Augusta GEORGIA

Print Form

Sole Source Justification (Reference Article 6, Procurement Source Selection Methods and Contract Awards, § 1-10-56 SOLE SOURCE PROCUREMENT

Vendor: Kleinschmidt Associates E-Verify Number: 876285

Commodity: Engineering Services

Estimated annual expenditure for the above commodity or service: $ 85,000 (one time)

Initial all entries below that apply to the proposed purchase. Attach a memorandum containing complete justification and support documentation as directed in initialed entry. (More than one entry will apply to most sole source products/services requested).

1. SOLE SOURCE REQUEST IS FOR THE ORIGINAL MANUFACTURER OR PROVIDER, THERE ARE NO REGIONAL DISTRIBUTORS. (Attach the manufacturer's written certification that no regional distributors exist. Item no. 4 also must be completed.)

2. SOLE SOURCE REQUEST IS FOR ONLY THE AUGUSTA GEORGIA AREA DISTRIBUTOR OF THE ORIGINAL MANUFACTURER OR PROVIDER. (Attach the manufacturer's — not the distributor's — written certification that identifies all regional distributors. Item no. 4 also must be completed.)

3. THE PARTS/EQUIPMENT ARE NOT INTERCHANGEABLE WITH SIMILAR PARTS OF ANOTHER MANUFACTURER. (Explain in separate memorandum.)

4. THIS IS THE ONLY KNOWN ITEM OR SERVICE THAT WILL MEET THE SPECIALIZED NEEDS OF THIS DEPARTMENT OR PERFORM THE INTENDED FUNCTION. (Attach memorandum with details of specialized function or application.)

5. THE PARTS/EQUIPMENT ARE REQUIRED FROM THIS SOURCE TO PERMIT STANDARDIZATION. (Attach memorandum describing basis for standardization request.)

CDH 6. NONE OF THE ABOVE APPLY. A DETAILED EXPLANATION AND JUSTIFICATION FOR THIS SOLE SOURCE REQUEST IS CONTAINED IN ATTACHED MEMORANDUM.

The undersigned requests that competitive procurement be waived and that the vendor identified as the supplier of the service or material described in this sole source justification be authorized as a sole source for the service or material.

Name: Chad Hendrix Department: Utilities Date: 8/17/2023

Department Head Signature: [signature] Date: 17Aug23

Approval Authority: BAdams Date: 8/18/23

Administrator Approval: (required – not required) Date:

COMMENTS:

Augusta GEORGIA

UTILITIES DEPARTMENT

Wes Byne, P.E.
Director

Chad Hendrix, P.E.
Assistant Director

TO: Geri Sams
Director, Procurement Department

THRU: Wes Byne, P.E.
Director, Utilities Department

FROM: Chad Hendrix, P.E.
Assistant Director, Utilities Department

DATE: August 14, 2023

SUBJECT: SOLE SOURCE JUSTIFICATION – Kleinschmidt Associates

The Augusta Canal falls under the regulatory jurisdiction of the Federal Energy Regulatory Commission (FERC). FERC regulations require that every 5 years a Part 12D Independent Consultant Dam Safety Inspection be performed on the Canal. FERC also states the same consulting firm cannot conduct more than two consecutive Part 12 inspections. In 2019, a contract to work with Kleinschmidt Associates as a sole source provider was approved by the Commission. This was the first time Kleinschmidt was used for this level of inspection and they performed the task well. AUD respectfully requests that Kleinschmidt once again be allowed to provide this service as a sole source provider for this upcoming inspection.

Kleinschmidt Associates was chosen for this task due to their vast knowledge of the water industry providing engineering, regulatory, and environmental consulting services to government agencies across North America. Kleinschmidt's Mr. Nick Ciomei will serve as the Independent Consultant and has developed a great working rapport with the local FERC office on many dam safety projects.

Kleinschmidt's price for the inspection and final report is $85,000.00 which the department is in agreement with, and funding is available. A municode agenda item for approval of this draft contract is being submitted for presentation to the Commission.

Kleinschmidt

We provide practical **solutions** *for complex renewable energy, water, and environmental projects.*

May 19, 2023

Via Email

Chad Hendrix, PE
Assistant Director
Augusta Utilities Department
452 Walker Street
Augusta, GA 30901

Proposal for Engineering Services (2097002.00)
Augusta Canal Hydroelectric Project (FERC No. 11810)
2024 4th FERC Part 12D Periodic Inspection

Dear Mr. Hendrix:

Kleinschmidt Associates (Kleinschmidt) is pleased to submit this proposal to provide engineering services to prepare the 4th Part 12D Independent Consultant Dam Safety Inspection of the Augusta Canal Hydroelectric Project (FERC No. 11810, Project). The 4th Part 12D Safety Inspection of the Project will be conducted as a Periodic Inspection (PI), in accordance with and as required by the Federal Energy Regulatory Commissions' (FERC) Chapter's 16 and 17 of the *Engineering Guidelines for the Evaluation of Hydropower Projects* (*Guidelines*), December 16, 2021. According to the information we have available, the Part 12D Periodic Inspection Report (PIR) is due to FERC by June 30, 2024.

