

**CITY OF FAYETTEVILLE
WORK AUTHORIZATION
FOR
PROFESSIONAL SERVICES
BY
SCHNABEL ENGINEERING SOUTH, P.C.
July 1, 2026**

In accordance with the Professional Services Agreement (Agreement) dated February 13, 2026, between the CITY OF FAYETTEVILLE (hereinafter called OWNER) and Schnabel Engineering South, P.C. (hereinafter called CONSULTANT), OWNER hereby authorizes CONSULTANT to proceed, and CONSULTANT agrees to perform in accordance with the terms of the Agreement and this Work Authorization, the following services for the following Project:

I. PROJECT

This Work Authorization is for professional services related to:

COLLEGE LAKES DAM IMPROVEMENT PROJECT

This contract authorizes the Scope of Work shown in Exhibit A, which is hereby attached and incorporated herein by reference. This will be for the hours per task shown in Exhibit A in the not to exceed amount shown below.

Funding Mechanism: Stormwater Enterprise Fund

Division/Department Representing the City: Stormwater/Public Services

Project will be managed by the Engineering Division of the Department of Public Services.

II. AGREEMENT & SCOPE OF SERVICE

The terms of the Agreement, **attached as Exhibit B**, are hereby incorporated by reference as if written herein and the parties confirm that its terms are a part of this Work Authorization.

The Scope of Services to be provided by CONSULTANT, in connection with this Authorization, is as follows:

As defined in attached Exhibit A Scope of Work

The CONSULTANT shall request written confirmation and/or execute an additional Work Authorization describing any scope change before performing any work beyond the scope specified in this Work Authorization. The confirmation shall identify any change in compensation and/or delay in completion which the scope change entails and must be approved by the City Manager or his designee.

III. RESPONSIBILITIES

The responsibilities of the OWNER and CONSULTANT, in addition to those provided in the Agreement which are specific to this Project, are as follows:

IV. COMPENSATION

OWNER shall compensate CONSULTANT for providing the services set forth herein in accordance with the terms of the Agreement.

In the absence of a lump sum fee agreement, it is understood and agreed that:

1. CONSULTANT will perform under this Agreement on a not-to-exceed ceiling price basis and will notify OWNER when the ceiling price will be exceeded.
2. The not to exceed compensation (including travel) for this Work Authorization is **\$1,658,000**. This is not a guaranteed maximum amount, but CONSULTANT shall not continue performing work in excess of this amount without further specific authorization. OWNER will be billed only for actual time worked and identified expenses.

Payment shall be made in accordance with the terms of the above referenced Agreement.

V. SCHEDULE

All work under this Work Authorization shall begin at **Notice to Proceed** and shall be complete by **twenty four months following Notice to Proceed date**.

VI. MISCELLANEOUS

1. The terms in this Work Authorization shall have the same meaning as provided in the Agreement.

2. **E-Verify.** CONSULTANT acknowledges that “E-Verify” is the federal E-Verify program operated by the U.S. Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. CONSULTANT further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with N.C. Gen. Stat. § 64-26(a). CONSULTANT pledges, attests and warrants through execution of this contract that CONSULTANT complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes and further pledges, attests and warrants that any subcontractors currently employed by or subsequently hired by CONSULTANT shall comply with any and all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Work Authorization.

3. **Force Majeure.** Neither party shall be deemed to be in default of its obligations hereunder if and *so long as* it is prevented from performing such obligations by an act of war, hostile foreign actions, adverse governmental actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

4. **Morality Clause.** If, in the sole opinion of the OWNER, at any time CONSULTANT or any of its owner(s) or employee(s) or agent(s) (collectively referenced as an “Actor”) engages in any one or more of the actions below, the OWNER may immediately upon written notice to CONSULTANT, terminate this Agreement, in addition to any other rights and remedies that the OWNER may have hereunder or at law or in equity:

- a. bring disrepute, contempt, scandal, or public ridicule to the Actor;
- b. subject the Actor to prosecution;
- c. offend the community or public morals/decency;
- d. denigrate individuals or groups in the community served by the OWNER;
- e. is scandalous or inconsistent with community standards or good citizenship;
- f. adversely affect the OWNER’S finances, public standing, image, or reputation;

g. is embarrassing or offensive to the OWNER or may reflect unfavorably on the OWNER; and,

h. is derogatory or offensive to one or more employee(s) or customer(s) of the OWNER.

5. **Venue and Forum Selection.** The Parties expressly agree that if litigation is brought in connection with this contract and (1) the litigation proceeds in the Courts of the State of North Carolina, the parties agree that the appropriate venue shall be in Cumberland County (Fourteenth Judicial District of North Carolina); or (2) the litigation proceeds in a federal court, the parties agree that the appropriate venue shall be the United States District Court for the Eastern District of North Carolina

6. **Termination for Cause.** In the event of substantial failure by CONSULTANT to perform in accordance with the terms of this Agreement, the OWNER shall have the right to terminate CONSULTANT upon ten calendar (10) days written notice in which event CONSULTANT shall have neither the obligation nor the right to perform further services under this Agreement nor shall the OWNER be obligated to make any further payment for work that has not been performed. CONSULTANT shall provide to the OWNER all reports, surveys or other related documents upon the OWNER'S request.

7. **Termination for Convenience.** Upon thirty (30) calendar days' written notice to CONSULTANT, the OWNER may, without cause and without prejudice to any other right or remedy legally available to the OWNER, terminate this Agreement. Upon such notice, CONSULTANT shall have neither the obligation nor the right to perform services under this Agreement nor shall the OWNER be obligated to make any further payment for work that has not been performed in accordance with the terms stated herein. In such case of termination, CONSULTANT shall be paid for the completed and accepted work executed in accordance with this Agreement prior to the written notice of termination. Additionally, upon mutual agreement, CONSULTANT may be paid for any completed and accepted work which takes place in order to achieve a specifically identified item in the scope of services or a milestone of the Agreement, between the written notice of termination and the effective date of termination. Unless otherwise stated or agreed upon, the effective date of termination shall automatically occur 30 days after the written notice is sent by the OWNER.

8. **Protest.** Protest related to this procurement must be addressed to the Purchasing Manager for City of Fayetteville, 433 Hay St, Fayetteville, NC 28301 and shall be received, in writing, within 2 calendar days of bid award. Responses will be in writing by email and first-class mail not later than (7) calendar days following receipt of said protest by the Purchasing Manager.

9. **Indemnification.** Article 5 of the Agreement shall govern and control all matters of indemnification applicable to this Work Authorization, and the terms of the Agreement shall prevail in the event of any conflict or inconsistency with this Work

Authorization.

10. CITY'S TERMS SUPERSEDE. To the extent that there are terms in any of the attachments that conflict with the terms of this Agreement, the terms of this Agreement are superseding.

11. Survival of Terms. All warranties, covenants, and representations contained within this Agreement and all applicable work authorizations, if any, shall continue in full force and effect for three (3) years after the execution and delivery of the final product, act, or service taken in furtherance of this contract. Survivability shall not be impacted, or otherwise shall not be rendered null or void, by the termination or natural expiration of this contract or other applicable work undertaken in furtherance of this contract.

12. Divestment of Companies Boycotting Israel or that Invest in Iran Certification. CONSULTANT certifies that: (i) it is not identified on the Final Divestment List or any other list of prohibited investments created by the NC State Treasurer pursuant to N.C.G.S. 147-86.58; (ii) it has not been designated by the NC State Treasurer pursuant to N.C.G.S. 147-86.81 as a company engaged in the boycott of Israel ((i) and (ii) to be collectively referred to as "FD Lists"); and (iii) it will not take any action causing it to appear on the Treasurer's FD Lists created by the NC State Treasurer during the term of this Agreement. By signing this Agreement, CONSULTANT further agrees, as an independent obligation, separate and apart from this Agreement, to reimburse the OWNER for any and all damages, costs and attorneys' fees incurred by the OWNER in connection with any claim that this Agreement or any part thereof is void due to CONSULTANT appearing on the Treasurer's FD Lists at any time before or during the term of this Agreement.

CONSULTANT ACCEPTANCE:
SCHNABEL ENGINEERING SOUTH, P.C.

BY: 

PRINT: Jonathan M. Pittman

TITLE: Executive Vice President

DATE: July 2, 2026

AUTHORIZATION BY:

CITY OF FAYETTEVILLE

ATTEST:

BY: _____

TITLE: _____

DATE: _____

BY: _____
JENNIFER L. AYRE, MPA,
MMC City Clerk

This instrument has been pre-audited in the
manner required by the Local Government
Budget and Fiscal Control Act.

TIFFANY R. MURRAY
Chief Financial Officer



Schnabel Engineering South, P.C.
11A Oak Branch Drive / Greensboro, NC 27407

O 336.274.9456
schnabel-eng.com

July 1, 2026

Mr. Maxwell Matthews
Engineering Project Manager
Public Service Department
City of Fayetteville
433 Hay Street
Fayetteville, North Carolina 28301

**Subject: Exhibit A: Proposal for Engineering Services for College Lake Dam Retrofit,
RFQ# COF1516975, Fayetteville, North Carolina,
Schnabel Project No. 25210037.001**

Dear Mr. Matthews:

SCHNABEL ENGINEERING SOUTH, P.C. (Schnabel) appreciates the opportunity to provide you with this proposal for the College Lake Dam (CUMBE-061) Retrofit Design, located in Fayetteville, North Carolina. This proposal has been provided in accordance with the Request for Qualifications – On Call Professional Engineering Services for Dam Related Projects, Number COF1516975, dated September 7, 2025; our qualification package dated October 7, 2025; and our teleconference held on January 14, 2026.

This proposal includes our scope, fees, and schedule to complete the Evaluation of Existing Conditions and Review of Proposed Retrofit Alternative, Preliminary Design, Final Design, and Permitting. A second proposal will be developed after the completion of Final Design, which will include our services for Pre-Construction (Bidding) and Construction Support. Phasing the project this way will allow us to provide the City of Fayetteville (City) with more accurate pricing for the post-design scope based on how the design progresses and the associated estimated construction schedule.

