the State Street Dam, N. State Street Bridge and N. Luce Rd. The existing conditions HEC-RAS model will be calibrated by comparing flood discharge results to the FEMA FIS. Future conditions models will be developed for each of the two proposed dam removal alternatives and will require the development of a proposed river centerline and typical cross sections for the restored conditions including channel geometry and floodplain width. The modeling will help inform the river restoration design and verify appropriate bankfull and floodplain geometries as well as inform impacts to flood elevations within the project area.

Deliverable: A Hydrology & Hydraulic (H&H) Technical Memorandum including a description of model setup, calibration, and assumptions; summary of results for existing and alternative conditions; figures illustrating key hydraulic changes; and recommendations for channel geometry and design considerations.

Task 2.2 Alternative Development

Long-Term Dam and Impoundment Management Alternative (No Action Alternative) This alternative assumes rehabilitation of the existing dam and impoundment. The assessment will rely on existing information and documentation provided by the City of Alma, including prior studies, inspection reports, and design concepts. This alternative will serve as a baseline for comparing the benefits, impacts, and costs of removal options.

Partial Dam Removal with River Restoration

This alternative involves partially lowering the impoundment to return some riverine conditions while also managing and maintaining a portion of the accumulated sediment in place. It may include the removal of the concrete dam structure and construction of a rock ramp or rock arch rapids at a reduced height. Both passive and active river restoration methods will be considered to support channel formation, habitat improvement, and sediment stabilization.

Complete Dam Removal with River Restoration

This alternative evaluates the full removal of the State Street Dam and restoration of the Pine River. A critical aspect of this approach is establishing a geomorphologically stable channel and floodplain within the former impoundment. GEI will rely on regional reference curves for developing appropriate bank full channel geometry, with proper floodplain connectivity and adequate floodplain benching. Existing infrastructure, including the bridge adjacent to the dam at N. State Street and the N. Luce Road bridge upstream of the dam will be considered and protected when designing the channel. Passive and active river restoration methods will be considered as part of this alternative.

Task 2.3 Impact Evaluation

Hydrology and Hydraulic - The existing conditions HEC-RAS model results will be compared to the 2011 FEMA FIS study which includes a detailed study downstream of this project site up through the dam to the approximate Alma city limits located upstream of the State Street Dam. Modeling results for the proposed dam removal alternatives will be compared to existing conditions to assess impacts to water surface and flooding to the project area.

Sediment Considerations - Sediment considerations including discussion of sediment quality, onsite vs offsite disposal, sediment fate and transport and overall sediment management will be discussed for each alternative. The exact method of sediment management will depend largely on the quality and quantity of the impounded sediment. Sediment disposal options will also be highly dependent on the results of the sediment characterization. If the sediments are determined to be predominantly clean, on-site disposal options will be outlined for partial dam and full dam removal. Reasonable effort will be made to compare the estimated sediment within the impoundment to the annual sediment load of the Pine River, which could be done using a

sediment rating curve that has been developed for Michigan by the USACE or a more updated sediment rating curve if one exists for the Pine River.

Ecological Considerations - Each alternative will be evaluated for potential environmental impacts, including effects on wetlands, water quality, Threatened and Endangered Species, and downstream resources. The analysis will consider changes to hydrology that may affect existing wetlands, both in terms of potential loss and opportunities for restoration or creation. Water quality impacts will be assessed by reviewing existing data with attention to nutrient loading, dissolved oxygen levels, and temperature changes. Potential effects on protected species and their habitats will be identified, along with any necessary coordination under applicable regulatory frameworks. Downstream impacts, including changes to flow regimes and sediment delivery, will also be evaluated to ensure a comprehensive understanding of ecological outcomes.

Infrastructure Considerations – The design team will attempt to identify locations and elevations of infrastructure and utilities within the project area and assess how these existing features may be impacted by each alternative. This could include requiring engineered rock riffle structures in a restored river channel to protect underground utilities, scour countermeasures at bridges or other engineered methods to protect existing infrastructure and limit the project impacts. Conversely, utility relocation will also be considered, or if the utility is abandoned, either completely removed or grouted in place.

