

RESOLUTION 25-236

A RESOLUTION TO SELECT THOMAS & HUTTON ENGINEERING CO. FOR ENGINEERING SERVICES FOR THE WATER SUPPLY RESERVOIR AND PARK PROJECT AND AUTHORIZE THE MAYOR TO EXECUTE THE LETTER AGREEMENT FOR SERVICES

WHEREAS, the City of Spring Hill recognizes the need to evaluate and plan for a Water Supply Reservoir and Park within Maury County, Tennessee; and

WHEREAS, the City of Spring Hill has requested Thomas & Hutton Engineering Co. to provide professional engineering services for said project; and

WHEREAS, Thomas & Hutton has submitted a Letter Agreement for Services dated August 29, 2025, to provide general consulting, master planning, surveying, permitting, environmental assessments, geotechnical studies, water quality evaluation, and project management services, attached hereto as Exhibit A; and

WHEREAS, the proposed services shall be funded by Spring Hill Water, and sufficient funds have been allocated within the FY26 budget; and

NOW, THEREFORE, BE IT RESOLVED, that the Board of Mayor and Aldermen of the City of Spring Hill authorize the Mayor as follows:

1. To approve the Letter Agreement for Services with Thomas & Hutton Engineering Co. attached in Exhibit A, for a total not to exceed fee of **\$2,310,800.00**.
2. To authorize the Mayor to execute the Agreement and any related documents on behalf of the City.

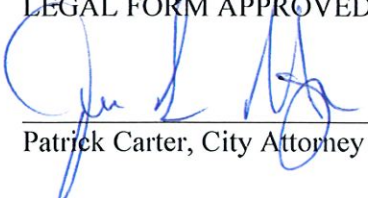
Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, on this 6th day of October, 2025.


Matt Fitterer, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:


Patrick Carter, City Attorney

STAFF MEMORANDUM

TO: Board of Mayor and Aldermen

FROM: Dan Allen | Assistant City Administrator, General Manager – Spring Hill Water

DATE: 10/06/2025

SUBJECT: Resolution – Task Order for Water Supply Reservoir

RECOMMENDATION:

Staff recommends approval of **Resolution 25-236**, authorizing the Mayor to execute the Letter Agreement with Thomas & Hutton Engineering Co. for the Water Supply Reservoir and Park Project.

BACKGROUND:

The City of Spring Hill continues to evaluate long-term water supply and recreational needs. To move this initiative forward, the City requested a proposal from **Thomas & Hutton Engineering Co.** for professional services related to the **Water Supply Reservoir and Park Project**.

FINANCIAL IMPACT:

This project will be funded through **Spring Hill Water**, with adequate funds allocated in the FY25-26 budget.

SUPPORTING DOCUMENTS:

- Resolution 25-236
- Letter Agreement for Services (Thomas & Hutton, August 29, 2025)



Exhibit A



August 29, 2025

Mr. Dan Allen
City of Spring Hill, Tennessee
199 Town Center Pkwy,
Spring Hill, TN 37174

Re: Water Supply Reservoir and Park
Spring Hill, Maury County, Tennessee
Letter Agreement for Services

Mr. Allen:

Thank you for requesting our engineering services for the Water Supply Reservoir & Park.

Our services will consist of the general consulting services, master planning, surveying and permitting, as set forth in the General Provisions and supplemental exhibits attached hereto, and such additional services as you may request during the course of the Project. We understand that you will furnish Thomas & Hutton with full information as to your requirements, including any special or extraordinary considerations for the Project and will make all pertinent existing data available to us.

Payment for our services will be as described in the attached General Provisions. You will be billed monthly for our services rendered and for Reimbursable Expenses.

We propose that payment for our services will be as follows:

<u>Phase</u>	<u>Fee Structure</u>	<u>Fee or Time & Expense Budget</u>
General Consulting:	Time & Expense – Budget	\$ 50,000.00
Park Master Plan:		
Task 1 – Subsurface Exploration and Suitability Analysis	Lump Sum	\$ 20,000.00
Task 2 – Final Public Involvement	Lump Sum	\$ 4,500.00
Task 3 – Final Illustrative Plan	Lump Sum	\$ 7,500.00
Archeological Study:	Lump Sum	\$ 8,700.00
Protected Species Assessment:	Lump Sum	\$ 8,000.00
Existing and Proposed Pumping and Piping Evaluation	Lump Sum	\$ 42,000.00

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<u>Phase</u>	<u>Fee Structure</u>	<u>Fee or Time & Expense Budget</u>
Water Quality Evaluation and Coordination	Lump Sum	\$ 333,300.00
Geotechnical Study/Report:		
Task 1 – Subsurface Exploration	Lump Sum	\$ 1,370,000.00
Task 2 – Data Report	Lump Sum	\$ 82,225.00
Task 3 – Alternatives Assessment and Conceptual Design	Lump Sum	\$ 286,000.00
Task 4 – Project Management and Meetings	Lump Sum	\$ 46,575.00
Survey:	Lump Sum	\$ 17,000.00
SWPPP Permit:	Time & Expense – Budget	\$ 30,000.00
Reimbursable Expenses:	Time & Expense – Budget	\$ 5,000.00
Total		\$ 2,310,800.00

Additional Services: Time & Expense – See "Consulting Services Rate Sheet"

The above fee arrangements are based on prompt payment of our invoices and the orderly and continuous progress of the Project through completion.

It is necessary that you advise us in writing at an early date if you have budgetary limitations for the overall Project cost or Construction Cost. We will endeavor to work within those limitations. At appropriate times during the Design Phase, we can submit to you our opinions as to the probable Construction Cost of the Project. We do not guarantee that our opinions will not differ materially from bids or negotiated prices.

This proposal between the City of Spring Hill, Tennessee ("Client"), and Thomas & Hutton Engineering Co. ("Consultant" or "Thomas & Hutton"), consisting of the Scope of Services, General Provisions, Consulting Services Rate Sheet, and this Letter Agreement with authorizing signatures, represents the entire understanding between Client and Thomas & Hutton with respect to the Project. This Letter Agreement may only be modified if completed in writing and signed by both parties.

If the arrangements set forth in this Letter Agreement are acceptable to you, ***please sign and initial the enclosed documents in the spaces provided below and return to Thomas & Hutton.*** This proposal will be open for acceptance until October 25, 2025, unless changed by Thomas & Hutton in writing. We appreciate the opportunity to prepare this proposal and look forward to working with you on the Project.

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The parties agree and acknowledge that this Agreement may be executed by electronic signature, and the parties may rely upon such electronic signatures as an original record of signature.

Respectfully,

THOMAS & HUTTON ENGINEERING CO.