We propose Nick Ciomei, P.E., as the Independent Consultant (IC), structural subject matter expert (SME), and Project Manager. Mr. Ciomei is a FERC-approved IC and he has not performed back-to-back Part 12 inspections of the Project. A copy of Mr. Ciomei's résumé is attached for Augusta Utilities Department's (AUD) review (Attachment A). Mr. Ciomei will be accompanied by two additional Kleinschmidt engineers to participate in the inspection of the Project's structures. One of the engineers will be an experienced engineer that can act as the Geotechnical SME. The second additional engineer will perform the role of IC assistant and notetaker for the inspection.

Kleinschmidt will not use subconsultants in performing the proposed scope of work.

PROPOSED SCOPE OF WORK

According to paragraph 12.32 of FERC Order 122, the proposed scope of work for the safety inspection is "...to identify any actual or potential deficiencies that might endanger life, health, or property, including deficiencies that may be in the condition of those project works or in the quality or adequacy of project maintenance, safety, methods of operation, analyses, and

other conditions." The requirements for the PIR are contained in Chapter 16 of FERC's *Guidelines*. The proposed work will be performed according to the requirements of the *Guidelines* and as outlined in FERC's Part 12 Notification Letter of December 19, 2022. All work will be performed either by the IC or under the direction of the IC. We will perform the following tasks to prepare the Part 12D PIR for the Project.

TASK 1: REVIEW BACKGROUND INFORMATION

We request that AUD provide an electronic copy of the following documents for the IC to review before visiting the Project. Some documents are requested in Microsoft Word or Excel format, as noted:

- Supporting Technical Information Document (STID) — the most current version of the document or the draft containing proposed revisions in Microsoft Word;
- Potential Failure Modes Analysis (PFMA) Report and addenda in Microsoft Word;
- copies of the three previous Part 12 Safety Inspection Reports (SIRs);
- dam safety correspondence with FERC since the previous SIR;
- FERC's most recent annual inspection report;
- most recent version of the Dam Safety Surveillance and Monitoring Plans (DSSMP);
- most recent Dam Safety Surveillance and Monitoring Reports (DSSMR);
- instrumentation and monitoring data set up to be plotted (if data are not in Excel, please provide electronic copies of the data plots);
- current Emergency Action Plans (EAPs);
- current Owner's Dam Safety Plan (ODSP);
- current Public Safety Plan (PSP);
- project drawings; and
- documents describing any modifications, studies, or investigations that have been performed since the STID was last updated.

Assuming that the drawings and other information contained in the documents are legible and suitable for reproduction and use in the Part 12D PIR, no other background information should be needed.

The IC needs to review AUD's correspondence with FERC regarding dam safety to ensure that he is aware of any issues that FERC may have with the safety of the Project. The correspondence should start with the letter submitting the 3rd Part 12D SIR to FERC up to the current day. Copies of correspondence regarding licensing issues or annual operating reports are not needed.

The requested documents should be provided to Kleinschmidt as soon as practical after issuing the notice to proceed, and at least 4 months before the field inspection for creation of the Pre-Inspection Preparation Report (PIPR, Task 6).

TASK 2: PART 12D INSPECTION PLAN

A Part 12D Inspection Plan for the Project will be prepared under the direction of the IC in a format that complies with the FERC's requirements as contained in Chapter 16 of the *Guidelines*. The Inspection Plan will include the Project's basic information, type of inspection, the proposed IC Team subject matter disciplines, and a schedule for completing the Part 12D inspection-related activities. Kleinschmidt will submit the proposed IC Team's resumes as part of the Inspection Plan. Kleinschmidt will deliver an electronic copy of the draft plan in Microsoft Word format. We request AUD to provide consolidated comments on the draft plan to Kleinschmidt within 2 weeks of receipt. Kleinschmidt will deliver the final plan within 2 weeks of receiving comments on the draft.

TASK 3: PARTICIPATE IN SECOND FERC COORDINATION CALL

Kleinschmidt will participate in the second coordination conference call with AUD and FERC. The purpose of the call is to discuss FERC's expectations of AUD and the IC during the PFMA review and field inspection. Any outstanding items or past Part 12D recommendations that have not been fulfilled or that require particular attention during the PFMA reviews and field inspections will be discussed during this call.

TASK 4: REVIEW SUPPORTING TECHNICAL INFORMATION DOCUMENT

The IC will review the STID for the Project in advance of creating the PIPR (Task 6). Any hydrologic studies and stability analyses performed since the last SIR will be reviewed as part of this task. We propose no additional studies or new analyses be completed specifically for preparing the PIR.

TASK 5: REVIEW INSTRUMENTATION AND SURVEY DATA

The IC will review the data provided by AUD to monitor the movement, stability, or uplift of the water-retaining structures at the Project. We expect the data to include the information required according to the *Guidelines*, Appendix H, Section 4.0. We understand that the active instrumentation and survey data at the Project is limited to that associated with monitoring of seepage. There are no piezometers being monitored nor are their deformation surveys (horizontal and vertical movement) being performed.