Deliverable: A draft of the Feasibility Study Report will be issued to the City in MSWord format for the City's review. Following development of the draft report, input will be sought from the City through a project review meeting. Following the DRAFT review meeting with City, GEI will address review comments and prepare a FINAL, bookmarked version of the report in pdf format.

Task 2.4 Cost Estimates

Cost estimates for this study will be developed to a conceptual (+/- 50%) level for proposed capital improvements and life cycle costs. Life cycle costs are expected to include work such as, inspections and adaptive management activities. Currently available funding opportunities will be identified and discussions provided regarding the likelihood of successful award.

Deliverable: The cost estimates and funding summary will be included in the Feasibility Study Report.

Task 2.5 Stakeholder and Public Engagement

GEI will provide advisory support to Healthy Pine River and the City for the planning and implementation of stakeholder and public engagement activities associated with the feasibility study. This support is intended to promote community awareness and solicit input during the study process.

GEI's scope includes participation in up to two public meetings. This participation may involve preparing presentation materials, assisting with the delivery of project-related information, responding to questions, and documenting community feedback. GEI assumes that the scheduling of meetings, distribution of meeting notices, facilitation of meetings, preparation of meeting summaries, and execution of any follow-up communications will be the responsibility of the City, Healthy Pine River, or other project partners. Similarly, GEI assumes that website updates, surveys, and other public engagement initiatives will be managed by the City and its partners. GEI assumes we will not serve as the lead entity for public engagement activities but will support these efforts by providing relevant project documentation and informational materials as needed.

Deliverable: A summary of public engagement efforts will be included in the Final Draft of the Feasibility Report.

Task 3: Project Management and Meetings

Our project manager, Michelle LaRose, will participate in monthly project update meetings and will facilitate internal coordination meetings to advance the feasibility study as needed. Monthly invoices will be provided with progress reports detailing ongoing work items and overall status of the project.

Project Cost

The above-described scope of work will be conducted on a lump sum basis for each task. GEI's cost for the scope of work described is \$236,100 which will be invoiced monthly based on percentage of completion.

Task	Fee
1. Data Collection and Review	\$69,600
2. Feasibility Study	\$146,500
3. Project Management & Meetings	\$20,000
Total	\$236,100

Schedule

The proposed project schedule is provided below. Project schedule will depend on the timing of the grant award, weather conditions for field data collection, and aligning of schedules for the project kickoff, public meetings, etc.

Grant Agreement Executed: TBD
Project Kickoff: Schedule within 2-3 weeks
Data Collection and Review: 2-3 months
Feasibility Study: 4-5 months
Final Report Complete (total project duration): 8-9 months

Terms

GEI will perform the proposed scope of work according to the attached Standard Professional Services Agreement. Please sign and return one copy of the attached agreement, which will serve as our contract and notice to proceed.

We look forward to providing professional services to you on this project. Please feel free to contact me, at (313) 575-8933 or mlarose@geiconsultants.com should you need any additional information or have questions regarding our proposal.

Sincerely,

GEI CONSULTANTS OF MICHIGAN, P.C.



Michelle LaRose, P.E.
Senior Water Resources Engineer



Dan DeVaan, P.E.
Vice-President, Senior Project Manager

Attachment(s): Standard Professional Services Agreement and 2025 Fee Schedule

STANDARD PROFESSIONAL SERVICES AGREEMENT

1. AGREEMENT

This Agreement is made and entered into by and between

GEI Consultants, Inc., 4472 Mount Hope Road, Suite A, Williamsburg, MI 49690 and
Healthy Pine River, 525 N. State Street, Alma, MI 48801

By this Agreement, the parties do mutually agree as follows:

2. SCOPE OF SERVICES

GEI shall perform the services described herein and in **Exhibit A**.

3. EFFECTIVE DATE

The effective date of this Agreement shall be the latter of the acceptance dates indicated in Article 16, Acceptance. Acceptance of this Agreement by both parties shall serve as GEI's Notice to Proceed with the services described in **Exhibit A**.