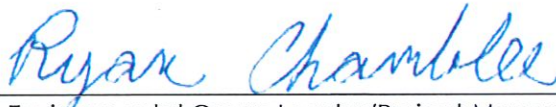
By


Benny K. Jones, Jr., PE
Senior Vice President/Chief Operating Officer

By


Trent V. Thompson, PE
Vice President of Infrastructure

By


Ryan Chamberlee
Environmental Group Leader/Project Manager

Enclosures: Scope of Services
General Provisions
Consulting Services Rate Sheet
Exhibits

CITY OF SPRING HILL, TENNESSEE

ACCEPTED: Oct 6, 2025

By


Mayor
TITLE

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SCOPE OF SERVICES

1. SCOPE OF SERVICES

A. General Consulting Phases

1. General Consulting Phase

Consultant shall assist Client during early stages of the Project. Assistance may include assembling documents, responding to questions, and feasibility analyses. Services will be provided on a Time and Expense basis.

2. Project Administrative/Clerical Phase

Consultant shall provide general clerical/administration duties to support the Project including typing, preparation of packages for submittal, and mailing. Services will be provided on a Time and Expense basis.

3. Project Team Meetings

Consultant shall attend Project meetings and conference calls at the request of Client. Services will be provided on a Time and Expense basis. If the budget for meeting time is expended, Client shall authorize additional funds.

B. Park Master Plan Phases

Our team also understands the City's desire is to create a trail and passive use park area to activate the areas around a planned water reservoir for access and enjoyment by the citizens of the City.

Thomas & Hutton understands the purpose of the Master Plan is to:

- Create an implementable, phased masterplan for the area that leverages the other planning efforts that are ongoing to focus on activating the green spaces around the planned water reservoirs.
- Assess the site inventory information developed by Client staff.
- Develop a network of paved and unpaved trails and enhanced green spaces to activate the area and provide access to the natural areas on and adjacent to the property.
- Gather input from our community from the conducted public involvement campaign led by Client staff.
- Create a final illustrative master plan.

PUBLIC PARTICIPATION

Public participation will be a cornerstone of building community support for the Master Plan. Our team has a depth of experience working with public and private entities, conducting interviews and surveys with stakeholders, and facilitating public meetings and stakeholder focus groups. Input from all sectors will be integrated throughout the planning process. Our goal is that when the plan is complete and delivered, the Client staff, stakeholders, and residents will claim ownership as they were engaged in the process. While we understand the Client will lead the public participation portion of this engagement, we also recognize that public participation is a continuous effort throughout the entire project.

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TASK 1: CONCEPT DEVELOPMENT & SUITABILITY ANALYSIS

SUB-TASK 1.1 CORE TEAM/CLIENT STAFF – #1 MEETING – KICKOFF AND DATA GATHERING

Meet with the Client staff and gather available data from the Client and Thomas & Hutton files that may be used during the master plan process. Materials may include:

- Existing surveys and studies the Client has already prepared
- Aerial photography, site inventory with GIS data
- Cultural resources database and environmentally sensitive areas
- The Client's overall park and recreation needs and how this may fit into the overall recreational needs of the community
- Current and future park and facility staffing and maintenance budgets
- National & State Professional Standards and best management practices for public parks

SUB-TASK 1.2 DOCUMENT REVIEW

Review the collected data and organize it for use during the planning process. We will utilize our in-house developed GIS system, Latapult, to collect, store, and visualize the information.

SUB TASK 1.3 BASE MAP ASSEMBLY

Based on maps and information provided by the Client, supplemented by Thomas & Hutton GIS data, our team will create a master plan base sheet that includes available data including, but not limited to:

- Site boundary (from the Client and Thomas & Hutton Information)
- Preliminary stream, wetlands & cultural resources assessments by the Client
- Site topography (from GIS and available survey documents)
- Existing tree canopy and vegetation (from aerial)
- Existing utilities
- Natural site features
- Existing man-made features
- Surrounding context, site access and circulation

SUB TASK 1.4 FIELD REVIEW

Conduct an on-site field review with Client staff. The purpose of the field review will be to:

- Verify and refine base data
- Explore site opportunities and constraints
- Refine programming
- Discuss design and master plan options

SUB TASK 1.5 SITE INVENTORY AND ANALYSIS MAPPING

Based on data gathered, discussions with Client staff, and observations from the site visit, our team will prepare a site analysis mapping that includes:



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- Site inventory map of existing/built conditions (from best available data) that may or may not be incorporated into the master plan
- Site analysis map for existing vehicular access, pedestrian access, and circulation, topography, views, pristine natural habitats, solar orientation, buffers, and screening
- Site opportunities and constraints map
- Background information collected and summarized

SUB TASK 1.6 TEAM/CLIENT STAFF – MEETING #2

Conduct a meeting with Client staff and other steering committee members to further refine the development program which is desired.

SUB TASK 1.7 INITIAL MASTER PLAN CONCEPT

Based on the work accomplished during pre-planning, field trips, public input, and market analysis, our team will develop a conceptual master plan rendering for the property, indicating, in plan view, the elements of the design, their location, and general character. As necessary, our team will prepare trace paper overlays that indicate potential alternatives/design thoughts for specific areas of the site.

SUB TASK 1.8 TEAM/CLIENT STAFF MEETING #3

The Project Manager will attend a team meeting with Client staff to review and discuss the initial master plan concept. The goal of the meeting will be to reach a consensus on a preferred master plan and to narrow down which elements of the site plan are worthy of inclusion in the final master plan.

SUB TASK 1.9 PRELIMINARY MASTER PLAN REFINEMENT

Based on client comments from Meeting #3, our team will refine the consensus master plan (including a 2D plan view and associated illustrations and other visualizations needed to portray the vision), opinions on probable construction costs (capital improvement plan), and develop an initial phasing plan.

TASK 2: FINAL PUBLIC INVOLVEMENT

SUB TASK 2.1 PRELIMINARY MASTER PLAN PRESENTATION / PUBLIC OPEN HOUSE MEETING WITH STAFF

Upon development of the preliminary master plan, we will assist the Client with holding an open house-style public meeting.

The open house will specifically include:

- Two hours of drop-in time for individuals to review preliminary master plan
- If warranted a 15 to 20-minute presentation to the plan to those in attendance
- An additional 30 minutes at the end of questions, answers, and more individual discussion.

The Project Manager will attend a team meeting with Client staff following the public open house. The goal of the meeting will be to capture the discussions and ideas that were presented during the public meeting, aiming to gain a clear consensus on the direction of the Final Master Plan. This meeting would be either the same day or the day after the public meeting.


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TASK 3: FINAL ILLUSTRATIVE PLAN & NEXT ACTIONS

SUB TASK 3.1 FINAL MASTER PLAN REFINEMENT & IMPLEMENTATION PLAN

Based on the post open house team meeting, we will prepare a final report which will include all of the background data, inventory and analysis, presentation-quality final master plans with proposed phasing, and final/phased cost opinion (capital improvement plan) which will incorporate Client staff comments.