This scope, fees, and schedule for the services described herein are based on several assumptions. Although the list of assumptions included herein are considered to be thorough, unforeseen changes and circumstances may occur during the course of the project. Should any required out-of-scope work be identified, the City will be notified in a timely manner and authorization obtained prior to performing any out-of-scope work.

Frequent communication and coordination between Schnabel, the City, and other project stakeholders will be key to a successful project. As such, this proposal includes scope and fees for multiple design review and coordination meetings as outlined under each task below.

1.0 PROJECT DESCRIPTION

College Lake Dam (CUMBE-061) is an earthen embankment dam located in Fayetteville, North Carolina. According to the North Carolina Department of Environmental Quality (NC DEQ) Dam Safety Inventory, the dam is approximately 565 feet long and 20 feet tall and is regulated as a small sized, high hazard dam. The dam was constructed in 1963 to serve as a recreational amenity for the surrounding community. According to Google Earth historical aerial imagery, the reservoir was drained between 1993 and 1999. The City took ownership of the dam in 2002, and the lake has been maintained in a drained condition.

In 2019, the City planned to decommission the dam as part of the City's Dam Preservation Program. A representative from Schnabel performed a site visit to the dam on November 6, 2019, and observed that the principal spillway riser had been removed, leaving the 48-inch corrugated metal pipe (CMP) outlet conduit as the hydraulic controlling structure, which is highly susceptible to clogging. Additionally, there are small and large trees present on the upstream and downstream slopes of the embankment, areas of sparse vegetative cover, and areas of significant erosion on the embankment crest and slopes.

According to the College Lake Dam Analysis Memorandum from Kimley-Horn and Associates, Inc (Kimley-Horn), dated May 2025, the dam does not have adequate capacity to pass the design storm (1/3 Probable Maximum Precipitation) for small sized, high hazard dams, per NC DEQ Dam Safety Regulations. However, as part of the Carvers Creek Watershed Master Plan, Kimley-Horn identified that the structure could provide benefits if retrofitted to function as a dry pond for flood-control purposes. The proposed retrofit alternative for the dam included a 20-foot high embankment with three horizontal to one vertical (3H:1V) upstream and downstream slopes, construction of a new spillway system consisting of a cast-in-place concrete riser and a reinforced concrete pipe (RCP) conduit through the dam, and installation of dam overtopping protection to protect the embankment for storm events up to and including the 1/3 Probable Maximum Precipitation (PMP).

The City contacted Schnabel and its subconsultants to develop a retrofit design for the dam to bring the dam into compliance with current NC DEQ Dam Safety requirements. Additional objectives of the proposed modifications include maintaining the existing level of flood protection to the downstream watershed and, to the extent practical, limiting impacts to the existing wetlands upstream of the dam.

2.0 OBJECTIVE

The objective of the project is to provide engineering design services to retrofit College Lake Dam to operate as a dry pond for flood control purposes while meeting current NC DEQ Dam Safety Regulations. Our proposed scope of services to achieve this objective has been divided into the four tasks listed below:

- Task 1 – Evaluation of Existing Conditions
- Task 2 – Review of Proposed Retrofit Alternative and Preliminary (30%) Design
- Task 3 – Detailed (90%) Design, Easement Acquisition Support, and Final (100%) Design
- Task 4 – Permitting

The services, described below in more detail, will be performed in general accordance with the requirements of NC DEQ Dam Safety and under the supervision of a Professional Engineer licensed in North Carolina.

3.0 PROJECT TEAM

Schnabel has assembled a highly qualified multidisciplinary team with the technical depth, local knowledge, and specialized expertise required to successfully complete the College Lake Dam Retrofit project. Our team includes Kimley-Horn and WithersRavenel as subconsultants and Parratt-Wolff, Inc. as our drilling subcontractor. This team brings complementary capabilities that strengthen the overall project delivery approach and ensure all project elements are addressed by subject-matter experts.

3.1 WithersRavenel (Role: Surveying and Easement Acquisition Support)

WithersRavenel of Raleigh, NC, will provide topographic and bathymetric surveying services as outlined in Section 4.1.2. In addition, WithersRavenel will assist with temporary and permanent easement acquisition, including preparation of sealed legal exhibits and descriptions as outlined in Section 4.3.4.

3.2 Parratt-Wolff, Inc. (Role: Geotechnical Drilling and Subsurface Investigation)

Parratt-Wolf, Inc. (PWI) of Hillsborough, NC, will perform the geotechnical drilling program as described in Section 4.1.3. As a regional leader in drilling and geotechnical field services, PWI brings specialized experience working on dam-related explorations throughout North Carolina. Their experience in drilling sampling and adherence to dam-safety drilling protocols will provide the subsurface data required to support the dam retrofit design.

3.3 Kimley-Horn (Role: Hydrologic/Hydraulic Engineering, Environmental Permitting, and Funding Support)

Kimley-Horn of Raleigh, NC, will serve in several key technical and environmental permitting capacities, including:

- Participation in and support of the site reconnaissance,
- Serving as Engineer of Record (EOR) for the hydrologic and hydraulic (H&H) analyses, associated design report sections, and design drawings for the College Lake Dam Retrofit;
- Serving as EOR for construction plans and specifications associated with the erosion and sediment (E&S) control plan and control-of-water concept;
- Leading the environmental assessment and assisting the City with securing required environmental permits, including the E&S permit; and
- Preparing the Operation and Maintenance Manual for the retrofitted dam.

4.0 SCOPE OF WORK

4.1 Task 1 – Evaluation of Existing Conditions

4.1.1 Review of Existing Information

Schnabel will coordinate with the City and NC DEQ Dam Safety to gather available existing data and technical documents for the dam, including As-Built drawings, design reports and calculations, inspection and investigation reports, and other applicable information. Schnabel and their subconsultants will review the available data to become familiar with the dam and to aid in the site investigations for the existing condition of the dam and preparation of an appropriate remediation design.

4.1.2 Site Reconnaissance and Survey

Two qualified representatives from Schnabel and one representative from Kimley-Horn will perform an initial site reconnaissance of the dam to observe the current condition of the structure and obtain additional information to aid in planning the topographic survey, wetlands delineation, and subsurface geotechnical investigation.

The topographic survey of the dam will be performed to confirm the general geometry and elevation of key features including the embankment, abutments, spillway system and areas downstream of the dam. Bathymetric surveying will be performed immediately upstream of the dam to support the hydrologic and hydraulic analyses and to provide the basis for designing the proposed spillway system. Horizontal coordinates for this project will reference the North American Datum of 1983 (NAD 83) and vertical elevations will reference the North American Vertical Datum of 1988 (NAVD 88). Survey coordinates will be provided in U.S. Survey Feet. The proposed extents of the topographic survey are shown on Figure 1. Schnabel will meet on-site with WithersRavenel to coordinate and confirm the appropriate site features to be surveyed. Schnabel will also contract with WithersRavenel to survey the as-drilled test boring locations after completion of the subsurface geotechnical investigation, as described in Section 4.1.3. The results of the survey will be used to support the engineering analyses and retrofit design.

4.1.3 Geotechnical Field Investigation, Laboratory Testing, and Reporting

The proposed investigation to support the College Lake Retrofit Design consists of:

- Performing five test borings and two auger probes with piezometers for the characterization of the embankment and foundation materials. The proposed boring and piezometer locations are shown in Figure 2. The locations, depths, and sampling intervals may be adjusted in the field based on the site conditions. A table summarizing the proposed borings including locations, depths, sampling, field in-situ testing, and termination criteria is provided as Attachment 1. Drilling and sampling will be performed by PWI, under the observation of a qualified field geologist or engineer from Schnabel and supervised by a Licensed Geologist or Professional Engineer registered in North Carolina.
- Perform soil drilling using hollow-stem augers. Methods that introduce fluid into the boring, such as mud rotary, will not be permitted. Standard Penetration Tests (SPTs) will be performed continuously through the soil strata at 24-inch intervals. Relatively undisturbed soil samples (Shelby Tubes) will be collected from select soil intervals within offset borings (auger probes). In

the event shallow obstructions are encountered below grade which cannot be penetrated with ordinary soil drilling equipment, the obstructed borings will be offset and re-drilled.

- If rock is encountered, Schnabel proposes to core up to 15 feet of rock below auger refusal using HQ triple tube wireline tooling. According to the Geologic Map of North Carolina (1985), the bedrock in the vicinity of the project site is Coastal Plain sedimentary rocks consisting of the Cape Fear Formation sandstone and sandy mudstone and the Middendorf Formation sand, sandstone. Before rock coring, PWI will drill temporary steel surface casing at least 1 foot into rock to protect the embankment and foundation soils from core water. Water from McPherson Creek will be used for drilling activities. Rock samples will be collected and stored in wooden core boxes. In-situ hydraulic conductivity (falling head) testing will be performed in select cored sections (possibly at B-01 and B-02).
- Installation of two permanent open standpipe piezometers, with stickup mount covers. The first one will be installed at the dam crest (B-01A) and the second one , at the downstream toe (B-101A). The piezometers will be used to evaluate the phreatic surface within the embankment and permeability of the embankment and foundation soils (by slug testing). The surface completions will include locks to deter public access to the piezometers. Borings that do not include piezometers will be backfilled with cement-bentonite grout upon completion.
- Perform hand augers to collect additional soil samples for material properties testing if insufficient material is retrieved from SPT and undisturbed sampling.

Schnabel will contact *North Carolina 811* at least 72 hours prior to PWI mobilizing to the site. *North Carolina 811* will contact the appropriate public utility companies (or their contract locators) to mark their utilities near the site. The public utility companies will not mark private utilities on a site. Private utilities include all utilities between the public utilities' metering devices and any existing facility on site; all storm and sanitary sewers on site; buried electric lines to light poles, signs or other electrical devices; irrigation lines; etc. Schnabel's subconsultant Johnson Mirmiran & Thompson, Inc., will locate private utilities within the proposed limits of the geotechnical investigation. The City should provide plans showing the locations of all known private utilities, to support this effort. Schnabel will not be responsible for damage or disruption of utilities or other subsurface features not indicated to us in advance.

Soil and rock samples will be temporarily stored at Schnabel's Greensboro, NC, office for 90 days following the submission of the Geotechnical Data Report at which point they will be discarded.