4. FORCE MAJEURE

- a) Force Majeure "Event of Force Majeure" means an event beyond the control of GEI and CLIENT, which prevents a Party from complying with any of its obligations under this Agreement, including but not limited to, acts of God (such as, but not limited to, fires, explosions, earthquakes, drought, tidal waves and floods, epidemics, war, hostilities, acts of terrorism, riot, commotion, strikes, go slows, lock outs or disorder, unless solely restricted to employees of GEI or its subcontractors.
- b) Neither CLIENT nor GEI shall be considered in breach of this Agreement to the extent that performance of their respective obligations (excluding payment obligations) is prevented by an event of Force Majeure. Either CLIENT or GEI shall give written notice to the other upon becoming aware of an Event of Force Majeure.

5. COMPENSATION

- a) CLIENT agrees to pay GEI in accordance with the payment terms provided in **Exhibit B** but in no event later than thirty (30) days of CLIENT's receipt of invoice.
- b) GEI will submit invoices monthly or upon completion of a specified scope of service in accordance with GEI's standard invoicing practices, or as otherwise provided in **Exhibit B**.
- c) Payment is due upon receipt of the invoice. Payments will be made by either check or electronic transfer to the address specified by GEI, and will reference GEI's invoice number.
- d) Interest will accrue at the rate of 1% per month of the invoiced amount in excess of thirty (30) days past the invoice date, or as otherwise provided in **Exhibit B**.
- e) In the event of a disputed or contested invoice, only that portion so contested will be withheld from payment, and the undisputed amounts will be paid.

6. PERFORMANCE STANDARDS

- a) GEI will perform its services under this Agreement in a manner consistent with that degree of skill and care ordinarily exercised by members of GEI's profession currently practicing in the same locality under similar conditions. GEI makes no other representations and no warranties, either express or implied, regarding the services provided hereunder.
- b) GEI shall correct deficiencies in services or documents provided under this Agreement without additional cost to CLIENT; except to the extent that such deficiencies are directly attributable to deficiencies in CLIENT-furnished information.
- c) Unless otherwise specifically indicated in writing, GEI shall be entitled to rely, without liability, on the

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accuracy and completeness of information provided by CLIENT, CLIENT's consultants and contractors, and information from public records, without the need for independent verification.

- d) CLIENT agrees to look solely to the manufacturer or provider to enforce any warranty claims arising from any equipment, materials or other goods provided as a component of GEI's services.

7. INSURANCE

- a) GEI will carry the types and amounts of insurance in the usual form as provided in **Exhibit C**.
- b) Upon written request of CLIENT, GEI will furnish Certificates of Insurance indicating the required coverages and conditions.

8. ALLOCATION OF RISKS

- a) Indemnification. To the fullest extent permitted by law, GEI agrees to indemnify and hold CLIENT harmless from and against liabilities, claims, damages, and costs (including reasonable attorney's fees) to the extent caused by the negligence or willful misconduct of GEI in the performance of services under this Agreement.
- b) Limitation of Liability. To the fullest extent permitted by law, the total liability, in the aggregate, of GEI and its officers, directors, employees, agents, and independent professional associates and consultants, and any of them, to CLIENT and any one claiming by, through or under CLIENT, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to GEI's services, the project, or this Agreement, will not exceed the total compensation received by GEI under the specific applicable project and/or task order, or Fifty Thousand Dollars (\$50,000) whichever is less. This limitation will apply regardless of legal theory, and includes but is not limited to claims or actions alleging negligence, errors, omissions, strict liability, breach of contract, breach of warranty of GEI or its officers, directors, employees, agents, or independent professional associates or consultants, or any of them. CLIENT further agrees to require that all contractors and subcontractors agree that this limitation of GEI's liability extends to include any claims or actions that they might bring in any forum.
- c) Consequential Damages. GEI and CLIENT waive consequential damages, including but not limited to damages for loss of profits, loss of revenues, and loss of business or business opportunities, for claims, disputes, or other matters in question arising out of or relating to this Agreement.

9. CONFIDENTIALITY

- a) Unless compelled by law, governmental agency or authority, or order of a court of competent jurisdiction, or unless required pursuant to a subpoena deemed by GEI to be duly issued, or unless requested to do so in writing by CLIENT, GEI agrees it will not convey to others any proprietary non-public information, knowledge, data, or property relating to the business or affairs of CLIENT or of any of its affiliates, which is in any way obtained by GEI during its association with CLIENT. GEI further agrees to strive to limit, to a "need to know" basis, access by its employees to information referred to above.
- b) Unless compelled by law, governmental agency or authority, or order of a court of competent jurisdiction, or unless required pursuant to a subpoena deemed by CLIENT to be duly issued, CLIENT will not release to its employees or any other parties any concepts, materials, or procedures of GEI deemed by GEI to be proprietary and so explained to CLIENT.