SUB TASK 3.2 FINAL MASTER PLAN REFINEMENT

Based on the work accomplished previously, our team will make any final tweaks or revisions necessary and finalize the master plan documents, which will include all the information created to date, as well as an executive summary describing the project, methodology, and recommendations.

SUB TASK 3.3 PROJECT FINAL DELIVERABLES

- Executive Summary
- Narrative Report
- Final Color Illustrative Master Plan and associated visuals with a keyed summary of proposed uses, elements, and amenities.
- High-resolution PDF of other image types requested by the Client of the Final Report, Illustrative Master plan, and the itemized Capital Improvement Plan.

C. General Study/Report Phases

1. Archeological Report Phase – Consultant will retain the services of an archeologist to conduct a Phase I archaeological survey for the proposed Spring Hill Water Supply Reservoir & Park Project. The proposed undertaking consists of approximately 153 acres. This project will be conducted in compliance with the National Historic Preservation Act (NHPA), 1966, in order to identify and define historic or archaeological resources that may be eligible for the National Register of Historic Places (NRHP). In order to achieve this objective, MCRC proposes to conduct (1) archival and background research, and (2) fieldwork including pedestrian and subsurface survey, and (3) report preparation. Laboratory analysis and determination of NRHP eligibility of any cultural resources identified during the course of the project will also be conducted following completion of all archival, background, and fieldwork. These methodologies and tasks are described in greater detail below.
2. Archival/Background Research
Archival and background research will be conducted through the Tennessee Division of Archaeology (TDOA) and the Tennessee Historic Commission (THC) prior to conducting fieldwork. The archaeological site files will be examined for the presence of previously recorded archaeological sites within the proposed APE that may be disturbed as a result of the undertaking. Additionally, previously recorded archaeological sites located within a 1-mile radius of the project area will be identified following the reporting standards in the TNSHPO reporting standards. The on-line historic properties website of the THC will also be investigated for



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the presence of above ground historic properties or resources that may be present within the APE.

Additional resources may also be evaluated including local inventories or on-line resources as needed.

3. **Fieldwork**

Fieldwork will commence following completion of archival and background research. Fieldwork will consist of both pedestrian survey and subsurface or shovel testing. Any previously recorded archaeological sites or historic properties within the APE will be re-visited and appropriately documented.

The entire property will be traversed through pedestrian reconnaissance to identify artifacts, structures, or other cultural material visible on the surface. Subsurface or shovel testing will be conducted in areas with limited or no surface visibility and less than 15% slope. Shovel tests will be excavated at approximately 30-meter intervals on a grid and will measure 30 cm x 30 cm. Each shovel test will be excavated to sterile subsoil or maximum of 75 cm in depth. All shovel test fill will be excavated through ¼" mesh. All recovered artifacts will be bagged and labeled with appropriate provenience information. If artifacts are recovered, the distribution of artifacts demarcated the site's boundaries will be determined through excavation of shovel tests at regular intervals in a cruciform pattern. All shovel test information will be recorded and plotted on topographic maps.

4. **Laboratory Analysis**

Artifacts recovered during field investigations will be washed, cataloged, and analyzed according to standard laboratory methods employed in modern archaeological investigations. Descriptions of recovered artifacts will be provided in the final report.

5. **Reporting**

A complete report conforming to the TNSPO standards will be produced following completion of field investigations. The report will include a complete description of the project undertaking, project area description, and cultural history. A full and detailed description of archival and background research, fieldwork, laboratory methods, and analysis will be included. Any previously documented or new archaeological or historical resources identified as a result of the project will be described and recommendations concerning eligibility for the NRHP and/or additional work or avoidance will be provided.

Electronic copies of the report will be provided for initial review. Once revisions are received, these will be completed and electronic and/or hard copies distributed to the client.

6. **Protected Species Assessment Phase** – Consultant shall obtain the services of a professional sub-consultant to conduct a Protected Species Assessment of the subject property. The purpose of the Protected Species Assessment is to determine if current conditions are suitable for federally protected terrestrial species (plants or animals occurring on land) that have

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been currently or historically documented by USFWS and/or TDEC in the vicinity of the site. If potential habitat for terrestrial protected species is identified during field review, these areas will be surveyed to determine whether or not protected species are present. In the event protected species are identified during field review, a separate proposal may be submitted for agency coordination associated with the increased scope of services. Please note that the Protected Species Assessment will not include sampling or habitat assessment for bat, mussel, fish, and/or aquatic protected species in the event streams are located on the Site.

It is recommended that assessment for floral species be conducted during the respective flowering periods, if potential habitat is located. If our surveys are conducted outside the optimal survey window for the protected species and potential habitat is identified, then additional Site visits may be necessary to confirm the presence or of protected species. The cost of additional field visits is not included in this proposal and will be addressed separately, if necessary.

The Protected Species Assessment for federally listed species will include three primary subtasks and are described as follows:

- **Review of the Public State and Federal Records**
The assessment will include a review of the available public records from USFWS and TDEC databases. Review of the soil series at the Site based upon the appropriate U.S. Department of Agricultural (USDA) county soil survey will also be conducted. Upon notice to proceed,
 - **Site Reconnaissance**
A site reconnaissance will be conducted to determine the presence of federally listed protected species known in the county, as well as potential habitat for protected terrestrial species.
- Protected Species Assessment Report**
- Upon completion of the above tasks, the sub-consultant will prepare a written report documenting our observations and conclusions. The report will be submitted to the USFWS for review and comment (if necessary).

D. **Existing and Proposed Pumping and Piping Evaluation**

1. **Hydraulic Calculations and Modeling**

Consultant shall evaluate the addition of the proposed reservoir in relation to the existing raw water pump station, raw water transmission line and water treatment plant (WTP), including the proposed transmission piping extension from the WTP to the reservoir and from the reservoir pump station to the WTP. Hydraulic calculations and modeling will be performed to verify the recommend transmission line sizes and materials, pump sizes and types and pumping improvements to the raw water pump station. Evaluations for connecting piping and valves between multiple reservoirs will be performed to provide recommendations for each layout scenario.

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- E. **Water Quality Study Phase** – The Consultant will retain the services of an expert in water quality and potable reuse for the following tasks.

TASK 1: PROGRAM DEVELOPMENT AND BASELINE ASSESSMENT

- Develop a Quality Assurance and Sampling Plan.
- Identify initial sampling locations across reservoir zones, Duck River source, and WWTP purified water source.
- Identify physical, chemical, and biological parameters to establish baseline conditions. **Analytical testing to be performed by Spring Hill staff or an approved outside laboratory.**
 - a. Flow Rate
 - b. pH
 - c. Temperature
 - d. Dissolved Solids (Salinity)
 - e. Turbidity
 - f. Nitrogen
 - g. Total Organic Carbon
 - h. Emerging Contaminates
 - i. Other parameters as needed
- Identify real-time monitoring and telemetry equipment.
- Computerized Fluid Dynamic (CFD) Modeling is recommended to assess the hydrodynamic conditions of the reservoir such as blending and ratio of Duck River to WWTP purified water. **(This subtask is recommended but not included in the fee)**
- Conceptual design of WWTP purified water pump station and forcemain. **(This subtask is not included in the fee)**
- **Deliverable:** Baseline Water Quality Technical Memorandum.