The data plots should cover not less than 15 years of data if available (*Guidelines*, Appendix D), although providing data for the full length of the instruments' record is preferred in order to allow a comparison of the last five years of data with historic data. The PIR will contain an

evaluation of the existing monitoring program and, if necessary, recommendations for revising the program. The PIR will also include a copy of the instrumentation data plots.

The Proposed Scope of Work does not include compiling or entering instrumentation data into any data base, or the generation of graphs of the data, but such services can be provided if requested and they will be considered as additional work.

TASK 6: PRE-INSPECTION PREPARATION REPORT

The PIPR will be prepared under the direction of the IC in a format that complies with the FERC's requirements as contained in Chapter 16 of the *Guidelines*. Unlike the Part 12 Inspection Plan, the PIPR will be utilized as part of the PIR (Task 9) and will require a separate plan for the Project. The PIPR will clearly state the required documentation in accordance with Section 16-4.2 of the *Guidelines* and IC Team inclusive of each proposed team member and their résumé. As part of the PIPR task and to meet the *Guidelines*, Kleinschmidt has assumed limited hand calculations will be performed to review analyses of record for the Project. Kleinschmidt will deliver electronic copies of the draft report in Microsoft Word. We assume AUD will provide consolidated comments on the draft report to Kleinschmidt within 4 weeks of receipt. Kleinschmidt will deliver the final report within 2 weeks of receiving comments on the draft.

TASK 7: REVIEW PFMA REPORT

The IC will review the current PFMA Report for the Project and documents provided by AUD that provide information to assess potential impacts to existing potential failure modes (PFMs) or to identify new PFMs as requested by FERC. The PI does not require a formal PFMA review; however, a review of PFMs with respect to current project conditions, studies, and outstanding items is required. Based on Kleinschmidt's understanding of the Project and some current outstanding items related to a number of PFMs, Kleinschmidt has planned and budgeted for up to 16 hours for PFM review and documentation of PFM related discussion within the PIR.

TASK 8: INSPECT PROJECT STRUCTURES

The IC and IC assistant will visit the Project to observe the water-retaining structures, focusing on the condition of each structure and considering the findings of the PFMA review. The inspection will assess the condition of the diversion dam, if not being overtopped, the 7-mile-long canal and any structure that intrudes into or passes beneath the canal dikes and waterways. Ideally, the IC's site visit will occur concurrently with FERC's annual inspection, and the IC will compare notes and findings with the FERC Inspector before leaving the site.

The IC will endeavor to perform the field inspection when the diversion dam is not spilling or minimally spilling flows to maximize visual observation of the structures, and when the ground surface is dry to identify any seepage or leakage. The date of the field inspection is not yet

determined but will include the IC Team and participants from AUD and FERC. Based on our current understanding of the Project and the work to be completed, we assume that the Part 12D field inspection will be completed in up to 3 days.

As part of the field inspection, the IC will offer an opinion regarding the adequacy of the operation and monitoring of the Project with respect to the findings of the PFMA review. Kleinschmidt will observe maintenance and repairs of the Project, if any, completed since the previous Part 12D SIR. The IC will visually observe the condition of project structures and consult with AUD personnel to complete the inspections. We request and assume that personnel knowledgeable on the history, operation, maintenance, and modification of the Project will be made available to accompany the IC Team during the inspection. The IC will use no equipment other than a camera, a geologist's hammer, and a measuring tape to test or assess the condition of project structures, equipment, and features. Our proposed services exclude inspecting the portions of the Project's structures that are underwater.

Kleinschmidt will provide the IC Team with safety shoes, glasses, hard hat, and gloves; AUD shall provide personal flotation devices, a boat and operator for access, and fall protection equipment, if required. We request that AUD arrange to provide the safety equipment, clearances, and field checks needed to allow access to any galleries or passages associated with the Project's structures. We assume that no spillage will occur during the inspection, both for safety and so that the IC Team can view the spillway effectively.

If the IC Team determines that additional analyses or field data are necessary to evaluate the condition or safety of the Project properly, the IC will work with AUD to develop means to secure such information. Any work to scope or complete additional analyses or to develop additional data gathering programs will be considered additional services. We assume that the recommendations of previous Part 12D Inspection Reports and FERC's comments on those reports have been addressed; therefore, this proposal excludes addressing any outstanding recommendations or comments.

TASK 9: PREPARE PART 12D PERIODIC INSPECTION REPORT

A Part 12D PIR will be prepared for the Project under the direction of the IC in a format that complies with the FERC's requirements as contained in the *Guidelines*. Pertinent sections of the Part 12D PIR will clearly state the extent of review of analyses and studies performed by the IC or under his direction, and whether the IC agrees with the methods, assumptions and findings of those analyses or studies.

Kleinschmidt will deliver an electronic copy of the draft report in Microsoft Word and PDF formats. The draft report will include photographs taken during the field inspection and selected to document the condition of Project's structures. The cover and each page of the Part 12 PIR will contain the following footnote "Critical Energy Infrastructure Information – Do

Not Release." We request that AUD provide consolidated comments on the draft report to Kleinschmidt within 4 weeks of receipt.