10. OWNERSHIP OF DOCUMENTS

Drawings, diagrams, specifications, calculations, reports, processes, computer processes and software, operational and design data, and all other documents and information produced in connection with the project as instruments of service (Project Documents), regardless of form, will be confidential and the proprietary information of GEI, and will remain the sole and exclusive property of GEI whether the project for which they are made is executed or not. CLIENT retains the right to use Project Documents for the furtherance of the project consistent with the express purpose(s) of the Project Documents, and for CLIENT's information and reference in

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connection with CLIENT's use and occupancy of the project. Any use of Project Documents for purposes other than those for which they were explicitly prepared shall be at CLIENT's sole risk and liability. CLIENT agrees to defend, indemnify, and hold GEI harmless from and against any claims, losses, liabilities, and damages arising out of or resulting from the unauthorized use of Project Documents.

11. TERMINATION AND SUSPENSION

- a) This Agreement may be terminated by CLIENT for any reason upon ten (10) days written notice to GEI.
- b) This Agreement may be terminated by GEI for cause upon thirty (30) days written notice to CLIENT.
- c) In the event that this Agreement is terminated for any reason, CLIENT agrees to remit just and equitable compensation to GEI for services already performed in accordance with this Agreement, subject to the limitations given in this Article 11, Termination and Suspension.
- d) In the event Client terminates this Agreement for cause, in determining just and equitable compensation to GEI for work already performed, CLIENT may reduce amounts due to GEI by amounts equal to additional costs incurred by CLIENT to complete the Agreement scope. Such additional costs incurred by CLIENT may include but are not limited to: (1) the additional costs incurred by CLIENT to engage another qualified consultant to complete the unfinished scope; and (2) CLIENT's labor costs and expenses to demobilize and remobilize its personnel to the site to coordinate with the new consultant.
- e) GEI may suspend any or all services under this Agreement if CLIENT fails to pay undisputed invoice amounts within sixty (60) days following invoice date, by providing written notice to CLIENT, until payments are restored to a current basis. In the event GEI engages counsel to enforce overdue payments, CLIENT will reimburse GEI for all reasonable attorney's fees and court costs related to enforcement of overdue payments, provided that CLIENT does not have a good faith dispute with the invoice. CLIENT will indemnify and save GEI harmless from any claim or liability resulting from suspension of the work due to non-current, undisputed payments.

12. DISPUTE RESOLUTION

Both parties agree to submit any claims, disputes, or controversies arising out of or in relation to the interpretation, application, or enforcement of this Agreement to non-binding mediation pursuant to the Rules for Commercial Mediation of the American Arbitration Association, as a condition precedent to litigation or any other form of dispute resolution.

13. GENERAL CONSIDERATIONS

- a) Authorized Representatives. The following individuals are authorized to act as CLIENT's and GEI's representatives with respect to the services provided under this Agreement:

For CLIENT:	<u>Chuck Sandro</u> <u>525 N. State Street, Alma, MI 48801</u>
For GEI:	<u>Michelle LaRose, PE</u> <u>4472 Mount Hope Road, Suite A, Williamsburg, MI 49690</u>

- b) Nothing in this Agreement shall be construed as establishing a fiduciary relationship between CLIENT and GEI.
- c) Notices. Any notice required under this Agreement will be in writing, submitted to the respective party's Authorized Representative at the address provided in this Article 13, General Considerations. Notices shall be delivered by registered or certified mail postage prepaid, or by commercial courier service. All notices shall be effective upon the date of receipt.
- d) Controlling Law. This Agreement is to be governed by the laws of the State of Michigan.