TASK 2: DEPLOYMENT OF MONITORING SYSTEM

- Identify the location and coordinate the installation and calibration of remote sensing and telemetry systems.
- Integrate data feedbacks via SCADA.
- Establish monitoring frequencies, sampling, and analytical protocols with concurrence from TDEC.
- **Deliverable:** Monitoring System Commissioning Technical Memorandum

TASK 3: MONITORING AND REPORTING

- Develop monthly monitoring and sampling of the Duck River and the WWTP purified effluent. Analytical testing to be performed by Spring Hill staff or an approved certified laboratory.
- Develop sampling and analytical protocols of source water from the reservoir to the WTP.
- Assist the City to develop and maintain a database with active QA checks.
- Review data and prepare quarterly and annual reports.
- **Deliverables:** Annual Source Water Quality Report

TASK 4: RISK ASSESSMENT AND MITIGATION

- Assess the risks such as algal blooms, salinity, etc.
- Develop early warning thresholds and operational response protocols.
- Recommend reservoir management strategies.
 - a. Aeration
 - b. Water withdrawal options

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- c. Blending/mixing Ratio
- Deliverable: *Annual Reservoir Water Quality Risk Assessment*

TASK 5: STAKEHOLDER ENGAGEMENT AND CONTINUOUS IMPROVEMENT

- Update monitoring plan as needed to maintain water supply objectives and to mitigate risks.
- Conduct meetings/workshops with TDEC and Spring Hill staff as needed to maintain transparency.
- Provide information as needed to keep stakeholders informed.
- Deliverables: Annual Water Supply Reservoir Management Review

- F. **Geotechnical Study/Report Phase** – Consultant will retain the services of a geotechnical sub-consultant to perform geotechnical borings and subsurface exploration.

TASK 1: SUBSURFACE EXPLORATION

The Geotechnical Sub-consultant will plan and implement a subsurface exploration to obtain subsurface information within the property being considered for the new reservoir(s). While the Geotechnical Sub-consultant recognizes that some exploration has been completed in and around the planned reservoir site, this proposed exploration will supplement previous data to provide information for the specific purpose of this project. For example, the proposed subsurface exploration program will include downhole testing within drilled boreholes to better characterize rock conditions and groundwater behavior.

Borings are planned to reach a target elevation of approximately 680 feet, except for borings B-1 through B-4 which will reach a target elevation of about 635 feet (see attached Boring Location Plan). It is anticipated that up to 80 feet of rock coring will be performed at each boring location to reach the target elevation, depending on existing ground surface elevation. Based on the previous exploration by others, the scope of work and associated budget described herein were developed under the assumption that 5 feet of overburden soil will be present at each boring location. Soil and rock samples will be collected for geotechnical laboratory testing as outlined under Sub-task 1.5.

SUB-TASK 1.1 – FINALIZE SCOPE AND PREPARE WORK PLAN FOR EXPLORATIONS

Prior to mobilization, a Work Plan will be developed to establish drilling locations and sampling depths. The Work Plan will include guidelines for aspects of the exploration program. Site-specific health and safety considerations will also be included in the Work Plan.

SUB-TASK 1.2 – COMPILE AND REVIEW EXISTING GEOLOGIC INFORMATION

The Geotechnical Sub-consultant will collect and review readily available public domain documentation such as aerial photography, data from previous explorations, and geologic mapping and publications by the US Geological Survey, and the US Department of Agriculture Natural Resources and Conservation Service.

The information will be summarized in the GDR, which is discussed in Task 2.

SUB-TASK 1.3 – SITE RECONNAISSANCE AND BORING STAKEOUT

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Two (2) Geotechnical Sub-consultant personnel – anticipated to be a Project Geologist and Senior Staff Engineer – will perform a 2-day reconnaissance to stake planned boring locations, mark planned geophysical lines, and to observe the site for access considerations and clearing requirements. If proposed locations are difficult to access, alternate locations with more favorable locations for access will be identified.

This proposal and associated budget were developed under the presumption that access to most of the exploration locations will require some level of clearing of vegetation and establishment of access paths. This proposal includes a clearing allowance of \$50,000. In the event the Client would like to perform the required clearing or procure these services separately, please notify the Consultant prior to authorizing this proposal. If the required clearing remains part of the Geotechnical Sub-consultant's scope of services, the allowance would be used. The Consultant's proposal is contingent upon the understanding that a change order will be executed to increase the contract amount if the clearing costs exceed the allowance amount of \$50,000. The Geotechnical Consultant also notes that the amount of clearing may require development and execution of a Stormwater Pollution Prevention Plan (SWPPP), and/or other associated permitting.

SUB-TASK 1.4 – FIELD EXPLORATION AND LABORATORY TESTING

The Geotechnical Sub-consultant will conduct field exploration which will include drilling, sampling, downhole optical and acoustic televiewer survey, and implementation of surface geophysical methods. Drilling, sampling, and testing will consist of standard penetration tests and rock coring. Hydraulic conductivity tests (i.e., packer testing) will be performed in select bedrock zones of the borings. The borings will extend through the overburden at depths ranging from 14 to 80 feet into bedrock.

The table below provides a summary with key information on the planned borings.

Number of Borings	Total Drilling Footage	Soil Drilling Footage	Rock Coring Footage	Number of Packer Tests	Number of Downhole Geophysics Surveys
49	2,607 ft	245 ft	2,362 ft	30	49

Borings may be extended or terminated before the planned depths based on the encountered subsurface conditions at the time of drilling.

The estimated field exploration plan consists of the following.

- 49 test borings to total depths between 15 and 85 feet below ground surface
- Auger drilling through soil with continuous split-barrel Standard Penetration Tests until refusal is encountered (estimated to be an average of 5 feet below ground surface across the site).
- Rock coring with HQ3 tooling
- Packer tests in 6 borings, with 5 tests per boring
- Optical and acoustic televiewer tests in each boring
- Electrical resistivity and seismic geophysical arrays ranging in length from about 1,200 feet to 3,900 feet in length

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- A total of about 13,650 feet of Electrical Resistivity testing and about 4,200 feet of Seismic Refraction testing

Test borings will be left open to collect stabilized groundwater measurements, generally 24–48 hours after hole completion. After collecting groundwater measurements, the borings will be backfilled with a cement–bentonite grout mixture pumped into the test boring via tremie pipe.

It is assumed that soil cuttings and drilling fluid can be discharged within the wooded area. Upon completion of the field exploration program, a relatively modest level of site restoration will be performed, only on areas that are heavily disturbed during the exploration program, as applicable. This will consist of spreading straw over the disturbed surface.