Select split-spoon samples and relatively undisturbed samples collected during the investigations will be tested at an accredited soils laboratory to be selected at the time of the investigation depending on subcontractor availability. The estimated quantities and types of laboratory testing are summarized below.

Table 4-1: Summary of Proposed Soil Laboratory Testing

Test Name	No. of Tests
Moisture Content (ASTM D2216)	24
Gradation (ASTM D422)	5
Atterberg Limits (ASTM D4318)	10
Gradation with Hydrometer (ASTM D6913)	5
Specific Gravity (ASTM D854)	5
One-Dimensional Consolidation, Method A (ASTM D2435)	2
Consolidated-Undrained Triaxial Shear Test with Pore Pressure Measurements, CU' (ASTM D2850)	2 sets of 3

4.1.4 Reporting

Deliverables associated with Task 1 include:

- A Site Reconnaissance Letter Report summarizing our observations and findings from the field visit, review of available information, and measurements (as appropriate). The report will include photographs taken during our site visit and a list of observed deficiencies.
- Topographic and bathymetric surveys with 1-foot contours, signed and sealed by a professional land surveyor licensed in the state of North Carolina. Survey point information (point name, northing, easting, and elevation) will be provided in a text file.
- A Geotechnical Investigation Report (GIR) including the following information:
 - Summaries of the field investigations, descriptions of the local and regional geology, boring location plans, boring logs, boring backfill records, soil and rock core photographs, subsurface profiles and other geologic and geotechnical data gathered to support the evaluation of existing conditions and retrofit design.
 - The results of laboratory testing performed.

4.1.5 Meetings

A total of eight biweekly meetings with the City have been included for this task to coordinate the various site visits, investigations, and discuss the associated deliverables. Task leaders will attend these meetings at the discretion of the Project Manager. For each meeting, an updated project schedule, agenda and meeting minutes will be prepared and provided to the City in PDF format.

4.2 Task 2 – Review of Proposed Retrofit Alternative and Preliminary (30%) Design

4.2.1 Hydrology

During this task, Kimley-Horn will update the upstream watershed hydrologic analysis (originally developed for the Carvers Creek Watershed Master Plan) using the NC DEQ Dam Safety statewide PMP study (May 2025). This includes updating the planning phase models and revising the hydrologic parameters (e.g., runoff curve numbers, lag time and time of concentration, watershed boundary delineation, rainfall data, and stage-discharge-storage relationships) used to evaluate the existing conditions and the proposed retrofit alternative.

Kimley-Horn will use the USACE Hydrologic Engineering Center – Hydrologic Modeling System (HEC-HMS) software to develop the necessary hydrologic loading information for the geotechnical, hydraulic, and structural analyses discussed below.

Kimley-Horn will prepare the hydrologic sections of the preliminary design report, summarizing their analyses and results. Calculation packages will be prepared and signed and sealed, as needed, for inclusion as attachments to the report.

4.2.2 Hydraulic Design and Proportioning

During this task, Kimley-Horn will update the hydraulic analyses performed as part of the Carvers Creek Watershed Master Plan to support the retrofit design and proportioning of the dam and spillway system. The updated analyses will also provide hydraulic loadings for the proposed geotechnical and structural analyses described below, as well as develop the outflows required for the dam overtopping protection design. These hydraulic analyses will be performed either using the HEC-HMS software mentioned under Section 4.2.1, the USACE Hydrologic Engineering Center River Analysis System (HEC-RAS) software, or a combination of these methods.

Corresponding sections of the preliminary design report will be prepared by Kimley-Horn, incorporating the results of their hydraulic analyses and design proportioning. Calculation packages will be prepared and signed and sealed, as needed, for inclusion as attachments to the report.

4.2.3 Review of Kimley-Horn Proposed Retrofit Alternative

Schnabel will review the College Lake Dam proposed retrofit alternative based on the results of the geotechnical investigation, topographic and bathymetric surveys, and the updated hydrologic and hydraulic analyses. A letter report summarizing the recommended modifications to the proposed retrofit alternative will be prepared and submitted to the City for review and approval prior to proceeding with the remaining preliminary design subtask outlined herein.

An optional in-person meeting with the City is included in this subtask to review and discuss the recommended modifications to the proposed dam retrofit alternative.

4.2.4 Preliminary (30%) Foundation, Geotechnical and Structural Analysis

Schnabel will perform geotechnical and structural analyses for the proposed dam and spillway configuration in general accordance with NC DEQ requirements. The analyses will be based on the information gathered from the geotechnical investigations and testing discussed under Section 4.1.3. The following geotechnical engineering analyses will be performed for the proposed conditions:

- Assigning material properties;
- Seismic Hazard Assessment;
- Embankment and foundation seepage analyses;
- Static slope stability analyses;
- Filter compatibility analyses for the embankment, foundation, and drain fill materials.

Schnabel will prepare the corresponding sections of the preliminary design report incorporating the results of the geotechnical and structural analyses and associated design considerations. Calculation packages will be prepared and signed and sealed, as needed, for inclusion as attachments to the report.

4.2.5 Control of Water Concept Development

Kimley-Horn will develop conceptual options to address stream diversion during construction. The various options for control of water will be discussed with the City so that a concept may be selected that is consistent with the City's tolerance for risk. Various levels of protection may be provided, and the risk of the various options may be borne by the contractor, the owner, or shared. Generally, the cost of providing diversions that offer protection from larger storm events will increase the cost of construction. The means to divert water during construction will influence the construction cost and schedule. The means to divert water during construction may also influence the spillway and reservoir drain designs. The concept will be incorporated into the preliminary design report. Corresponding calculation packages will be prepared, signed and sealed, as needed for inclusion into the attachments of the report.

4.2.6 Preliminary (30%) Design Drawings

Schnabel will prepare preliminary design drawings during this task. The preliminary design drawings will include a layout of the proposed spillway system and proposed modifications to the embankment. Typical cross sections, profiles, and details of major components will also be developed. Consideration will be given to subsurface, topographical, and environmental site constraints and conditions, constructability, aesthetics, and operation and maintenance. During this task, Kimley-Horn will prepare preliminary control of water drawings.

Drawings will be prepared using the City's template provided to Schnabel via email on January 14, 2026. Drawings will be prepared in AutoCAD Civil 3D 2026 and provided in digital format. It is anticipated that the following sheets will be provided:

1. Cover Sheet
2. Legend and Sheet Index
3. Existing Site Plan
4. Proposed Site Plan
5. Proposed Embankment Sections
6. Proposed Spillway Plan

7. Typical Spillway Sections
8. Proposed Control of Water Concept

Interim design sketches and data related to specific areas of concern will be submitted to the City on an informal, as needed, basis (email) to solicit feedback.

4.2.7 Preliminary Cost

A preliminary engineer's opinion of probable construction cost and construction schedule estimate will be developed. The quantities will be estimated from the preliminary design drawings, and unit and lump sum prices will be assigned based on published references, manufacturers' information, and bid tabs from other similar dam retrofit projects. A contingency of up to 30% will be included to account for uncertainties and for items that will be developed during the next phases of the design.

4.2.8 Preliminary (30%) Design Submittal

The preliminary design submittal will, at a minimum, include a preliminary design report, the preliminary design drawings described above, a list of technical specifications, and preliminary cost and schedule estimates. These submittals will be further refined during subsequent tasks of the project.

Addressing one round of consolidated comments from the City have been included for budgeting purposes. Review comments provided by the City will be addressed and incorporated into the next design phase, as appropriate.

4.2.9 Meetings

In addition to the in-person meeting described in Section 4.2.3, seven bi-weekly virtual meetings and one additional in-person review meeting with the City have been included for this task. Task leaders will attend these meetings at the discretion of the Project Manager. For each bi-weekly meeting, an updated project schedule will be provided. Schnabel will prepare meeting agendas and meeting minutes for all meetings and will submit these documents to the City for their records.

4.3 Task 3 – Detailed (90%) Design, Easement Acquisition Support, and Final (100%) Design

4.3.1 Detailed Design

The scope of services included under this task includes:

- Revisions as a result of preliminary design review comments received from the City will be addressed and incorporated throughout this task as applicable.
- Update the hydraulic analyses performed during the preliminary design to account for changes in the design since that time.
- Update the geotechnical analyses and design considerations developed during the preliminary design to reflect any design refinements. The drain layout and details for the spillway will be finalized. Drain outlet details will be developed for the structures and the embankment drainage systems, if necessary. The seepage and stability analyses performed during the preliminary design will be updated based on the final configuration. Settlement analyses will be performed for the principal spillway, as needed. If necessary and based on the results of our subsurface

exploration and engineering analyses, parameters will be developed for off-site borrow soils needed to supplement the soils obtained from on-site excavations.

- Update and finalize the control of water concept developed during the preliminary design. A design concept will be shown on the detailed design drawings and it is assumed that the Contractor will have responsibility for final design of temporary works including the stream diversion and other control of water features. Minimum constraints will be specified based on permitting requirements and input from the City. These items may include minimum top of cofferdam elevation, minimum size of conveyance, and/or minimum discharge requirements for the conveyance.
- Update the structural analyses developed during the preliminary design and prepare the design for the new reinforced concrete spillway and appurtenant structures. Structural analyses will be performed in accordance with the governing codes and standards, including ACI 350-20, Code Requirements for Environmental Engineering Concrete Structures, and USACE EM 1110-2-2100, Stability Analysis of Concrete Structures. It is anticipated that analyses will be performed to size and detail the following structural components:
 - Spillway orifice and weir,
 - Culvert(s),
 - Cutoff or starter walls (if needed for overtopping protection),
 - Headwalls and outlet walls, and
 - Energy dissipation components.
- Expand and revise the preliminary design drawings to include modifications made during this task. Drawings will include updated plans, sections, profiles, details, explanatory notes and scales. In addition, the drawings will include items such as permanent access locations, excavation limits, proposed right-of-way, and permanent and temporary easements.
- Develop technical specifications for the proposed work. The technical specifications will be prepared using City standards, as appropriate. Special provision technical specifications will follow the current Construction Specification Institute (CSI) master format.
- Prepare an engineer's opinion of probable construction cost and a detailed construction schedule estimate. The quantities will be estimated from the detailed design drawings, and unit and lump sum prices will be assigned based on published references, manufacturers' information, and bid tabs from other similar dam retrofit projects. The preliminary construction schedule will be based on the assumed construction sequence and will include critical milestones that will be encountered during construction.