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- e) Survival. All express representations, indemnifications, or limitations of liability included in the Agreement will survive its completion or termination for any reason. However, in no event shall indemnification obligations extend beyond the date when the institution of legal or equitable proceedings for professional negligence would be barred by an applicable statute of repose or statute of limitations.
- f) Severability. Any provision or part of this Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon GEI and CLIENT.
- g) Waiver. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- h) Headings. The headings used in this Agreement are for general reference only and do not have special significance.
- i) Certifications. GEI shall not be required to sign any documents, no matter by whom requested, that would result in GEI having to certify, guaranty, or warrant the existence of conditions or the suitability or performance of GEI's services or the project, that would require knowledge, services or responsibilities beyond the scope of this Agreement.
- j) Third Parties. Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either CLIENT or GEI. GEI's services hereunder are being performed solely for the benefit of CLIENT, and no other entity shall have any claim against GEI because of this Agreement or GEI's performance of services hereunder. CLIENT shall indemnify and hold GEI harmless from any claims by any third parties that arise from the CLIENT's release of any Project Documents by CLIENT.

14. ADDITIONAL PROVISIONS

- a) If Field Services are provided under this Agreement, the additional provisions included in **Exhibit D** shall apply. Field Services are defined as services performed on property owned or controlled by CLIENT, any federal, state, or local government or governmental agency, or other third party, and include, but are not limited to: site inspection, site investigation, subsurface investigation, sample collection, or sample testing.
- b) If the services of a Licensed Site Professional (LSP), a Licensed Environmental Professional (LEP), or a Licensed Site Remediation Professional (LSRP) are provided under this Agreement, the additional provisions included in **Exhibit E** shall apply.
- c) If Engineering Design Services are provided under this Agreement, the additional provisions included in **Exhibit F** shall apply.
- d) If Opinions of Probable Construction Cost are provided under this Agreement, the additional provisions included in **Exhibit G** shall apply.
- e) If Construction Services are provided under this Agreement, the additional provisions included in **Exhibit H** shall apply.
- f) If applicable, all samples collected will be retained for a period of **60 days**, after which time they will be discarded unless other specific instructions as to their disposition are received from the client

15. EXHIBITS

The following Exhibits are attached to and made a part of this Agreement:

- ☒ Exhibit A, Scope of Services and Schedule
- ☒ Exhibit B, Payment Terms
- ☒ Exhibit C, Insurance
- ☒ Exhibit D, Special Provisions for Field Services
- ☐ ~~Exhibit E, Special Provisions for Services of Licensed Site/Environmental/Remediation Professionals~~
- ☒ Exhibit F, Special Provisions for Engineering Design Services
- ☒ Exhibit G, Special Provisions for Opinions of Probable Construction Costs
- ☒ Exhibit H, Special Provisions for Construction Services

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16. ACCEPTANCE

The parties hereto have executed this Agreement as of the dates shown below.

For CLIENT:

By: _____

(Signature)

(Print Name)

(Title)

(Date)

For GEI:

By: _____

Michelle LaRose

(Signature)

Michelle LaRose, PE

(Print Name)

Senior Water Resources Engineer

(Title)

7/21/2025

(Date)

EXHIBIT A

Scope of Services and Schedule

See Attached Letter Proposal Dated July 18, 2025.

EXHIBIT B

Payment Terms

This project will be performed on a lump sum basis for each task. Invoices will be submitted monthly based on a percentage of completion.

EXHIBIT C

Insurance

GEI will carry the following types and amounts of insurance:

A. Worker's Compensation and Employer's Liability (statutory):

1. In accordance with the laws of the state(s) in which services are performed.

B. Commercial General Liability (CGL) Insurance:

1. Bodily Injury and Property Damage Combined: \$1,000,000 per occurrence and in aggregate.
2. Including explosion, underground drilling excavation, and collapse hazards.
3. Including an endorsement providing Additional Insured Status to CLIENT under the policy.

C. Comprehensive Automobile Insurance:

1. Bodily Injury and Property Damage Combined: \$1,000,000 per accident.
2. Includes all owned, nonowned, and hired vehicles used in connection with the services under this Agreement.

D. Professional Liability Insurance:

1. \$1,000,000 per claim and in aggregate.