The scope of work covered in this proposal excludes services required to address any follow-up questions from FERC. Kleinschmidt cannot anticipate the questions or the level of detail of the questions that FERC may ask. Kleinschmidt expects to prepare complete reports that leave no unresolved issues, but we cannot guarantee that FERC will have no questions on the reports or their findings.

SCHEDULE

The draft schedule for completion of the work is proposed as follows, subject to discussion with AUD and FERC:

TASK	COMPLETION DATE
Proposal Submitted to AUD	May 19, 2023
Authorization to Proceed	By June 2, 2023
Task 1 – Review Background Materials	Continuous Throughout Project
Task 2 – DRAFT Part 12D Inspection Plan	June 23, 2023
Task 2 – FINAL Part 12D Inspection Plan	July 14, 2023
Task 3 – Second FERC Coordination Call	TBD, Summer 2023
Tasks 4, 5, & 7 – Review of STID/Instruments/PFMs	Continuous Throughout Project
Task 6 – DRAFT PIPR	November 10, 2023
Task 6 – FINAL PIPR	December 15, 2023
Task 8 – Field Inspection	January/February 2024
Task 9 – DRAFT PIR	May 31, 2024
Task 9 – FINAL PIR	June 28, 2024
Final PIR due to FERC	June 30, 2024

COST

Kleinschmidt will perform the proposed work on an Hourly Rate plus Expenses basis. Based upon our understanding of the scope of work, the estimated cost for this is **$85,000** (Eighty-five thousand dollars). This Cost of Services is calculated using Kleinschmidt's 2023 Rate Schedule (Attachment B) for work planned for 2023 and a 5% increase in rates for 2024. The estimate is not a fixed price or an upper limit. We will not exceed the estimated amount without first discussing the need with you and receiving your authorization to proceed.

Kleinschmidt will communicate a need for a change order, if necessary, once the 2024 Rate Schedule is finalized.

TERMS AND CONDITIONS

The proposed scope of work will be performed on an Hourly Rate plus Expenses basis according to Kleinschmidt's Method of Payment (Attachment C), 2023 Rate Schedule (Attachment B) and the Standard Terms and Conditions (Attachment D). Work completed in 2024 will be based on an estimated 5% increase over the 2023 Kleinschmidt rates to accommodate our annual business cost adjustments.

Please reference this proposal, *Proposal No. 2097002.00*, on the face of the purchase order (PO) or other form of written notice issued as authorization to proceed. If a PO is issued as authorization to proceed, please note on the face of the PO that the terms and conditions referenced in this proposal supersede any shown on the back of the PO. Provide written authorization to proceed to the following address and forward an electronic copy of the authorizing document to Nick Ciomei at Nick.Ciomei@KleinschmidtGroup.com:

Kleinschmidt Associates
P.O. Box 650
Pittsfield, ME 04967-0650
Attn: Accounting Group

We appreciate the opportunity to assist you with this project. If you have any questions regarding this proposal, please call or e-mail Nick Ciomei at 207.416.1216 or Nick.Ciomei@KleinschmidtGroup.com.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Nick M. Ciomei, P.E.
Project Manager

Steven R. Layman, Ph.D.
Project Director
NMC:FHW
Attachments: Attachment A. IC's Résumé
Attachment B. 2023 Rate Schedule
Attachment C. Method of Payment
Attachment D. Standard Terms and Conditions
cc: Proposal Distribution

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ATTACHMENT A

INDEPENDENT CONSULTANT'S RÉSUMÉ

Nicholas M. Ciomei, P.E.

Project Role: **Structural Subject Matter Expert**

Nick Ciomei has 12 years of dam safety experience and specializes in dam safety/Part 12D safety inspections as a FERC approved IC. He conducted six Part 12 safety inspections and PFMA projects as an IC and assisted the FERC-approved IC on 25 additional Part 12 safety inspections and PFMA projects. Nick is experienced in completing gravity stability analyses for concrete, timber crib, masonry, stacked stone, and various gated structures. His experience includes engineering design and inspection for a variety of hydropower structures such as retaining walls, spillways, penstocks, flashboards, and rock anchors. In addition, Mr. Ciomei facilitates emergency action plan functional and tabletop exercises, generates dam safety surveillance monitoring plans/reports and standard technical information documents. He received the Leveraging Potential Failure Mode Analysis to Perform Semi-Quantitative Risk Analysis training and the Fundamentals of Facilitating a Semi-Quantitative Risk Analysis required for facilitators.