4.3.2 Detailed Design Submittal

The detailed design report will be prepared by updating the preliminary design report to address preliminary design review comments, as well as incorporating the services described in Section 4.3.1, Detailed Design. Detail design deliverables will be submitted to the City for review in digital format.

4.3.3 Meetings

This Task includes, for budgeting purposes, sixteen bi-weekly virtual meetings with the City. Task leaders will attend any such meetings at the discretion of the Project Manager. For each bi-weekly meeting, an updated project schedule will be provided. Schnabel will prepare meeting agendas and meeting minutes for all meetings and will submit these documents to the City for their records.

Upon completion of this task, an in person meeting with the City will be held to discuss the detailed design deliverables. Review comments provided by the City will be addressed and incorporated into the final design, as needed.

4.3.4 Easement Acquisition Support

Following the Detailed Design, WithersRavenel, will prepare legal descriptions and up to twelve (12) legal-sized exhibits for the easements to be acquired within the project area. These exhibits and descriptions will be signed and sealed by a Professional Land Surveyor registered in the State of North Carolina. The exhibits and descriptions will be submitted to the City for review, and review comments will be addressed. Final exhibits will be provided in both hard copy and digital format.

4.3.5 Final (100%) Design Submittal

Following the detailed design review meeting and after receiving comments from the City's review, final design will proceed. The goal of this subtask includes addressing City's comments and refining all the Detailed Design deliverables to produce the Final Design deliverables.

The final design deliverables will include a final design report, final construction drawings in PDF and AutoCAD Drawings in DWG format, technical specifications, erosion and sediment control plans, and final cost and schedule estimates.

4.4 Task 4 – Permitting

4.4.1 NC DEQ Dam Safety

The proposed retrofit design will require approval from NC DEQ Dam Safety. Schnabel will submit the sealed final design deliverables to NC DEQ Dam Safety for review and approval. The final design submittal package will include:

- The application for review by NC DEQ Dam Safety
- Signed and sealed Design Report
- Signed and sealed Design Drawings
- Signed and sealed Technical Construction Specifications
- Operation and Maintenance Manual for the proposed dam
- Construction EAP Addendum Letter

One in person meeting with NC DEQ Dam Safety has been budgeted to review and discuss the submittal. One round of review comments from NC DEQ Dam Safety will be addressed, and the design deliverables will be updated based on the comments received.

4.4.2 Erosion and Sediment Control Plan and Narrative

For dam construction activities, a soil erosion and sediment control plan (E&S Plan) will need to be implemented. Kimley-Horn will prepare the erosion and sediment control plan and narrative as required by NCDEQ. A set of soil erosion and sediment control requirements will be developed for each stage of construction. The E&S Plan will be included as a standalone document in the detail (90%) and final (100%) design submittals. The final E&S Plan will be submitted to NC DEQ for review and approval.

4.4.3 Stream and Wetland Delineation

Kimley-Horn will perform a wetlands delineation survey at the beginning of this task and coordinate with USACE and other environmental regulators, as needed. The delineation flagging will be surveyed by WithersRavenel, and the delineation boundaries will be incorporated into the design documents.

As a part of this subtask, Kimley-Horn will conduct a field investigation to delineate streams, wetlands, and open waters within approximately 11-acres. Kimley-Horn will utilize the three-parameter approach for wetland delineations as described in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Potentially jurisdictional features will be assessed in the field using the guidelines presented in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). Data forms required to obtain US Army Corps of Engineers (USACE) and the NC Division of Water Resources (NCDWR) certification will be completed. Jurisdictional streams will be classified as either perennial or intermittent and will be documented per NCDWR stream classification protocol.

4.4.4 Agency Verification

Kimley-Horn anticipates that a Preliminary Jurisdictional Determination (PJD) will best meet the objectives for the site. Kimley-Horn will prepare a PJD request package for submittal to the USACE based on the findings from the stream and wetland delineation work.

Kimley-Horn will seek to obtain concurrence from the USACE on the wetlands, open waters, and/or streams identified within the site. As part of the PJD package, an Aquatic Resources Delineation Report (ARDR) will be included in the submittal to the USACE via the Regulatory Request System. The ARDR will be prepared following the standards put forth by the USACE Wilmington District's Recommended Minimum Standards for Aquatic Resource Delineation Reports published on July 21, 2025.

The PJD request package will consist of a cover letter, the required PJD forms, ARDR, figures, and supporting data forms. It is anticipated that one site inspection will be required with the USACE where Kimley-Horn will review the final delineation in the field with applicable agency representative. Kimley-Horn will perform minor modifications to the jurisdictional feature boundaries that may be deemed necessary by the USACE in order to obtain concurrence.

4.4.5 Protected Species Assessment

Kimley-Horn will review the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool and NC Natural Heritage Program's database of known protected species occurrences and conduct a desktop review of the site to locate areas of potentially suitable habitat for federally-listed threatened or endangered species known to occur within the site vicinity.

Following the desktop review, Kimley-Horn will conduct a field reconnaissance to confirm desktop-identified potentially suitable habitat. If suitable habitat for the bald eagle is present within the site, Kimley-Horn will perform pedestrian surveys for the bald eagle concurrently with the Stream & Wetland Delineation task. If suitable habitat is identified for plant species, pedestrian surveys for these species will be conducted in the appropriate USFWS recommended survey window in an additional site visit.

It is assumed that surveys for protected bat species and protected aquatic species will not be required as part of this effort. If it is determined that surveys for protected bat species or protected aquatic species are warranted, these efforts will be considered as additional services and covered under a future amendment.

Kimley-Horn will prepare a brief technical memorandum for the site outlining the findings of the protected species investigation and database review. The technical memorandum will include a figure identifying areas of potentially suitable habitat and any known occurrences within the site proximity. Consultation with the USFWS will not be conducted as part of this task but can be provided as an additional service if warranted.

4.4.6 401-404 Permitting

It is assumed that the project will qualify for authorization under a Nationwide Permit (NWP) Number 3 or Number 18 criteria. During this task, Kimley-Horn will conduct a Pre-Application Meeting with the USACE and NCDWR to present the permit approach and avoidance and minimization measures. Kimley-Horn will prepare a Section 404/401 NWP application including a cover letter, Pre-Construction Notification (PCN) form, figures, permit drawings, and site plans for the site. Kimley-Horn will submit the draft NWP application to Schnabel and the City for review.

Compensatory mitigation is not anticipated to be necessary for the project. Should mitigation be required by the agencies for stream or wetland impacts resulting from the projects, Kimley-Horn will coordinate with private mitigation banks or the NC Division of Mitigation Services (NCDMS) to reserve mitigation for the project impacts. On-site mitigation design services are not included in this scope but can be provided as an additional service if required.

Kimley-Horn will finalize the Section 404/401 NWP application and submit it to the regulatory agencies via the Regulatory Request System on the City's behalf. Upon submittal, Kimley-Horn will track the application through the regulatory review process. This will include addressing up to one (1) additional information request made by the regulatory agencies for the project. If additional studies, including but not limited to protected species surveys, or historical/cultural resources investigations, are requested by the permitting agencies, these efforts will be considered as an additional service. In addition, if the regulatory agencies determine that the Project does not qualify for authorization under the Nationwide Permit program and an Individual Section 404/401 Permit is required, these efforts will be considered as an additional service.

5.0 ADDITIONAL CONSIDERATIONS AND ASSUMPTIONS

In developing our scope and fees, the following considerations and assumptions have been made:

- Unless stated otherwise, all deliverables will be provided to the City in PDF format.
- Best management practices (BMPs) will be used to reduce erosion and sediment transport during the geotechnical investigation.
- From our previous experience on similar projects, a formal Stormwater Pollution Prevention Plan is not required for the proposed geotechnical drilling activities.
- Some tree clearing will be required to access the geotechnical boring locations with the track-mounted drill rig and this has been included in our fee estimate. Trees will not be uprooted, and stumps will not be removed.
- During the proposed geotechnical investigations, rutting and ground disturbance will be limited to the extent practical, but rutting may occur if site conditions are wet. The budgeted extent of the proposed site restoration includes placement of seed and straw over the areas disturbed during the drilling operations and minor hand grading to repair ruts. No additional repair efforts are included in our fee for this scope.
- The City will be responsible for coordination of the geotechnical investigation, surveys, and site reconnaissance (field investigations) with nearby property owners. No interaction will be carried out between our team and property owners in the area. It is assumed that the site access roads will be traversable with four-wheel drive equipment during our geotechnical investigations.
- Field investigations work hours will generally be between 7:30 AM and 5:30 PM, Monday through Friday. No limitations to site access during those work hours have been assumed. Progress of site work may be dependent upon weather and ground conditions, or other factors beyond our control.
- No additional considerations for site access or site improvement beyond the ones described in Section 4.1.3 have been included in our fees.
- The current dam breach inundation maps and EAP for College Lake Dam can be incorporated as is into the dam's Construction EAP Amendment.
- Per City's request, construction staging and stockpiling areas to be used during construction are excluded from the services listed above.
- One round of consolidated review comments from the City will be addressed for each deliverable submitted to the City.
- One round of consolidated review comments from NC DEQ Dam Safety will be addressed in the final design package.
- A maximum allowance of \$52,900 has been included to our fees under Task 4 – Permitting to account for application fees. If additional fees are required, we will notify the City as soon as possible.
- It is assumed that coordination with FEMA regarding floodplain permitting (No Rise, Conditional Letter of Map Revision and/or Letter of Map Revision) will not be required since College Lake Dam is not in a FEMA studied stream.