EXHIBIT D

Special Provisions for Field Services

- A. Right of Entry. CLIENT agrees to furnish GEI with right-of-entry and a plan of boundaries of the site where GEI will perform its services. If CLIENT does not own the site, CLIENT represents and warrants that it will obtain permission for GEI's access to the site to conduct site reconnaissance, surveys, borings, and other explorations of the site pursuant to the scope of services in the Agreement. GEI will take reasonable precautions to minimize damage to the site from use of equipment, but GEI is not responsible for damage to the site caused by normal and customary use of equipment. The cost for restoration of damage that may result from GEI's operations has not been included in GEI's fee, unless specifically stated in **Exhibit B**.
- B. Underground Structures. CLIENT will identify locations of buried utilities and other underground structures in areas of subsurface exploration. GEI will take reasonable precautions to avoid damage to the buried utilities and other underground structures noted. If locations are not known or cannot be confirmed by CLIENT, then there will be a degree of risk to CLIENT associated with conducting the exploration. In the absence of confirmed underground structure locations, CLIENT agrees to accept the risk of any damages and losses resulting from the exploration work and shall indemnify and hold GEI, its subconsultants and employees harmless from all claims, losses or damages arising from GEI's services involving subsurface exploration.
- C. Presence of Hazardous Materials. If unanticipated hazardous waste, oil, asbestos, or other hazardous materials, as defined by federal, state, or local laws or regulations, and if such materials are discovered during GEI's work, CLIENT agrees to negotiate appropriate revisions to the scope, schedule, budget, and terms and conditions of this Agreement. When such hazardous materials are suspected, GEI will have the option to stop work, without financial penalty, until a modification to this Agreement is made or a new Agreement is reached. If a mutually satisfactory Agreement cannot be reached between both parties, this Agreement will be terminated without cause and CLIENT agrees to pay GEI for all services rendered up to the date of termination, including any costs associated with termination.
- D. Disposal of Samples and Wastes Containing Regulated Contaminants. In the event that samples collected by GEI or provided by CLIENT, or wastes generated as a result of site investigation activities, contain or potentially contain substances or constituents which are or may be regulated contaminants as defined by federal, state, or local statutes, regulations, or ordinances, including but not limited to samples or wastes containing hazardous materials, said samples or wastes remain the property of CLIENT and CLIENT will have responsibility for them as a generator. If set forth in the Agreement, GEI will, at CLIENT's expense and as CLIENT's appointed agent, perform necessary testing, and either (a) return said samples and wastes to CLIENT, or (b) using a manifest signed by CLIENT as generator, have said samples and/or wastes transported to a location selected by CLIENT for disposal. CLIENT agrees to pay all costs associated with the storage, transport and disposal of said samples and/or wastes. Unless otherwise provided in the Agreement, GEI will not transport, handle, store, or dispose of waste or samples or arrange or subcontract for waste or sample transport, handling, storage, or disposal. CLIENT recognizes and agrees that GEI is working as a bailee and/or agent and at no time assumes title to said waste or samples or any

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responsibility as generator of said waste or samples. Further, CLIENT agrees to look solely to any transport or disposal entity in the event any claim, cause of action or damages arise from GEI's activities as a bailee or agent of CLIENT under this provision.

- E. Contribution of Hazardous Materials. CLIENT agrees that GEI has not contributed to the presence of hazardous wastes, oils, asbestos, biological pollutants such as molds, fungi, spores, bacteria and viruses, and by-products of any such biological organisms, or other hazardous materials that may exist or be discovered in the future at the site. GEI does not assume any liability for the known or unknown presence of such materials. GEI's scope of services does not include the investigation or detection of biological pollutants such as molds, fungi, spores, bacteria and viruses, and by-products of any such biological organisms. CLIENT agrees to indemnify and hold harmless GEI, its subconsultants, subcontractors, agents, and employees from and against all claims, damages, losses, and costs (including reasonable attorneys' fees) that may result from the detection, failure to detect, or from the actual, alleged, or threatened discharge, dispersal, release, escape, or exposure to any solid, liquid, gaseous, or thermal irritant, asbestos in any form, or contaminants including smoke, vapor, soot, fumes, acids, alkalis, chemicals, waste, oil, hazardous materials, or biological pollutants. CLIENT's obligations under this paragraph apply unless such claims, damages, losses, and expenses are caused by GEI's sole negligence or willful misconduct.