The following laboratory tests may be performed on samples obtained during the exploration:

- Moisture Content
- Particle Size Analysis
- Hydrometer Analysis
- Atterberg Limits
- Unconfined Compressive Strength of Rock
- Direct Shear Testing of Rock Joints and/or Rock Mass
- Brazilian Splitting Tensile Strength

Laboratory testing assignments will be made upon completion of the field exploration program when more is known about the material types present on the site. Findings will be summarized in a Geotechnical Data Report (GDR).

TASK 2: GEOTECHNICAL DATA REPORT

A Geotechnical Data Report (GDR) will be prepared to summarize the subsurface exploration survey. It is anticipated that the report will contain the following information:

- Overview of exploration program, procedures, equipment, and personnel
- Results of drilling, sampling, laboratory testing, and geophysical testing efforts
- Summary of regional geology, including formations and major structural features
- Summary of surface geology, including discussion of potential karst at the site
- Findings related to hydrogeology (i.e., water flow through bedrock)
- Geologic map, profiles, and cross sections to include boring and other relevant data in plan and section views in areas of the project features
- Appendices, which are anticipated to consist of:
 - Boring location plan
 - Typed boring logs
 - Packer test results
 - Surface geophysical survey results
 - Downhole geophysical survey results
 - Summary of laboratory testing results

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The GDR will be submitted as Draft to the Consultant and the Client for review and comment. A meeting (discussed under Task 4) will be held to present and discuss key findings from the exploration. The GDR will be submitted as Final upon receipt of Consultant and Client comments and following the meeting. The budget presented herein was developed under the condition that one consolidated round of comments from the review and meeting will be incorporated in the Final GDR. Additional rounds of review comments, or review comments from stakeholders other than Consultant and the Client, may require additional time and budget to implement into the GDR.

TASK 3: ALTERNATIVES ASSESSMENT AND CONCEPTUAL DESIGN

The tasks outlined below are intended to meet Client's objective of developing concept-level design of the preferred alternative in support of a future Progressive Design Build solicitation by the Client. They do not constitute detailed design.

SUB-TASK 3.1 – ALTERNATIVES EVALUATION FOR NEW RESERVIOR(S)

The Geotechnical Sub-consultant will evaluate three alternatives related to the number of reservoirs to be designed on the subject property. A cursory review of topographic survey information provided by the Client on July 7, 2025, suggests that no more than 3 reservoirs on the property is appropriate to achieve the combined 200-million-gallon raw water storage capacity. Consequently, the Geotechnical Sub-consultant will perform the following key tasks for each alternative (i.e., one, two, or three reservoirs on the property).

The alternatives assessment will incorporate the following key findings from the subsurface exploration and laboratory testing program:

- Develop schematic plan view layout of reservoir(s) based on existing site topography
- Calculate estimated storage volume
- Assessment of hydrogeologic conditions and evaluation of need for foundation seepage cutoff
- Evaluation of need for reservoir liner
- Coordination to assess water inflow/outflow infrastructure needs
- Evaluation of watershed area, and need for spillway and outlet works
- Assessment of reservoir evaporation potential
- Development of Order of Magnitude (AACE Class 4) construction cost and schedule estimate, including calculation of cut/fill quantities
- Evaluate constructability considerations, including access, staging, and rock removal
- Identification of potential karst activity within area of reservoir(s)
- Develop schematic figures to communicate key aspects of each alternative
 - Up to 4 sheets per alternative
- Develop comparative pros/cons list for consideration of selection criteria for preferred alternative

Once the above tasks have been completed for each alternative, a meeting (discussed under Task 4) will be held with Consultant and the Client. The intent of the meeting will be to present the alternatives, discuss key considerations and pros/cons of each option, and review the order of magnitude construction cost

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estimates. The objective is to provide the Client with information to support selection of a preferred alternative to move forward into conceptual design.

Upon selection by the Client, the preferred alternative will be advanced to a conceptual level, and the engineering efforts will be documented in a Conceptual Design Report (Task 3.3 below).

TASK 3.2 – CONCEPTUAL DESIGN OF SELECTED PREFERRED ALTERNATIVE

The Geotechnical Sub-consultant will develop conceptual design (not more than 30% design level) for the alternative selected by the Client. The following key tasks will be performed to comprise the conceptual design effort.

- Refinement of reservoir layout, including grading considerations
- Development of construction site access, layout, and staging plan
- Conceptual design of foundation seepage cutoff and reservoir liner
- Conceptual design of spillway and outlet works, as applicable
- Development of a technical specifications outline
- Development of conceptual design drawings, anticipated to include plan, section, and profiles of major design elements
 - Up to 10 total sheets
 - Coordination to incorporate aspects of water inflow/outflow infrastructure needs
- Refinement construction cost estimate to an AACE Class 3 level
 - Coordination to incorporate costs for water inflow/outflow infrastructure needs

TASK 3.3 – CONCEPTUAL DESIGN REPORT

The subtasks listed in Task 3 above will be summarized into a CDR, which will discuss key findings based on the geotechnical information included in the GDR, preliminary recommendations for raw water storage including global stability and seepage control (such as liners and/or cutoff walls), key takeaways from the alternatives assessment phase, and the conceptual design of the selected preferred alternative. The GDR will be attached as an appendix. The CDR will be submitted as Draft to Consultant and the Client for review and comments. A meeting (discussed under Task 4) will be held to present and discuss key aspects of the conceptual design. The CDR will be submitted as Final upon receipt of Consultant and Client comments and following the meeting. The budget presented here was developed under the condition that one consolidated round of comments from the review and meeting will be incorporated in the Final CDR.

Additional rounds of review comments, or review comments from stakeholders other than Consultant and the Client, may require additional time and budget to implement into the CDR.

Task 4: PROJECT MANAGEMENT AND MEETINGS

Project management, coordination, and communication with Consultant, the Client, and other project stakeholders is critical to the success of the project. During the execution of the scope of services described herein, formal communication between Consultant and Sub-consultants will occur in the form of regular progress updates (i.e., weekly progress update emails during the

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Subsurface Exploration), and meetings at key milestones. The following is a list of meetings that are included in this scope of services.

The following meetings will occur in-person or virtually as noted. In-person meetings, if and when required, will be held at Client offices. The budget presented herein was developed under the condition that two (2) Geotechnical Sub-consultant personnel will attend in-person meetings, and up to four (4) Geotechnical Sub-consultant personnel will participate in virtual meetings.