6.0 EXCLUSIONS

The following services are not included in this proposed scope, but a proposal for these services can be provided upon request:

- Attendance at Public Meetings, City Council Meetings, or other meetings beyond those described above.
- Topographic survey for proposed staging and stockpiling areas necessary during construction.
- Locating or surveying public or private utilities.
- Archaeological, historical or cultural investigations and/or surveys.
- Determination and geotechnical investigation of potential soil borrow areas.
- Site restoration beyond seeding and minor hand grading at locations disturbed by drilling activities.
- An Emergency Action Plan (EAP) and dam breach inundation analysis. It is our understanding that an EAP and dam breach inundation maps are not required for College Lake Dam. If an updated EAP and maps are required based on the proposed configurations, Schnabel will notify the City and include those services in the proposal cost for the next phase of the project.
- Design of stormwater features or roadways.
- Submittal of the E&S Plan via the express permitting method.
- Preparation or submittal of an Individual Section 404/401 Permit.
- Section 7 Consultation with the USFWS.
- Bidding and construction services.

7.0 PROJECT FEES

Our time-and-materials (T&M) fees are summarized below and are for the specific scope of services detailed herein. The services for this work authorization have been divided into four tasks, as shown in the table below. Fees for Task 1 and Task 2 were developed assuming the services will be performed in 2026*, while fees for Task 3 and Task 4 were developed assuming the services will be performed in 2027; our 2027 rates have been estimated as a 3% increase from the 2026 rates. If authorization or performance is delayed, fee adjustments may be warranted to reflect the current billing rates.

The fee for work requested beyond the scope of services included herein will be based on our current unit prices at the time the work is authorized or a negotiated T&M fee.

Task	Fee Type	Total Fee
Task 1 - Evaluation of Existing Conditions*	T&M	\$271,300
Task 2 - Review of Proposed Retrofit Alternative and Preliminary (30%) Design*	T&M	\$385,300
Total Fees		\$656,600
Task 3 - Detailed (90%) Design, Easement Acquisition Support, and Final (100%) Design**	T&M	\$831,000
Task 4 – Permitting (includes \$52,900 to cover permitting application fees) **	T&M	\$170,400
Total Fees		\$1,001,400
Estimated Total Project Cost		\$1,658,000

*See Attachment 2 for 2026 Schedule of Personnel Fees

**2027 rates have been estimated as a 3% increase from the 2026 rates

Invoices will be submitted in accordance with our Professional Services Agreement (PSA) with the City dated February 13, 2026 (see Exhibit B). Payment will be due on receipt of our invoices and will be considered past due 30 days after the invoice date. Payments will not be contingent on receipt of funds from third parties. Interest at 1.5% per month will be charged on all overdue amounts.

8.0 PROJECT SCHEDULE

The following project schedule presented in Table 8-1 outlines the major tasks, milestones, and anticipated durations associated with completing the dam retrofit design. The project schedule has been prepared assuming that work will not be performed during the weekends and up to eight holidays per calendar year. The project schedule for Tasks 1 through Task 3 is structured to be completed within approximately fourteen (14) months following notice to proceed (NTP). The permitting (Task 4) schedule has been prepared assuming NCDEQ Dam Safety requires six (6) months to complete their review.

Table 8-1: Proposed Project Schedule

Task Name	Duration
Kickoff Meeting (completed)	1 day
Project Schedule (Assumes no work on weekends and with an average of 8 holidays/year)	449 days
Task 1 – Evaluation of Existing Conditions (approximately 3 months)	72 days
Task 2 – Review of Proposed Rehabilitation Alternatives and Preliminary Design (approximately 6 months)	128 days
Task 3 – Detailed (90%) Design, Easement Acquisition Support, and Final (100%) Design (approximately 7 months)	140 days
Task 4 - Permitting	350 days

9.0 GENERAL

Schnabel understands the terms and conditions included in our Professional Services Agreement (PSA) with the City dated February 13, 2026 (see Exhibit B) will apply to the services proposed herein. The City is expected to develop the Work Authorizations referencing the PSA and this proposal (Exhibit A) to form our agreement for these services. After the Work Authorization has been signed by Schnabel and the City, the City will issue a Purchase Order.

This proposal is valid for 90 days from the date shown.

Schnabel appreciates the opportunity to submit our proposal for these services and are looking forward to working with you on this project. Please contact our office if you have any questions regarding this proposal.

Sincerely,

SCHNABEL ENGINEERING SOUTH, P.C.



Jonathan M. Pittman, PE
Executive Vice President

MRG:JG:SMB:AS:CC:EBB:JMP

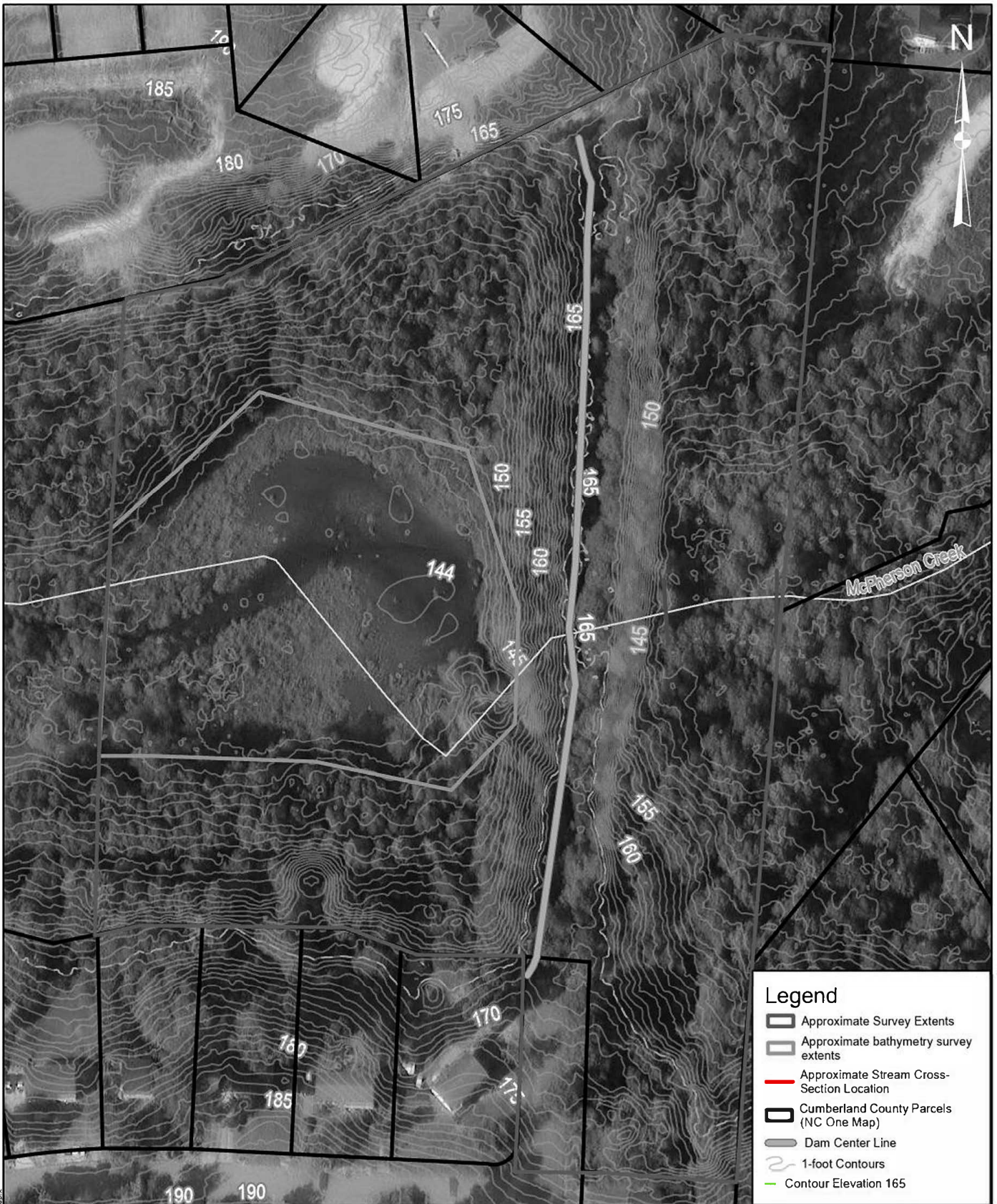
Figures:

Figure 1: Proposed Extents of the Topographic Survey

Figure 2: Boring Location Plan

Attachments:

- (1) Proposed Geotechnical Subsurface Investigation Scope
- (2) Schedule of Personnel Fees