EXHIBIT E

Special Provisions for Services of Licensed Site/Environmental Professionals

~~For services under this Agreement that require the engagement of a Licensed Site Professional (LSP), a Licensed Environmental Professional (LEP), or a Licensed Site Remediation Professional (LSRP) registered with and subject to the laws and regulations promulgated by the state in which the services are provided (collectively the LSP/LEP/LSRP Program), the following will apply:~~

- ~~A. Under the LSP/LEP/LSRP Program, the LSP/LEP/LSRP owes professional obligations to the public, including, in some instances, a duty to disclose the existence of certain contaminants to the state in which the services are provided.~~
- ~~B. CLIENT understands and acknowledges that in the event that the licensed professional's obligations under the LSP/LEP/LSRP Program conflict in any way with the terms and conditions of this Agreement or the wishes or intentions of CLIENT, the licensed professional is bound by law to comply with the requirements of the LSP/LEP/LSRP Program. CLIENT recognizes that the licensed professional is immune from civil liability resulting from any such actual or alleged conflict.~~
- ~~C. CLIENT agrees to indemnify and hold GEI harmless from any claims, losses, damages, fines, or administrative, civil, or criminal penalties resulting from the licensed professional's fulfillment of the licensed professional's obligations under the LSP/LEP/LSRP Program.~~

EXHIBIT F

Special Provisions for Engineering Design Services

- A. Design Without Construction Phase Services. CLIENT understands and agrees that if GEI's services under this Agreement include engineering design and do not include Construction-Related Services, then CLIENT:
1. Assumes all responsibility for interpretation of the construction Contract Documents.
 2. Assumes all responsibility for construction observation and review.
 3. Waives any claims against GEI that may be in any way connected thereto.

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For purposes of this Agreement, Construction-Related Services include, but are not limited to: construction observation; review of the construction contractor's technical submittals; review of the construction contractor's progress; or other construction-phase services.

B. Use of Documents.

1. The actual signed and sealed hardcopy construction Contract Documents including stamped drawings, together with any addenda or revisions, are and will remain the official copies of all documents.
2. All documents including drawings, data, plans, specifications, reports, or other information recorded on or transmitted as Electronic Files are subject to undetectable alteration, either intentional or unintentional, due to transmission, conversion, media degradation, software error, human alteration, or other causes.
3. Electronic Files are provided for convenience and informational purposes only and are not a finished product or Contract Document. GEI makes no representation regarding the accuracy or completeness of any accompanying Electronic Files. GEI may, at its sole discretion, add wording to this effect on electronic file submissions.
4. CLIENT waives any and all claims against GEI that may result in any way from the use or misuse, unauthorized reuse, alteration, addition to, or transfer of the electronic files. CLIENT agrees to indemnify and hold harmless GEI, its officers, directors, employees, agents, or subconsultants, from any claims, losses, damages, or costs (including reasonable attorney's fees) which may arise out of the use or misuse, unauthorized reuse, alteration, addition to, or transfer of electronic files.

EXHIBIT G

Special Provisions for Opinions of Probable Construction Costs

GEI's Opinions of Probable Construction Cost provided under this Agreement are made on the basis of GEI's experience and qualifications and represent GEI's best judgment as an experienced and qualified professional generally familiar with the industry. However, since GEI has no control over the cost of labor, materials, equipment, or services furnished by others, or over a contractor's methods of determining prices, or over competitive bidding or market conditions, GEI cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from Opinions of Probable Construction Cost prepared by GEI.

If CLIENT wishes greater assurance as to probable construction costs, CLIENT agrees to employ an independent cost estimator.

EXHIBIT H

Special Provisions for Construction Services

In accordance with the scope of services under this Agreement, GEI will provide personnel to observe the specific aspects of construction stated in the Agreement and to ascertain that construction is being performed, in general, in accordance with the approved construction Contract Documents.

- A. GEI cannot provide its opinion on the suitability of any part of the work performed unless GEI's personnel make measurements and observations of that part of the construction. By performing construction observation services, GEI does not guarantee the contractor's work. The contractor will remain solely responsible for the accuracy and adequacy of all construction or other activities performed by the contractor, including: methods of construction; supervision of personnel and construction; control of machinery; false work, scaffolding, or other

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temporary construction aids; safety in, on, or about the job site; and compliance with OSHA and construction safety regulations and any other applicable federal, state, or local laws or regulations.