Position with Firm
Senior Engineer

Key Expertise
- FERC Part 12 Dam Safety Inspection
- DSSMR/DSSMP
- Stability Analysis
- Supporting Technical Information Documents (STID)
- Dam & Spillway Inspections & Design
- Gates & Water Control Design
- Penstock Investigation & Design

Professional Registration
Professional Engineer, ME, HI, VT, NH, GA

Certification/Training
FERC-Approved Independent Part 12D Consultant

Leveraging Potential Failure Mode Analysis to Perform Semi-Quantitative Risk Analysis

Fundamentals of Facilitating a Semi-Quantitative Risk Analysis

SPRAT Rope Access Technician Level I

Safety Evaluation of Existing Dams, Bureau of Reclamation

Inspection and Assessment of Dams, Bureau of Reclamation

Education
B.S. Civil Engineering, minor in Business, University of Maine, 2010

Years of Experience
With Kleinschmidt: 9
Total: 12

Relevant Project Experience

Federal Energy Regulatory Commission (FERC) Part 12 Independent Consultant and Potential Failure Mode Analyses (PFMA)
Independent Consultant for the following FERC Part 12 inspection and potential failure mode analysis (PFMA) in 2021:

Tallulah Falls, GA - 2021
Clark's Falls, VT - 2021
Peterson, VT - 2021
Tugalo, GA – 2022
Bartletts Ferry, GA – 2022
Pocono Lake, PA – 2022

Assisted the Independent Consultant with Federal Energy Regulatory Commission (FERC) Part 12 and Potential Failure Mode Analyses (PFMA)
Independent Consultant Assistant responsible for the following FERC Part 12 inspection and potential failure mode analyses (PFMA) in the years noted:

Bartlett's Ferry, GA - 2018
Clark's Falls, VT- 2017
Eel Weir, ME- 2016
Ellsworth, ME - 2015
Forest City, ME - 2014
Gantt, AL - 2018
Graham Lake, ME- 2015
Gregg's Falls, NH- 2016
Gulf Island, ME- 2015
Indian Orchard, MA – 2015 & 2020
Minetto, NY - 2017
Sinclair, GA - 2017
Parr Pond, GA (PFMA Only) - 2017
Peterson Dam, VT- 2017
Phoenix, NY- 2018
Point A, AL - 2018
Rapidan, MN - 2016
Red Bridge, MA - 2015 & 2020
Sebec , ME - 2017
Vanceboro, ME - 2014
Wallace Dam, GA - 2020
West Grand Lake, ME - 2014
Weston, ME - 2014
Mathis-Terrora, GA - 2020
Augusta Canal, GA (PFMA Only) - 2020

Dam Safety and Compliance, General Services
Eagle Creek Renewable Energy
Project Manager responsible for leading dam safety and compliance work for ECRE's Midwest and East Division hydro assets. The work included providing support services for FERC 12.10 reports, emergency embankment repair designs, dive report reviews, construction support, Tainter gate inspections, STID and DSSMP revisions, stability analyses, dam safety state and federal correspondence, and other miscellaneous FERC compliance documents.

FERC Part 12 Inspection, Pocono Lake
Pocono Lake Preserve, Pocono Lake, PA
Project Manager and Independent Consultant responsible for FERC Part 12 inspection. Types of structures inspected include a concrete gravity dam, uncontrolled ogee spillway, and earthen embankments. Project services included dam inspections, hydrologic & hydraulic analyses including PMF determination and dam breach analyses, and potential failure mode analyses (PFMA) review.

Multiple Dam Safety Projects, Gantt and Point A Developments, Conecuh Hydroelectric Project, PowerSouth Energy Cooperative, Andalusia, AL
Project Manager & Project Engineer responsible for multiple projects at the two developments between 2015 and 2018 including: Rewriting and separating STIDs, DSSMPs, and DSSMRs for reporting years 2016-2018, 5-year ODSP audit, conducting the 10-year Detailed Tainter Gate inspections, Focused Spillway Assessments, and Part 12D Inspection. The developments both consists of large earthen embankment structures, Tainter gate spillways, and integral intake/powerhouse structures. Each development has 20+ embankment and spillway piezometers, toe ditch weirs, and survey monuments. Due to access limitations, the close-up Tainter gate inspection incorporated rope access techniques to meet the FERC Guidelines. Additional work completed during the STID update process included stability analyses of concrete gravity structures, identification of population at risk due to a dam breach, and revised spillway rating curves for each development. The Focused Spillway Assessment was completed to address the FERC initiative as a result of the Oroville Dam event. The Part 12D inspection included a comprehensive PFMA review that addressed concerns raised during the Focused Spillway Assessment. Project work to date has resulted in a revamped dam safety program addressing deficiencies noted by FERC and now meets or exceeds the FERC Guidelines.

Audit of Owner's Dam Safety Program, Six Hydroelectric Projects
Kruger, KEI (USA) Power Management Inc., Gardiner, ME
Project Manager responsible for managing audit of KEI's Owner's Dam Safety Program (ODSP) for submittal to Federal Energy Regulatory Commission. Audit included review of KEI's ODSP and related documents for six hydroelectric projects with high hazard potential in Maine, New York and Virginia. Evaluation of the ODSP included interviews of KEI's personnel and preparation of the audit report, which was submitted to the Atlanta Regional Engineer of FERC.

Revised Owners Dam Safety Program
Central Rivers Power Massachusetts, MA
Project Manager and Project Engineer responsible for revising the Owner's Dam Safety Program after assets were purchased. The revised program consisted of a complete rewrite of the document, specifically the roles and responsibilities of the new owner from management through operations staff, defining of the companies training programs, and maintenance of the Owner's Dam Safety Program.