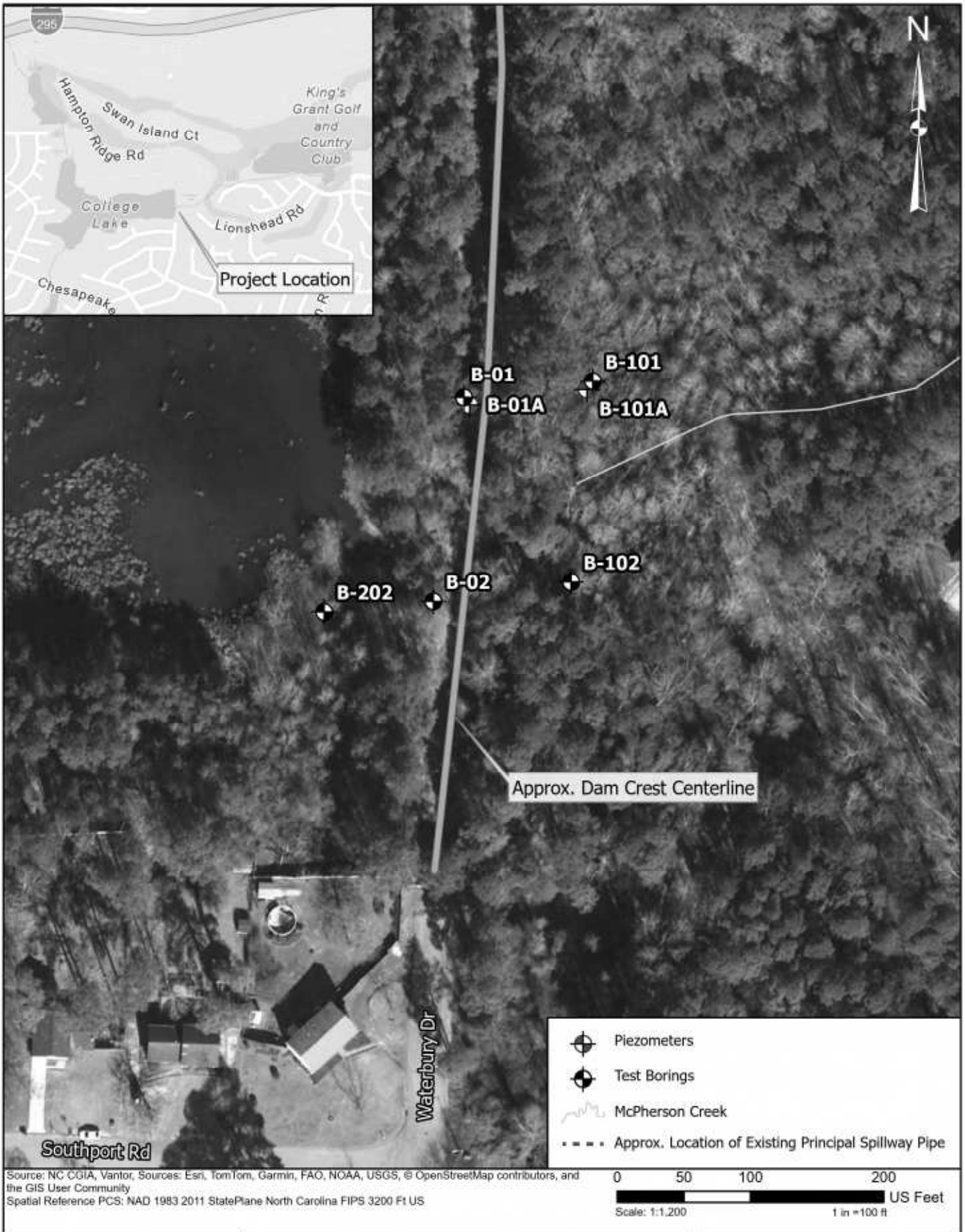
Source: NC CGIA, Microsoft, Vantor
Spatial Reference PCS: NAD 1983 2011 StatePlane North Carolina FIPS 3200 Ft US

0 62.5 125 250
Scale: 1:1,500 US Feet
1 in = 125 ft



COLLEGE LAKE DAM
CITY OF FAYETTEVILLE
FAYETTEVILLE, NC
PROJECT NO. 25210037.000

APPROXIMATE SURVEY EXTENTS
MAP
FIGURE 1



COLLEGE LAKE DAM RETROFIT
CITY OF FAYETTEVILLE
FAYETTEVILLE, NORTH CAROLINA
PROJECT NO. 25210037.001

BORING LOCATION
PLAN

FIGURE 2

Attachment 1: Proposed Geotechnical Subsurface Investigation Scope							
Boring	Location of Boring	Purpose of Boring	Soil Sampling	Proposed Depth Criteria		Hydraulic Conductivity Testing	Backfilling
				Termination Depth (feet)	Rock Core Length (feet) ^{1,2}		
B-01	Dam Crest	Assessment of embankment and foundation materials for rehab design and slope stabilization	Continuous 2-ft SPTs	60	15	Falling Head Test	Cement/bentonite grout by tremie pipe
B-01A	Dam Crest	Assessment of embankment and foundation materials	4 UD Shelby tubes at engineer specified intervals	30	N/A	Slug Test	Install Piezo, 5 ft screen, cement/bentonite grout by tremie pipe
B-02	Dam Crest	Assessment of embankment and foundation materials for rehab design and slope stabilization	Continuous 2-ft SPTs	60	15	Falling Head Test	Cement/bentonite grout by tremie pipe
B-101	Downstream Toe	Assessment of foundation materials	Continuous 2-ft SPTs	30	10	N/A	Cement/bentonite grout by tremie pipe
B-101A	Downstream Toe	Assessment of foundation materials	2 UD Shelby tubes at engineer specified intervals	20	N/A	Slug Test	Install Piezo, 5 ft screen, cement/bentonite grout by tremie pipe
B-102	Downstream Toe	Assessment of foundation materials	Continuous 2-ft SPTs	30	10	N/A	Cement/bentonite grout by tremie pipe
B-202	Upstream Toe	Assessment of foundation materials	Continuous 2-ft SPTs	30	10	N/A	Cement/bentonite grout by tremie pipe

Notes:

1. Rock will be cored only if auger refusal is encountered before termination depth. There is no need to extend rock coring deeper than the termination depth.

2. This is the maximum length of cored rock regardless of RQD and may be less if termination depth is encountered.

3. Falling head testing will be performed if competent rock is encountered before the termination depth.

1. Rock will be cored only if auger refusal is encountered before termination depth. There is no need to extend rock coring deeper than the termination depth.
2. This is the maximum length of cored rock regardless of RQD and may be less if termination depth is encountered.
3. Falling head testing will be performed if competent rock is encountered before the termination depth.

- _____



**SCHEDULE OF PERSONNEL FEES – GREENSBORO, NORTH CAROLINA
DAMS AND RESERVOIRS (EASTERN UNITED STATES)
Effective until December 31, 2026**

Senior Consultant	\$375.00/hr
Principal	343.00/hr
Senior Associate	311.00/hr
Associate	277.00/hr
Senior Engineer/Scientist	234.00/hr
Project Engineer/Scientist	203.00/hr
Construction Resident Engineer/Resident Project Representative	203.00/hr
Senior Staff Engineer/Scientist/Technologist	179.00/hr
Staff Engineer/Scientist/Technologist	155.00/hr
Senior Technician II/Construction Resident Technician (see note 4)	147.00/hr
Senior Technician I (see note 4)	124.00/hr
Technician III (see note 4)	110.00/hr
Technician II (see note 4)	90.00/hr
Technician I (see note 4)	80.00/hr
Senior CAD Designer	179.00/hr
CAD Designer III	165.00/hr
CAD Designer II	150.00/hr
CAD Designer I	126.00/hr
Clerical/Admin	96.00/hr

NOTES:

1. Personnel fees will be based upon the actual hours charged times the appropriate hourly rate.
2. Travel by auto to and from jobs will be charged at the current IRS prevailing rate. Travel by air or rail, lodging and meal expenses for personnel in the field will be billed at cost.
3. Per Diem rates for out-of-town or overnight travel will be in accordance with U.S. General Services Administration rates published on website www.GSA.gov for the area in which the project is located.
4. Overtime for Technicians is time for work on Saturday, Sunday and federal holidays, time in excess of 8 hours per day, and time between the hours of 7:00 P.M. and 7:00 A.M. A surcharge of \$15/hr is added to the above rate for overtime.

PROFESSIONAL SERVICES AGREEMENT FOR ON-CALL CONSULTING SERVICES

BETWEEN

CITY OF FAYETTEVILLE
FAYETTEVILLE, NORTH CAROLINA

AND

SCHNABEL ENGINEERING SOUTH, P.C.

February 13, 2026

**STATE OF NORTH CAROLINA
COUNTY OF CUMBERLAND**

**PROFESSIONAL SERVICES AGREEMENT
FOR ON CALL CONSULTING SERVICES**

THIS PROFESSIONAL SERVICES AGREEMENT or “Agreement”, effective the 13th day of February 2026 by and between **THE CITY OF FAYETTEVILLE, NORTH CAROLINA** (hereinafter referred to as **CITY**), with principal business offices at Fayetteville, North Carolina, and **SCHNABEL ENGINEERING SOUTH, P.C.** (hereinafter referred to as **CONSULTANT**), a professional corporation with principal business offices at 11A Oak Branch Drive, Greensboro, North Carolina 27407.

W I T N E S S E T H:

WHEREAS, CITY, is engaged in the operation and maintenance of facilities and services which from time to time require revision, renovation and extension of existing facilities, and the construction of new facilities and other related projects; and

WHEREAS, the professional services of engineers, architects, surveyors and others will from time to time in the future be needed by the **CITY** in the renovation of existing facilities, and in the construction of new facilities and other related projects; and

WHEREAS, pursuant to N.C.G.S. § 143-64.31 it is the public policy of this State that municipalities announce all requirements for architectural, engineering and surveying services, to select firms qualified on the basis of demonstrated competence and qualification and to negotiate contracts for services at a fair and reasonable fee with the best qualified firm; and

WHEREAS, CONSULTANT provides professional engineering consulting services of the nature required by the **CITY** and employs trained and experienced engineering, technical and/or other personnel possessing adequate knowledge, skills and experience to provide professional services to the **CITY**; and

WHEREAS, the parties contemplate that the on-call services of **CONSULTANT** will be performed on an as needed basis, in various stages in accordance with separate authorizations to be issued by **CITY**, and the parties desire to set forth the basic terms of their agreement in this Professional Services Agreement rather than in separate authorizations to be issued by **CITY**.

NOW THEREFORE, IN CONSIDERATION of the premises and the mutual covenants herein contained, the parties hereto do hereby contract and agree as follows:

ARTICLE 1. TERM OF AGREEMENT. The term of this Professional Services Agreement for On-Call Consulting Services shall be for three (3) years from the date it is effective. The Agreement may be extended thereafter by mutual written agreement of the parties.

1.1. ASSIGNMENT. It is the intent of this Professional Services Agreement to secure the

professional engineering services of **CONSULTANT** and failure of **CONSULTANT** for any reason to make the professional engineering services available to the **CITY** for the purposes described in this Professional Services Agreement shall be cause for termination of this Agreement. **CONSULTANT** shall not assign this Agreement without prior written consent of the **CITY**. Nothing contained in this paragraph shall prevent **CONSULTANT** from employing such independent consultants, associates and subcontractors as it may deem appropriate to assist **CONSULTANT** in the performance of services rendered.

ARTICLE 2. COMPENSATION. **CONSULTANT** shall submit to **CITY** monthly invoices for services performed and accepted during that month. **CITY** agrees to pay **CONSULTANT's** monthly invoice within thirty (30) days after said invoice is received by the **CITY**. Adjustments to an invoice for billing errors may extend the time for payment. For clarity, compensation to **CONSULTANT** shall be based upon task and/or work authorizations that are provided to and agreed upon by the **CITY**. The signing of this Professional Services Agreement does not bind or obligate the **CITY** to pay **CONSULTANT** any compensation.