The Geotechnical Sub-consultant will conduct virtual and in-person meetings with the Client and Consultant at the following phases to provide updates:

- Subsurface Exploration Summary Meeting (in-person)
 - The purpose of this meeting is to inform the Client of key findings from the Subsurface Exploration. The findings will be communicated in reference to how they may affect the alternatives to be developed under Task 3, and the meeting will be targeted within 2 weeks after Draft GDR Submittal. The budget presented herein was developed under the condition that the meeting will last up to 2 hours.
- Alternatives Assessment Meeting (in-person)
 - The purpose of this meeting is to present the alternatives developed under Task 3, discuss key considerations and pros/cons of each option, review the order of magnitude construction cost estimates, and select a preferred alternative to move forward into conceptual design. The budget presented herein was developed under the condition that the meeting will last not more than 4 hours.
- Conceptual Design Meeting (in-person)
 - The purpose of the meeting is to discuss key aspects of the conceptual design developed under Task 3, and the meeting will be targeted within 2 weeks after Draft CDR Submittal. The budget presented herein was developed under the condition that the meeting will last up to 2 hours.
- Monthly Conference Calls with Consultant and Sub-consultants for Project Updates (virtual)
 - For a project of this magnitude, it is helpful to have a regular status call to discuss progress, identified issues, and key considerations as the scope of services progresses.

G. Survey Phases

Based upon the final Master Plan approved by Client, Consultant will retain the services of a Sub-consultant(s) to perform the following Survey Phase tasks:

1. Topographic Survey Phase

The Surveyor shall obtain vertical and horizontal data sufficient to generate a one-foot contour interval map that meets the state standard in which the project exists. Survey will include the location of visible improvements (i.e. roads, drives, buildings, fences, ditches, above ground utilities, storm sewer and sanitary sewer structures within the project limits. Underground utilities (i.e. power, communication, water and gas) that may exist within the project limits will be shown based upon the location of visible surface

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appurtenances. Subsurface utility designation is not included in this scope of work. Contour interval for the survey will be one foot. Horizontal datum for the survey will be based on the appropriate State Plane Coordinate System, NAD83 (2011) and units will be U.S. Survey Feet.

The Category 4 Partial Topographic Survey Partial Topographic Survey will include topographic and existing features data of approximately three (3) acres of cleared land specified by Client. Said three (3) acres will not be surveyed until clearing is complete.

Items under the Topographic Survey Scope will also include the following:

- Survey will include the locations of approximately 49 Geo Borings.
- Survey will be conducted utilizing a combination of conventional and GNSS methodology to obtain enough ground points to achieve a 1-foot contour interval.
- The Surveyor will locate areas of impact, such as archeological or cultural sites, if delineated by others prior to commencement of fieldwork.
- When Surveying Gravity Sanitary and Storm Sewer, the Surveyor will:
 - Verify the routing and connections of the existing sanitary and storm sewer system indicating the following information.
 - The material type, diameter (I.D.) and flow direction of each pipe.
 - Provide depth and elevations for catch basin grates and flow lines, if accessible. Surveyor will note in the deliverable If a catch basin grate is not accessible, or bolted in place.
- The topographic survey will collect visible planimetric and terrain features inside the proposed survey extents:
 - Roads and parking areas, including surfacing material type (Dirt, Aggregate, Asphalt, Concrete) and road sign types and locations.
 - Railways, including top of rail, point of switch, road crossings, and signage.
 - Building Outlines and Finished Floor Elevations inside the survey limits as shown in Exhibit A.
 - Equipment Foundation Outlines with Top of Concrete Elevations
 - Fence Lines with fence heights.
 - Security Gate centerlines, height, width, and type (i.e. 8ft x 10ft double swing gate)
 - Drainage Features, including ditch break and flow lines; top of bank and bottom of slope; culvert inverts, sizes, and materials; drainage structure inverts, sizes, and types; edge of water.
 - Above ground utility locations and identifications (Hydrants, Electrical Transmission Lines, Light Poles, etc.)
 - Water Wells including potable, monitoring, and test wells.
 - Utility Manholes and Valve Vaults, including at surface sizes.

Survey deliverables will include:

- AutoCAD survey base file in Civil3D format.
- XML surface file
- ASCII point file in Point, Northing, Easting, Elev, and Desc format

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(upon request).

- Photos taken during the field survey (upon request).

H. Permit Phases

1. SWPPP Permit Phase

Consultant will assist Client with the preparation of submittal packages for the development approval. The payment of fees associated with the application process is the responsibility of Client. Consultant will submit final plans and specifications to the applicable local, state, and federal agencies for review. Agency submittals anticipated for this Project include:

- Tennessee Department of Environment and Conservation Construction General Permit (SWPPP Document with NOI application). TDEC now requires the electronic submittal of the SWPPP and NOI application to be completed by the project owner. Consultant will assist as needed for completion of the submittal.

Submittal fees are **not** included in our fee schedule and must be provided by Client at the time of submittal. Consultant will assist Client in obtaining construction permits for the Project. This phase includes revising plans and specifications according to regulating agency comments and, if requested, meeting with the agencies on behalf of Client.

Consultant's services include:

- Qualified personnel to monitor maintenance of EPSC measures on required permit intervals (expected two (2) observations per week).
- Submittal of Notice of Termination (NOT) and certification

Consultant's services **do not** include:

- Continuous monitoring of maintenance of EPSC measures
- Monitoring of NTU's at outfalls or receiving streams
- Submittal of monthly reports to appropriate governing regulatory agency

I. Exclusions

Unless a specific scope is included in this Agreement, these items are **not** included in the Scope of Services:

- Full engineering design and construction documents
- Construction Administration or Construction Observation Services
- Subsurface utility designations
- Accessibility construction compliance verification
- Wetland delineation, surveys, or permits
- Phase One or Phase Two Environmental Assessments (previously performed for development)
- Off-site work unless specifically covered in the Scope of Services

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- Approvals or permits other than those related to the Scope of Services covered by this Agreement
- Act as an expert witness for legal activities
- Tennessee Department of Transportation permits or approvals
- Telephones, cable television, gas, and power distribution systems

These items can be coordinated or provided, if requested by Client in writing.

2. **PERIODS OF SERVICE**

A. **General Consulting**

After receipt of a written notice to proceed from Client, Consultant will commence work within Seven (7) calendar days after receipt and complete work described in this phase within three hundred thirty (330) calendar days.

B. **Park Master Plan Phase**

After receipt of a written notice to proceed from Client, Consultant will commence work within Seven (7) calendar days after receipt and complete work described in this phase within three hundred thirty (330) calendar days.

C. **General Study/Report Phase**

After receipt of a written notice to proceed from Client, Consultant will commence work within Seven (7) calendar days after receipt and complete work described in this phase within ninety (90) calendar days.

D. **Geotechnical Study/Report Phases**

After receipt of a written notice to proceed from Client, Consultant will commence work within seven (7) calendar days after receipt and complete work described in this phase within three hundred thirty (330) calendar days.

E. **Existing and Proposed Pumping and Piping Evaluation**

After receipt of a written notice to proceed from Client, Consultant will commence work within seven (7) calendar days after receipt and complete work described in this phase within three hundred thirty (330) calendar days.