Spillway Stability and Rock Anchoring, Middlesex Dam
Green Mountain Power, Middlesex, VT
Project Engineer responsible for the design of rock anchors to improve the stability of a 50-foot-high concrete gravity ogee spillway founded on bedrock to meet flood loading conditions. Performed stability analysis for all concrete gravity structures of the project as a part of a condition assessment report and provided design/construction support throughout installation of anchors.

Stability Analyses, Lockhart Hydroelectric Project
Lockhart Power Company, Lockhart, SC
Project Engineer responsible for stability analyses of concrete gravity canal headgate, headgate non-overflow, sandgate, sluiceway, canal spillway, canal draingate, and powerhouse spillway structures. Analysis included sensitivity analyses of required friction factor, cohesion, and post-tensioned anchors forces for each structure not meeting FERC Guidelines.

Detailed Tainter Gate Inspection, Keystone Hydroelectric Project
Nebraska Public Power District, Ogallala, NE
Project Engineer responsible for performing a close-up, detailed condition inspection of nine Tainter gates at the Keystone Hydroelectric Project. Limited inspection access and size of the gates required the use of rope access equipment. Generated and submitted a report summarizing the inspection and provided recommendations to the client for maintenance and repair.

Detailed Tainter Gate Inspection, Saluda Hydroelectric Project
South Carolina Electric & Gas, Columbia, South Carolina

Project Manager & Engineer responsible for performing a close-up, detailed condition inspection of six Tainter gates at the Saluda Hydroelectric Project. Limited inspection access and size of the gates required the use of fall protection equipment and rope access techniques. Generated and submitted a report summarizing the inspection and provided recommendations to the client for maintenance and repair. Additionally, a table top and inspection investigation into historic pier movement for one of the internal gate piers was conducted.

Penstock Inspection, Mathis-Terrora Development
Georgian Power Company, Tallulah Falls, GA

Engineer responsible for inspecting two partially buried and above ground penstocks. The inspection included a visual inspection of the interior and exterior visible portions, thickness gauge readings, and determination of voids for buried portions of the penstocks. Thickness readings were used to perform calculations based on internal and external pressures present at the site to estimate remaining service life and recommend future repairs and monitoring recommendations.

Peacham Pond Improvements, Peacham Pond Dam
Green Mountain Power, Marshfield, VT

Project Manager responsible for the design of multiple repairs and upgrades to the Peacham Pond outlet works intake structure. The project consisted of site inspections, design, and construction support for the concrete tower. The project added electrical hook-up, new access walkway, low-level gate housing structure, new bubbler system, installation of a pond control weir and leaf gate, and miscellaneous concrete repairs.

Seepage Investigation and Analysis, Bartletts Ferry Project
Georgia Power, Bartletts Ferry, GA

Project Manager responsible for the investigation into seepage, settlement, and abnormal piezometer readings within the main embankment adjacent to the Tainter gate spillway structure at the Project. The project consisted of a model of the structure in Civil3D, subsurface boring and piezometer installation program using sonic drilling methods, and seepage and stability analyses of the embankment and concrete retaining wall structures, respectively.

Power Canal Dam Break Analysis and Removal Design, Webster and Pembroke Dams, Eagle Creek Renewable Energy, Suncook, NH

Project Manager and Engineer responsible for developing a HEC-RAS breach model for the Webster Dam Power Canal located on the Suncook River in New Hampshire to determine the Hazard Classification. Used a LiDAR digital elevation model (DEM) to model downstream impacts within GIS. As a part of this project, a second HEC-RAS model was generated to study normal pool and flood the effects for a partial removal of a small, stone block dam located downstream of Webster Dam. Managed a team that completed construction drawing and permitting packages for the partial removal.

Penstock Inspection and Replacement Design, Lower Great Falls Dam
Enel Green Power North America, Inc., Somersworth, NH

Project Engineer responsible for inspecting four sections of buried penstock at the Lower Great Falls Dam for condition. Used thickness readings obtained during inspection to perform calculations based on internal and external pressures present at the site to estimate remaining service life and recommend future repairs and replacement options and estimated costs. Based on the results of the inspection, completed multiple replacement design options, including replace in kind, slip lining, and reconfiguration to improve hydraulic efficiency, for two of the four penstocks at the site.

Previous Work Experience

Dam Safety Inspections, Multiple Dams
Maine Emergency Management Agency (MEMA), Statewide ME

Assistant State Dam Inspector. Conducted condition and hazard inspections of concrete gravity, timber crib, earth embankment, and rockfill dams, table-top Emergency Action Plan exercises, and worked with private and municipal dam owners to achieve compliance with state regulations. Completed dam breach analyses to determine flood inundation extents for hazard classification of dams using ArcGIS, WMS, HydroCAD, and HEC-RAS.

GEI Consultants
Portland, ME
Water Resources Engineer. Used ArcGIS and HEC-RAS software to model and analyze inundation zones and incremental impacts downstream of a dam breach. Created watershed models in HEC-HMS and HydroCAD for rainfall runoff and water quality analysis.