2.1. VERIFICATION OF INVOICES. **CITY** has the right to require the **CONSULTANT** to produce for inspection all **CONSULTANT's** time records, salaries of personnel and charges for direct expenses for which cost-plus compensation is provided. **CONSULTANT** agrees to provide **CITY** with said records on a timely basis and cooperate with **CITY** to verify the accuracy of all invoices.

2.2. NON- APPROPRIATION . Notwithstanding any other provisions of this Agreement, the Parties agree that payments due hereunder from the **CITY** are from appropriations and monies from the City Council and other governmental entities. In the event sufficient appropriations or monies are not made available to the **CITY** to pay the terms of this Agreement for any fiscal year, this Agreement shall terminate immediately without further obligation of the **CITY**.

ARTICLE 3. PROFESSIONAL STANDARDS AND DUTIES OF CONSULTANT. **CONSULTANT** shall be held to the same standard and shall exercise the same degree of care, skill and judgment in the performance of services for **CITY** as is ordinarily provided by members of the profession under the same or similar circumstances at the time in Cumberland County, North Carolina. **CONSULTANT** agrees that the professional engineering services performed shall be in a safe manner in compliance with all applicable laws, ordinances and regulations or rules. All professional engineering services provided by the **CONSULTANT** which are, or must be, performed by licensed professionals, will be performed by such professionals licensed by the State of North Carolina.

3.1. CONSULTANT NOT RESPONSIBLE FOR CONSTRUCTION MEANS OR SAFETY. Notwithstanding anything to the contrary: **CONSULTANT** for general construction projects shall not be responsible for any general contractor's or other project participant's failure to fulfill their contractual responsibilities to the **CITY**, nor shall **CONSULTANT** be responsible for construction means, methods, techniques, sequences, or procedures. Neither shall **CONSULTANT** be responsible for a project safety program or safety precautions unless **CONSULTANT** sets forth a safety program which is accepted by **CITY** and becomes a part of the agreement between the parties.

3.2. CONSULTANT AS CONSTRUCTION MANAGER. In the event the **CITY**

contracts with the **CONSULTANT** to provide Construction Management Services, but subject to Article 3.1, the **CONSULTANT** shall make site visits appropriate to the stage of construction to observe the progress and the quality of work and to attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. **CONSULTANT** will endeavor to protect **CITY** against defects and deficiencies in the work of contractors and will report any observed deficiencies to **CITY**. In no event shall **CONSULTANT** be responsible for any contractor's, subcontractor's, vendor's, or other project participant's failure to comply with federal, state or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards unless it has contracted with the **CITY** to do so.

ARTICLE 4. ESTIMATES OF COST AND TIME. Although **CONSULTANT** has no control over the cost of labor, materials, equipment or services furnished by others, or over contractor's, subcontractor's, or vendor's methods of determining prices, or over competitive bidding or market conditions, nevertheless **CONSULTANT's** cost estimates and time estimates shall be made on the basis of current labor and material prices and the **CONSULTANT's** experience and qualifications, and **CONSULTANT's** estimates shall be provided consistent with the standards set out in Article 3 (*Professional Standards and Duties of Consultant*). Although **CONSULTANT** has no control over the resources provided by contractors to meet contract schedules, nevertheless **CONSULTANT's** estimates or forecast of schedules shall be provided consistent with the standards set out in Article 3 (*Professional Standards and Duties of Consultant*). **CONSULTANT** does not guarantee that project costs and schedules will not vary from the estimates and schedules given to **CITY**.

ARTICLE 5. LIABILITY, INDEMNIFICATION AND INSURANCE.

5.1. GENERAL. The **CITY** and **CONSULTANT** have considered the risks and potential liability that may exist during the performance of services by **CONSULTANT** and have agreed to allocate such liabilities in accordance with this Article. During the performance of services under this Agreement, **CONSULTANT** shall purchase and maintain insurance coverage as hereinafter set forth, without lapse or changes contrary to the requirements of this section. Words and phrases used in this Article shall be interpreted in accordance with customary insurance industry usage and practice.

5.2 INDEMNITY & PROFESSIONAL LIABILITY INSURANCE. To the extent permitted by law, **CONSULTANT** agrees to indemnify and hold harmless the **CITY** and its elected officials, employees, agents, successors, and assigns, from any and all liability and claims for any injury or damage to the extent caused by any negligent or tortious act, omission or negligence of **CONSULTANT**, its agents, servants, employees, contractors, licensees, or invitees. Indemnification of the **CITY** by **CONSULTANT** does not constitute a waiver of the **CITY's** governmental immunity in any respect under North Carolina law. **CONSULTANT** agrees to purchase and maintain professional liability insurance (errors and omissions insurance) in the amount of \$1,000,000 coverage for each claim, with a general aggregate of \$2,000,000. Said insurance

coverage shall be underwritten by an insurance company authorized to do business in the State of North Carolina by the North Carolina Department of Insurance, with an A.M. Best rating of not less than A.

5.3 INDEMNITY & GENERAL LIABILITY INSURANCE. **CONSULTANT** agrees to indemnify and hold the **CITY**, its servants, agents and employees, harmless from and against all liabilities, claims, demands, suits, losses, damages, costs and expenses (including attorney's fees) for third party bodily injury to or death of any person, or damage to or destruction of any third party property, to the extent caused by the negligence of **CONSULTANT**, **CONSULTANT's** employees, and **CONSULTANT's** subcontractors, for whom **CONSULTANT** is legally responsible during the performance of services under this Agreement. **CONSULTANT** shall purchase and maintain at all times during performance of services under this Agreement Commercial General Liability Insurance ("CGL") with combined single limits of \$1,000,000.00 coverage for each occurrence with a general aggregate of \$2,000,000.00, designating the **CITY** as an additional insured and which said insurance provides **CONSULTANT** with insurance for contractual liability which **CONSULTANT** has assumed pursuant to the terms of this Agreement.

5.4. OTHER INSURANCE. In addition to professional liability insurance and commercial general liability insurance set forth above, **CONSULTANT** further agrees to purchase and maintain at all times during the performance of services under this Agreement insurance coverage as follows:

- Worker's Compensation Insurance as required by North Carolina law and said policy shall also afford coverage to **CONSULTANT** for employer's liability.
- Automobile liability insurance with \$1,000,000.00 combined single limit for each accident covering bodily injury and property damage.
- The CGL policy required above shall include independent contractor liability coverage.
- If applicable, the CGL policy required above shall provide **CONSULTANT** with products and completed operations insurance. Said coverage is to be written on an occurrence basis, with coverage extended for such a period of time in which suits can be filed before the running of the statute of limitations, on any claim for injury to person or property due to negligence of **CONSULTANT** in the design of any building designed by the **CONSULTANT** under the terms of this Agreement.

5.5. CERTIFICATES OF INSURANCE. **CONSULTANT** shall provide to **CITY**, within a reasonable time after request, certificates from the insurer(s) indicating the amount of insurance coverage, the nature of such coverage, and the expiration date of the policy for each of the insurance coverage requirements contained in Article 5.

ARTICLE 6. INDEPENDENT CONTRACTOR. **CONSULTANT** is an Independent Contractor and shall undertake performance of the services pursuant to the terms of this Agreement as an Independent Contractor at all times. **CONSULTANT** shall be wholly responsible for the methods, means and techniques of performance. **CITY** shall have no right to supervise methods and techniques of performance employed by **CONSULTANT**, but **CITY** shall have the right to observe such performance.

ARTICLE 7. COMPLIANCE WITH LAWS. **CONSULTANT** agrees that in performing

services pursuant to this Agreement to comply with all applicable regulatory requirements including federal, state and local laws, rules, regulations, orders, codes, criteria, and standards. **CONSULTANT** shall be responsible for procuring all permits, certificates, and licenses necessary to allow **CONSULTANT** to perform services under this Agreement. **CONSULTANT** shall not be responsible for procuring permits required for the construction of any building, unless such responsibility is specifically agreed to by **CONSULTANT**.

ARTICLE 8. CITY'S RESPONSIBILITIES. **CITY** will furnish to **CONSULTANT** all of **CITY'S** requirements for the project, including, but not limited to, scope of work, program, time constraints, schedule milestones, financial constraints, design objectives and design constraints, which are available to the **CITY** or which the **CITY** can reasonably obtain to furnish to **CONSULTANT** to enable **CONSULTANT** to respond to **CITY** and provide services for the project. Additionally, the **CITY** shall also be responsible for the following:

- Make final decisions utilizing information supplied by **CONSULTANT**.
- Designate personnel to represent **CITY** in matters involving the relationship between **CITY**, **CONSULTANT** and third parties.
- Provide such accounting, independent cost estimating, and insurance counseling services as may be required by the project.
- Provide such legal services as **CITY** may require or **CONSULTANT** may reasonably request with regard to legal issues pertaining to the project, including those which may be raised by contractors, subcontractors, vendors or other project participants.
- Enter into contracts for the purchase, construction, or other services with contractors, subcontractors, and vendors.
- Provide financing for the project and make all payments in accordance with the terms of the contract.

ARTICLE 9. TERMINATION OF CONTRACT FOR CAUSE. In the event of substantial failure by **CONSULTANT** to perform in accordance with the terms of this contract, the **CITY** shall have the right to terminate **CONSULTANT** upon ten (10) calendar days' written notice in which event **CONSULTANT** shall have neither the obligation nor the right to perform further services under this contract nor shall the **CITY** be obligated to make any further payment for work that has not been performed. **CONSULTANT** shall provide the **CITY** all reports, surveys or other related documents upon the **CITY's** request. In the event of termination for cause, **CITY** shall pay **CONSULTANT** for all services performed to the date of termination; provided, however, that all costs and charges incurred by **CITY** to complete the services beyond the total compensation available under this Agreement when terminated shall be deducted from any compensation due or which may become due to **CONSULTANT**.