F. **Water Quality Coordination**

After receipt of a written notice to proceed from Client, Consultant will commence work within seven (7) calendar days after receipt and complete work described in this phase within three hundred thirty (365) calendar days.

G. **Survey Phase**

After Client approves the final master plan, Consultant will coordinate survey work to coincide with geotechnical field work phase.



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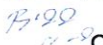
CONSULTANT'S INITIALS

H. Permit Phase

After receipt of a written notice to proceed from Client, Consultant will commence work within thirty (30) calendar days and coordinate with geotechnical field work phase.



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PERIOD OF SERVICE

The services provided under this Agreement will commence on a start date and proceed on a schedule that are mutually developed and agreed upon by the parties. The period of service may be extended by mutual written agreement of the parties. Any extension shall be subject to the same terms and conditions as set forth in this Agreement, unless otherwise agreed in writing.

PAYMENT FOR SERVICES

For services rendered, CLIENT shall pay CONSULTANT as outlined in the Letter Agreement for Services.

Payment for services on the basis of "Time & Expense" shall be paid according to the Consulting Services Rate Sheet attached hereto.

Project related costs for printing, reproductions, materials, and travel will be billed as reimbursable expenses.

Projects will be billed monthly or at the completion of the work, whichever comes sooner, with payment due upon receipt. Payment will be considered overdue after forty-five (45) days from date of invoice, with interest charged at a monthly rate of 1.5 percent (18 percent annual rate).

CONSULTANT reserves the right to suspend work hereunder or any other work to be performed by CONSULTANT for CLIENT or any of its affiliates under a separate agreement or agreements with CONSULTANT in the event of delinquent payment by CLIENT to CONSULTANT hereunder or in the event of delinquent payment by CLIENT or its affiliates to CONSULTANT under a separate agreement or agreements. For all purposes hereof, affiliate means (i) in the case of an individual, any relative of any person listed among the following, (ii) any officer, director, trustee, partner, manager, employee or holder of 5 percent or more of any class of the voting securities of or equity interest in CLIENT; (iii) any corporation, partnership, limited liability company, trust, or other entity controlling, controlled by, or under common control with CLIENT; or (iv) any officer, director, trustee, partner, manager, employee, or holder of 5 percent or more of the outstanding voting securities of any corporation, partnership, limited liability company, trust, or other entity controlling, controlled by, or under common control with CLIENT.

In the event legal action is necessary to enforce the payment terms of this Agreement, CONSULTANT will be entitled to collect from CLIENT any judgment or settlement sums due, plus reasonable attorneys' fees, court costs, and other expenses incurred by CONSULTANT for such collection action, and, in addition, the reasonable value of CONSULTANT's time and expenses spent for such collection action, computed according to CONSULTANT's prevailing fee schedule and expense policies.

ASSIGNMENT

Neither party to this Agreement may transfer, sublet, or assign any rights or duties under or interest in this Agreement, including but not limited to monies that are due or monies that may be due, without the prior written consent of the other party. Subcontracting to subconsultants, normally contemplated by CONSULTANT as a generally accepted business practice, is not considered an assignment for purposes of this Agreement.

CLIENT'S RESPONSIBILITIES

A. Access

CLIENT shall make provisions for CONSULTANT to enter upon public and private lands as required to perform such work as surveys and inspections in development of the Project.

B. CLIENT's Representative

CLIENT shall designate in writing one person to act as CLIENT's Representative with respect to the work to be performed under this Agreement. This Representative will have complete authority to transmit instructions, receive information, and interpret and define CLIENT's policy and decisions, with respect

to the product, materials, equipment, elements, and systems pertinent to the work covered by this Agreement.

C. Fees

CLIENT is responsible for payment of fees associated with the project. Such fees include permit review and application fees, impact fees, and capacity fees. CONSULTANT will notify CLIENT regarding the amount of fees and timing of payment.

CONSULTANT'S RESPONSIBILITIES

In providing services under this Agreement, CONSULTANT will perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality. No other representation expressed or implied, and no warranty or guarantee is included or intended in the Agreement, or in any report, opinion, document, or otherwise.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, drawings, specifications, computer files, electronic files, BIM models, field data, notes and other documents and instruments prepared by CONSULTANT as instruments of service remain the property of CONSULTANT. CONSULTANT retains all common law, statutory, and other reserved rights, including, without limitation, the copyrights thereto. CONSULTANT will retain these records for a period of two (2) years following their completion during which period paper copies will be made available to CLIENT at reasonable times.

ELECTRONIC FILES

In accepting and utilizing any drawings, reports, and data on any form of electronic media generated and furnished by CONSULTANT, CLIENT agrees that all such electronic files are instruments of service of CONSULTANT, who will be deemed the author, and will retain all common law, statutory law, and other rights, without limitation, including copyrights.

CLIENT agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. CLIENT agrees not to transfer these electronic files to others without the prior written consent of CONSULTANT. CLIENT further agrees to waive all claims against CONSULTANT resulting in any way from any unauthorized changes to or reuse of the electronic files for any other project by anyone other than CONSULTANT.

CLIENT is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by CONSULTANT and electronic files, the signed or sealed hard-copy construction documents will govern.

In addition, CLIENT agrees that the CLIENT will not share or distribute any electronic files provided by the CONSULTANT to other parties without the express written consent of the CONSULTANT. Furthermore, following authorization by the CONSULTANT, CLIENT agrees any party requesting said electronic files must sign a waiver/release provided by the CONSULTANT which will require the recipient to the fullest extent permitted by law, to indemnify and hold harmless CONSULTANT, its officers, directors, employees, and subconsultants (collectively, CONSULTANT) against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than CONSULTANT or from any reuse of the electronic files provided by the CONSULTANT.

Under no circumstances will delivery of electronic files for use by CLIENT be deemed a sale by CONSULTANT, and CONSULTANT makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event will CONSULTANT be liable for indirect or consequential damages as a result of CLIENT's use or reuse of the electronic files.



CLIENT'S INITIALS



CONSULTANT'S INITIALS

CERTIFICATIONS, GUARANTEES, AND WARRANTIES

CONSULTANT will not be required to sign any documents, no matter by whom requested, that would result in CONSULTANT having to certify, guarantee, or warrant the existence of conditions whose existence CONSULTANT cannot ascertain, or any way might, in the sole judgment of CONSULTANT, increase CONSULTANT's contractual or legal obligations or risks, or adversely affect the availability or cost of its professional or general liability insurance. CLIENT also agrees not to make resolution of any dispute with CONSULTANT or payment of any amount due to CONSULTANT in any way contingent upon CONSULTANT signing any such certification.