ATTACHMENT B

2023 RATE SCHEDULE

KLEINSCHMIDT ASSOCIATES
2023 RATES (USD)

LABOR CATEGORY	HOURLY BILLING RATE
SENIOR MANAGERS/CONSULTANTS	
Principal Consultant F1	$285.00
ENGINEERS	
Senior Engineering Advisor E7	$265.00
Senior Engineering Consultant E6	$240.00
Senior Engineer E5	$198.00
Project Engineer E4	$180.00
Engineer E3	$166.00
Staff Engineer E2	$148.00
Engineer Technician E1	$114.00
LICENSING COORDINATORS/PLANNERS	
Senior Regulatory/Planner Advisor L/P7	$265.00
Senior Licensing Coordinator/Planner L/P6	$210.00
Project Licensing Coordinator/Planner L/P5	$172.00
Licensing Coordinator/Planner L/P4	$152.00
Staff Licensing Coordinator/Planner L/P3	$130.00
Associate Licensing Coordinator/Planner L/P2	$114.00
Licensing Coordinator/Planner Technician L/P1	$92.00
Licensing Intern L/P0	$72.00
SCIENTISTS	
Senior Science Advisor S7	$255.00
Senior Scientist S6	$202.00
Project Scientist S5	$171.00
Scientist S4	$148.00
Staff Scientist S3	$130.00
Associate Scientist S2	$104.00
Scientist Technician S1	$90.00
Field Technician S0	$68.00
PROJECT AND PROGRAM MANAGEMENT	
Project Director	$276.00
Senior Project Manager PM2	$250.00
Project Manager PM1	$210.00
Senior Support Staff A7	$210.00
Project Controller A6	$175.00
Senior Project Coordinator or Administrator /Accountant A5	$141.00
Project Administrator or /Accountant A4	$122.00
Administrative Staff A3	$106.00
Associate Administrative Staff A2	$92.00
Office Assistant A1	$81.00
DESIGNERS/DRAFTERS	
Lead Designer D5	$164.00
Senior Designer D4	$148.00
Designer D3	$130.00
Senior Drafter D2	$114.00
Drafter D1	$98.00

Effective January 1, 2023

ATTACHMENT C

METHOD OF PAYMENT

1. Client may pay Kleinschmidt either on a negotiated Lump Sum basis or Hourly Rate basis, as defined in the Work Authorization and agreed by the *Client* and Kleinschmidt in writing.
2. Client agrees to pay Kleinschmidt for Services the amounts quoted in the Proposal or Work Authorization, in accordance with the compensation terms laid out in the contract. Kleinschmidt agrees not to exceed the estimated consulting costs as stated in the proposal without explaining the need to the Client and obtaining the Client's authorization to proceed.
3. For Lump Sum projects, Kleinschmidt will invoice monthly as a percent complete of the project or Work Authorization, unless otherwise defined in the Work Authorization.
4. For Time and Materials, or Hourly Rate projects, Kleinschmidt will invoice monthly for all employee time at the hourly billing rate currently in effect, times a number of hours worked on the project plus subconsultant fees and expenses as described below. Client agrees to pay for expert testimony and direct preparation for testimony in any litigation, arbitration, or other legal or administrative proceeding at 150% of the standard billing rates with a minimum daily charge based upon an 8-hour day, plus Reimbursable Expenses.
5. For any projects where expenses are invoiced separately from labor, the following apply:
    a. Client agrees to pay Kleinschmidt a 15 percent markup for subconsultant services.
    b. Client agrees to pay 3 percent of labor costs for telecommunications (e.g., phone, data transmission and storage, fax, conference and video conference, data security).
    c. Client agrees to pay for specialized computer programs, field equipment, and other unit charges (e.g., photocopies, mileage, photos, drawing reproductions, CD preparation, SharePoint hosting) according to the current rates in effect.
    d. Client agrees to pay any other reimbursable expenses actually incurred by Kleinschmidt at cost.

ATTACHMENT D

STANDARD TERMS AND CONDITIONS

KLEINSCHMIDT ASSOCIATES
(A MAINE CORPORATION)
STANDARD TERMS AND CONDITIONS

1. **Purpose**: These Standard Terms and Conditions when combined with a Proposal are intended to form a complete Agreement between Kleinschmidt Associates (Kleinschmidt) and the Client to whom the Proposal is addressed. When Kleinschmidt's signed Proposal has been accepted by the Client, the resulting Agreement shall take the place of all other agreements and representations concerning the subject of the Proposal. This Agreement may be amended only by a writing signed by both parties. Terms and Conditions of any purchase order issued by Client shall not be part of this Agreement unless separately signed by Kleinschmidt.

2. **Payment**: In consideration for Kleinschmidt's performance of the proposed work, Client shall pay Kleinschmidt as stated in the Proposal. Client agrees to pay promptly Kleinschmidt's fees and expenses as submitted on monthly invoices. If any balance remains unpaid thirty days from the date of the invoice, Client shall pay interest on the unpaid balance at the rate of one and one-half percent per month from said thirtieth day and shall, in addition, pay Kleinschmidt's costs of collection including reasonable legal fees.

3. **Client's Duties**: At no cost to Kleinschmidt, Client shall:

   Promptly provide to Kleinschmidt the information required by Kleinschmidt for performance of its services.

   Provide Kleinschmidt personnel with access to the work site so that they may perform their work without interference.