B. In consideration of any review or evaluation by GEI of the various bidders and bid submissions, and to make recommendations to CLIENT regarding the award of the construction Contract, CLIENT agrees to hold harmless and indemnify GEI for all costs, expenses, damages, and attorneys' fees incurred by GEI as a result of any claims, allegations, administrative proceedings, or court proceedings arising out of or relating to any bid protest or such other action taken by any person or entity with respect to the review and evaluation of bidders and bid submissions or recommendations concerning the award of the construction Contract. This paragraph will not apply if GEI is adjudicated by a court to have been solely negligent or to have actually engaged in intentional and willful misconduct without legitimate justification, privilege, or immunity; however, CLIENT will be obligated to indemnify GEI until any such final adjudication by a court of competent jurisdiction.

EXHIBIT B**FEE SCHEDULE AND PAYMENT TERMS****FEE SCHEDULE**

<u>Personnel Category</u>	<u>Hourly Billing Rate \$ per hour</u>
Staff Professional – Grade 1	\$ 107
Staff Professional – Grade 2	\$ 116
Project Professional – Grade 3	\$ 126
Project Professional – Grade 4	\$ 136
Senior Professional – Grade 5	\$ 154
Senior Professional – Grade 6	\$ 199
Senior Professional – Grade 7	\$ 214
Senior Consultant – Grade 8	\$ 294
Senior Consultant – Grade 9	\$ 330
Senior Principal – Grade 10	\$ 330

Senior Drafter and Designer / GIS	\$ 124
Drafter and Designer / GIS	\$ 100
*Senior Field Professional	\$ 126
*Field Professional	\$ 111
*Senior Technician	\$ 96
*Technician II	\$ 90
*Technician I	\$ 80
Word Processor, Administrative Staff	\$ 83
Office Aide	\$ 83

Rates will increase up to 5% annually, at GEI's option, for all contracts that extend into the next calendar year. Rates for Deposition and Testimony are increased 1.5 times.

- *The scope of work is based on a normal work week, Monday through Friday, eight (8) hours per day. Overtime will be charged at 1.3 times the specified rate; Sunday and holiday hours will be charged at two times the specified rate, with a minimum charge of eight (8) hours

OTHER PROJECT COSTS

Subconsultants, Subcontractors and Other Project Expenses - All costs for subconsultants, subcontractors and other project expenses will be billed at cost plus a 15% service charge. Examples of such expenses ordinarily charged to projects are subcontractors; subconsultants: chemical laboratory charges; rented or leased field and laboratory equipment; outside printing and reproduction; communications and mailing charges; reproduction expenses; shipping costs for samples and equipment; disposal of samples; rental vehicles; fares for travel on public carriers; special fees for insurance certificates, permits, licenses, etc.; fees for restoration of paving or land due to field exploration, etc.; state sales and use taxes and state taxes on GEI fees. The 15% service charge will not apply to GEI-owned equipment and vehicles or in-house reproduction expenses.

Field and Laboratory Equipment Billing Rates – GEI-owned field and laboratory equipment such as pumps, sampling equipment, monitoring instrumentation, field density equipment, portable gas chromatographs, etc. will be billed at a daily, weekly, or monthly rate, as needed for the project. Expendable supplies are billed at a unit rate.

Transportation and Subsistence - Automobile expenses for GEI or employee owned cars will be charged at the rate per mile set by the Internal Revenue Service for tax purposes plus tolls and parking charges, or at a day rate negotiated for each project. When required for a project, four-wheel drive vehicles owned by GEI or the employees will be billed at a daily rate appropriate for those vehicles. Per diem living costs for personnel on assignment away from their home office will be negotiated for each project.

PAYMENT TERMS

Invoices will be submitted monthly or upon completion of a specified scope of service, as described in the accompanying contract (proposal, project, or agreement document that is signed and dated by GEI and CLIENT).

Payment is due upon receipt of the invoice. Interest will accrue at the rate of 1% of the invoice amount per month, for amounts that remain unpaid more than 30 days after the invoice date. All payments will be made by either check or electronic transfer to the address specified by GEI and will include reference to GEI's invoice number.