ARTICLE 10. TERMINATION OF CONTRACT FOR CONVENIENCE. Upon thirty (30) calendar days' written notice to **CONSULTANT**, **CITY** may, without cause and without prejudice to any other right or remedy legally available to the **CITY**, terminate this Agreement. Upon such notice, **CONSULTANT** shall have neither the obligation nor the right to perform services under this Agreement nor shall the **CITY** be obligated to make any further payment for work that has not been performed in accordance with the terms stated herein. In such case of termination, **CONSULTANT** shall be paid for the completed services executed in accordance with this Agreement prior to the effective date of termination. Additionally, upon mutual agreement,

CONSULTANT may be paid for any completed and accepted work which takes place in order to achieve a specifically identified item in the scope of services or a milestone of the Agreement, between the written notice of termination and the effective date of termination. Unless otherwise stated or agreed upon, the effective date of termination shall automatically occur thirty (30) days after the written notice is sent by the **CITY**. Upon request by the **CITY**, **CONSULTANT** shall provide to the **CITY** all reports, surveys or other related documents upon the **CITY's** request and at the **CITY's** cost. **CONSULTANT** has no liability for **CITY's** use of incomplete reports, surveys or related documents.

ARTICLE 11. NONDISCLOSURE OF PROPRIETARY INFORMATION. **CONSULTANT** shall consider all information provided by **CITY** and all drawings, reports, studies, calculations, plans, specifications, and other documents resulting from the **CONSULTANT'S** performance of the services to be proprietary, unless such information is available from public sources. **CONSULTANT** shall not publish or disclose proprietary information for any purposes other than the performance of the services without the prior written authorization of **CITY**. **CONSULTANT** shall not make any written or verbal statement to any press or news media concerning the Project without the written authorization of **CITY**.

ARTICLE 12. NOTICE. Any formal notice, demand, or request required by or made in connection with this agreement shall be in writing and shall be delivered by hand or mailed by the United States mail, postage prepaid, to the address specified below.

TO CITY: **CITY OF FAYETTEVILLE**
ATTENTION: DR. DOUGLAS J. HEWETT
CITY MANAGER
433 HAY STREET
FAYETTEVILLE, NORTH CAROLINA 28301

TO CONSULTANT: **SCHNABEL ENGINEERING SOUTH, P.C.**
ATTENTION: MARIDEE ROMERO-GRAVES VICE PRESIDENT
11A OAK BRANCH DRIVE
GREENSBORO, NC 27407

Nothing contained in this Article shall be construed to restrict the transmission of routine communication between representatives of **CONSULTANT** and **CITY**.

ARTICLE 13. FORCE MAJEURE. Neither party shall be deemed to be in default of its obligations hereunder or responsible for any delay or failure of performance if and *so long as* it is prevented from performing such obligations by an act of war, hostile foreign actions, adverse governmental actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

ARTICLE 14. GOVERNING LAW. The validity, interpretation, and execution of this Agreement and the performance of and rights accruing under this Agreement are all to be governed by the laws of the State of North Carolina.

ARTICLE 15. MISCELLANEOUS.

15.1. NONWAIVER FOR BREACH. No breach or non-performance of any term of this Agreement shall be deemed to be waived by either party unless said breach or non-performance is waived in writing and signed by the parties. No waiver of any breach or non-performance under this Agreement shall be deemed to constitute a waiver of any subsequent breach or non-performance and for any such breach or non-performance each party shall be relegated to such remedies as provided by law.

15.2. PRECEDENCE. In the event of any conflict or discrepancy between the terms of this Agreement and the specific written authorization to proceed pursuant to this Agreement, then the written authorization to proceed shall be given precedence over this Agreement in resolving such conflicts or discrepancies. If any conflict or discrepancy is discovered by either party hereto, then the written authorization to proceed, or this Agreement, shall be modified or amended, as necessary.

15.3. SEVERABILITY. The Parties agree that if any provision of this Agreement shall be held invalid for any reason, the remaining provisions shall not be affected if they may continue to conform to the purposes of this Agreement and the requirements of applicable law.

15.4 STATUTE OF LIMITATIONS. No action, regardless of form, arising out of this Agreement may be brought by either party after the applicable statute of limitations giving rise to the alleged cause of action.

ARTICLE 16. INTEGRATED AGREEMENT. The CITY's authorization to proceed and this Professional Services Agreement for Consulting Services shall be integrated into and shall become the integrated agreement between the parties. **CONSULTANT** and **CITY** agree that all prior negotiations, representations, letters, agreements, understandings, or other communications between them, whether written or oral, are hereby merged into the Agreement and that the Agreement supersedes all such prior negotiations, contracts and/or agreements. This Agreement shall not be modified unless such modifications are evidenced in writing, signed by both **CONSULTANT** and **CITY**.

ARTICLE 17. BENEFITS LIMITED TO PARTIES. Nothing herein shall be construed to give any right or benefits hereunder to anyone other than **CITY** and **CONSULTANT**.

ARTICLE 18. VENUE AND FORUM. The Parties expressly agree that if litigation is brought in connection with this Agreement and (1) the litigation proceeds in the Courts of the State of North Carolina, the Parties agree that the appropriate venue shall be in Cumberland County (Fourteenth Judicial District of North Carolina); or (2) the litigation proceeds in a federal court, the Parties agree that the appropriate venue shall be the United States District Court for the Eastern District of North Carolina.

ARTICLE 19. E-VERIFY. **CONSULTANT** hereby acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. **CONSULTANT** further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with

NCGS §64-26(a). **CONSULTANT** hereby pledges, attests and warrants through execution of this Agreement that **CONSULTANT** complies with the requirements of Article 2 of Chapter 64 of North Carolina General Statutes and further pledges, attests and warrants that any subcontractors currently employed by or subsequently hired by **CONSULTANT** shall comply with any and all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Agreement.

ARTICLE 20. MORALITY CLAUSE. If, in the sole opinion of the **CITY**, at any time **CONSULTANT** or any of its owner(s) or employee(s) or agent(s) (collectively referenced as an “Actor”) engages in any one or more of the actions below, the **CITY** may immediately upon written notice to **CONSULTANT**, terminate this Agreement, in addition to any other rights and remedies that the **CITY** may have hereunder or at law or in equity:

9. bring disrepute, contempt, scandal, or public ridicule to the Actor;
10. subject the Actor to prosecution;
11. offend the community or public morals/decency;
12. denigrate individuals or groups in the community served by the **CITY**;
13. is scandalous or inconsistent with community standards or good citizenship;
14. adversely affect the **CITY**’s finances, public standing, image, or reputation;
15. is embarrassing or offensive to the **CITY** or may reflect unfavorably on the **CITY**; and,
16. is derogatory or offensive to one or more employee(s) or customer(s) of the **CITY**.

ARTICLE 21. DIVESTMENT OF COMPANIES BOYCOTTING ISRAEL OR THAT INVEST IN IRAN CERTIFICATION. **CONSULTANT** certifies that: (i) it is not identified on the Final Divestment List or any other list of prohibited investments created by the NC State Treasurer pursuant to N.C.G.S. § 147-86.58; (ii) it has not been designated by the NC State Treasurer pursuant to N.C.G.S. § 147-86.81 as a company engaged in the boycott of Israel ((i) and (ii) to be collectively referred to as “FD Lists”); and (iii) it will not take any action causing it to appear on the Treasurer’s FD Lists created by the NC State Treasurer during the term of this Agreement. By signing this Agreement, **CONSULTANT** further agrees, as an independent obligation, separate and apart from this Agreement, to reimburse the **CITY** for any and all damages, costs and attorneys’ fees incurred by the **CITY** in connection with any valid claim, brought by a third party, that this Agreement or any part thereof is void due to **CONSULTANT** appearing on the Treasurer’s FD Lists at any time before or during the term of this Agreement.

ARTICLE 22. CITY’S TERMS SUPERSEDE. To the extent that there are terms in any of the attachments that conflict with the terms of this Agreement, the terms of this Agreement are superseding.

ARTICLE 23. SURVIVAL OF TERMS. All warranties, covenants, and representations contained within this Agreement and all applicable work authorizations, if any, shall continue in full force and effect for three (3) years after the execution and delivery of the final product, act, or service taken in furtherance of this Agreement. Survivability shall not be impacted, or otherwise shall not be rendered null or void, by the termination or natural expiration of this Agreement or other applicable work undertaken in furtherance of this Agreement.

ARTICLE 24. NON-DISCRIMINATION. **CONSULTANT** agrees not to discriminate by

reason of age, race, religion, color, sex, national origin, disability or other applicable law while performing the services required herein.

ARTICLE 25. LIMITATIONS. CONSULTANT's total liability to CITY under each authorization shall not exceed the total compensation paid under the authorization, or \$1,000,000, whichever is greater; any portion of liability determined to be consequential damages under this per authorization limit, shall not exceed the compensation paid under the authorization. In no event shall CONSULTANT's total liability in the aggregate, for all services under this Agreement, exceed \$4,000,000. Limits set forth in this Agreement shall apply notwithstanding any and all causes whatsoever including, but not limited to negligence (of any degree), errors, omissions, warranty, indemnity, strict liability or breach of contract.

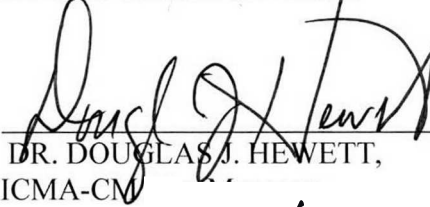
IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized representatives effective the day and year first above written.

ATTEST:


JENNIFER L. AYRE
City Clerk



CITY OF FAYETTEVILLE


DR. DOUGLAS J. HEWETT,
ICMA-CM

DATE: 3/26/26

SCHNABEL ENGINEERING SOUTH, P.C.

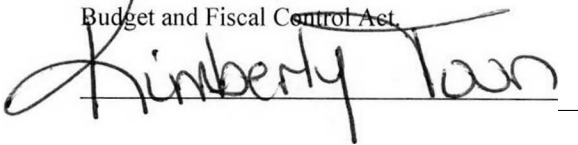
BY: Evan Binder

PRINT: : Evan Binder

TITLE: : Vice President

DATE: : 02/16/2026

This instrument has been pre-audited in the
manner required by the Local Government
Budget and Fiscal Control Act


Kimberly Tarr