   Designate a Client's representative with authority to transmit instructions, receive information, and define Client's polices concerning this Agreement.

   Promptly notify Kleinschmidt of any defect in Kleinschmidt's services as soon as Client becomes aware of it.

   Prior to commencement of Kleinschmidt's work, furnish Kleinschmidt with any special design or construction standards, which Client may require Kleinschmidt to follow.

4. **Kleinschmidt's Liability**: Kleinschmidt's services will be performed with that degree of reasonable care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

   The total liability by Kleinschmidt and its agents for all claims relating to the work outlined in the Proposal shall not exceed the compensation received by Kleinschmidt or $50,000, whichever is greater.

   Kleinschmidt shall not be liable for any losses resulting from deficiencies in its services if those deficiencies arise from a cause beyond Kleinschmidt's reasonable control.

5. **Betterment**: If Kleinschmidt omits a required element of the project, Kleinschmidt shall not be responsible for paying the cost to add such item to the extent that it would have been necessary to the project or otherwise adds value or betterment. Kleinschmidt will not be responsible for any added cost or expense that provides betterment, upgrade or enhancement of the project.

6. **Shop Drawing Review**: When authorized by Client, Kleinschmidt shall review contractor submittals, such as shop drawings, product descriptions, samples, and other data, but only for determining that it conforms to the design concept and that it appears consistent with the contract documents. This shall not include checking the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction methods, coordination of the work with other trades, or construction safety issues, all of which are the sole responsibility of the Contractor.

Kleinschmidt's review shall be conducted with reasonable promptness while allowing sufficient time to permit a review that is adequate in Kleinschmidt's judgment. Review of a specific item does not mean that Kleinschmidt has reviewed the entire assembly of which the item is a part.

Kleinschmidt shall not be responsible for any deviation from the contract documents unless the deviation is brought specifically to Kleinschmidt's attention by the Contractor in writing. Kleinschmidt shall not be required to review partial submissions or those for which correlated items have not been received.

7. **Ownership of Documents**: Any drawings, specifications, or reports prepared by Kleinschmidt under this Agreement shall be the property of Client; however, Kleinschmidt shall have the unlimited right to use such drawings, specifications, and reports and the intellectual property therein. Client's use of such drawings, specifications, and reports shall be limited to the project or purpose for which they were prepared. Any use other than that purpose will be at Client's sole risk and without liability to Kleinschmidt and Client shall indemnify and hold harmless Kleinschmidt from all claims, damages, losses, and expenses resulting therefrom.

8. **Opinions of Probable Cost**: Opinions of Probable Cost prepared by Kleinschmidt are merely expressions of Kleinschmidt's judgment based on its experience as a design professional familiar with the industry. Kleinschmidt has no control over market prices, construction methods, or competitive conditions and therefore cannot represent that actual bids or negotiated prices will not vary from Kleinschmidt's Opinions of Probable Cost.

9. **Patents**: Kleinschmidt's work under this Agreement shall not include patent or copyright searches; and Kleinschmidt assumes no responsibility for any patent or copyright searches; and Kleinschmidt assumes no responsibility for any patent or copyright infringement that may arise from its work. Kleinschmidt makes no representation that anything made, used, or sold in connection with its services will be free from such infringement.

10. **Termination or Suspension**: Either party may terminate this Agreement upon reasonable notice to the other. Kleinschmidt shall be paid for the services provided and expenses incurred through the date of termination.

    If the Agreement is terminated by the Client without breach by Kleinschmidt or if Kleinschmidt terminates for Client's breach, Kleinschmidt shall also be paid its reasonable and necessary termination costs which may include layoff and demobilization expenses as well as costs of terminating contracts, leases, and other obligations incurred by Kleinschmidt in reliance upon this Agreement. If Client suspends the work, Kleinschmidt shall be reimbursed by Client for such added fees and costs which arise from the suspension and remobilization.

    Kleinschmidt shall not be liable to Client for losses resulting from Kleinschmidt's termination or suspension caused by Client's non-payment or other material breach of this Agreement.

11. **Assignment**: Neither party shall assign its rights, interests, or obligations under this Agreement without prior written consent from the other party; but such consent shall not unreasonably be withheld.

12. **No Waiver**: The failure of either party to enforce a provision of this Agreement shall not prevent that party from later enforcing it or from pursuing the remedies that may be available for breach of the provision.

13. **Indemnification**: Within its limit of liability Kleinschmidt shall indemnify and hold harmless the Client and its agents from any and all claims and losses caused solely by the negligent acts or omissions of Kleinschmidt or its agents in the performance of services under this Agreement.

    Client shall indemnify and hold harmless Kleinschmidt and its agents from any and all claims and losses caused solely by the negligent acts or omissions of Client or its agents with respect to this Agreement.

14. **Governing Law**: This Agreement shall be governed by the laws of the State of Maine, provided that nothing contained in the Agreement shall be interpreted in such a way as to render the Agreement unenforceable under any law of the United States or the law of the place in which the Client is located.

15. **Time for Acceptance**: Kleinschmidt's proposal shall remain firm for no longer than 60 days unless another period is specified in the proposal or the time is specifically extended by Kleinschmidt.