ACCESSIBILITY

CLIENT acknowledges that the requirements of the Americans with Disabilities Act (ADA), Fair Housing Act (FHA) and other federal, state, and local accessibility laws, rules, codes, ordinances, and regulations will be subject to various and possibly contradictory interpretations. CONSULTANT, therefore, will use reasonable professional efforts and judgment to interpret applicable accessibility requirements in effect as of the date of the execution of this Agreement and as they apply to the Project. CONSULTANT, however, cannot and does not warrant or guarantee that CLIENT's Project will comply with all interpretations of the accessibility requirements and/or the requirements of other federal, state, and local laws, rules, codes, ordinances, and regulations as they apply to the Project. Any changes in the applicable law or contrary interpretations of existing law subsequent to the issuance of permits that requires CONSULTANT to perform redesign will be considered an additional service.

SUBSTITUTIONS

Upon the written request or direction of CLIENT, CONSULTANT will evaluate and advise CLIENT with respect to proposed or requested changes in materials, products, or equipment. CONSULTANT will be entitled to rely on the accuracy and completeness of the information provided in conjunction with the requested substitution. CONSULTANT will not be responsible for errors, omissions, or inconsistencies in information by others or in any way resulting from incorporating such substitution into the Project. CLIENT will be invoiced for this service on a Time & Expense basis unless both parties mutually agree on a lump sum fee.

OPINIONS OF PROBABLE COSTS

Since CONSULTANT has no control over the cost of labor, materials, or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, opinions of probable construction costs provided for herein are to be made on the basis of experience and qualifications. These opinions represent CONSULTANT's best judgment as a design professional familiar with the construction industry.

However, CONSULTANT cannot and does not guarantee that proposals, bids, or the construction cost will not vary from opinions of probable construction costs prepared by CONSULTANT.

BETTERMENT

If, due to CONSULTANT's negligence, a required item or component of the Project is omitted from CONSULTANT's construction documents, CONSULTANT will not be responsible for paying the cost required to add such item or component to the extent that such item or component would have been required and included in the original construction documents. In no event will CONSULTANT be responsible for any cost or expense that provides betterment, upgrades, or enhances the value of the Project.

CHANGED CONDITIONS

If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to CONSULTANT are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks, or other material terms

of this Agreement, CONSULTANT may call for renegotiation of appropriate portions of this Agreement. CONSULTANT shall notify CLIENT of the changed conditions necessitating renegotiation, and CONSULTANT and CLIENT shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement in accordance with the Termination provision hereof.

CODE COMPLIANCE

CONSULTANT shall exercise usual and customary professional care in its efforts to comply with applicable laws, codes, and regulations in effect as of the date this agreement was written. Design changes made necessary by newly enacted laws, codes, and regulations after this date will entitle CONSULTANT to a reasonable adjustment in the schedule and additional compensation in accordance with the Additional Services provisions of this Agreement.

In the event of a conflict between laws, codes, and regulations of various governmental entities having jurisdiction over the Project, CONSULTANT shall notify CLIENT of the nature and impact of such conflict. CLIENT agrees to cooperate and work with CONSULTANT in an effort to resolve this conflict.

VALUE ENGINEERING

(If) CLIENT has elected to engage in value engineering of the Project, CLIENT has established cost as a primary project objective over other programming, performance, and aesthetic objectives and recognizes that in doing so, it has limited the available design and product options. These limitations may impact the overall project cost, schedule, and performance. CLIENT has accepted these risks and impacts in recognition of the importance it has placed on project cost.

DELEGATED DESIGN

Where any design services are provided by persons or entities not under CONSULTANT's direct control, CONSULTANT's role will be limited to its evaluation of the general conformance with the design intent and the interface with CONSULTANT's design and portion of the Project. Except to the extent, it is actually aware of a deficiency, error, or omission in such design by others, CONSULTANT will have no responsibility for such design and may rely upon its adequacy, accuracy, and completeness in all respects.

LIMITS OF LIABILITY

Nothing contained in this Agreement will create a contractual relationship with or a cause of action in favor of a third party against either CLIENT or CONSULTANT. CONSULTANT's services under this Agreement are being performed solely for CLIENT's benefit, and no other party or entity will have any claim against CONSULTANT because of this Agreement or the performance or nonperformance of services hereunder. CLIENT and CONSULTANT agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors, and other entities involved in this Project to carry out the intent of this provision.

To the fullest extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of CONSULTANT and CONSULTANT's officers, directors, partners, employees, and sub-consultants, and any of them, to CLIENT and anyone claiming by or through CLIENT (including, but not limited to construction contractors & subcontractors), for any and all claims, losses, costs, or damages, including attorneys' fees and costs and expert-witness fees and costs of any nature whatsoever or claims expenses resulting from or in any way related to the Project or the Agreement from any cause or causes shall not exceed \$200,000. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law. This liability cap may be increased by mutual consent of both parties and in exchange for additional compensation.

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AUGUST 29, 2025

It is our understanding CLIENT has elected to exclude Construction Observation and Monitoring from this contract. Based on this understanding, CLIENT assumes all responsibility for interpretation of the documents and for construction observation and supervision activities and waives any claims against CONSULTANT that may in any way connected thereto. In addition, CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless CONSULTANT from any loss, claim, or cost including reasonable attorneys' fees resulting from the performance of such services by other persons or entities and all claims arising from clarifications, interpretations, or changes made to the contract documents or work specified therein to reflect field or other changes made except for sole negligence or willful misconduct of CONSULTANT. Any requests for specific construction observation services and agreed to by CONSULTANT will be paid as Additional Services by CLIENT.

TIME BAR TO LEGAL ACTION

All legal actions by either party against the other arising out of or in any way connected with this Agreement or the services to be performed hereunder will be barred and under no circumstances will any such legal action be initiated by either party after five (5) years from the date of Substantial Completion, unless this Agreement is terminated earlier, in which case the date of termination of this Agreement will be the date on which such period commences. Nothing in this Agreement is construed to waive any protections granted under existing laws of the state in which the work is performed.

ACTS OF OTHERS

CONSULTANT will not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by contractor(s) or the safety precautions and programs incident to the work of contractor(s). CONSULTANT will not be responsible for the failure of contractor(s) to perform the work in accordance with the Contract Documents.

CONSULTANT will not be responsible for the acts or omissions of any contractor, or sub-contractor, or any of the contractor(s)', or sub-contractor(s)' agents, or employees or any other persons (except CONSULTANT's own employees and agents) at the site or otherwise performing any of the contractor(s)' work. However, nothing contained herein will be construed to release CONSULTANT from liability for failure to perform properly the duties undertaken by CONSULTANT in the Contract Documents.

CONSULTANT will not be responsible for the acts, omissions, means, methods, or specifications of other design professionals not directly retained by CONSULTANT. **Unless specifically stated otherwise, CONSULTANT's work and responsibility under this Agreement terminates at the building pad or within five (5) feet of the building, whichever is greater, for any proposed building shown on the plans. CLIENT/Architect/Contractor is responsible for compliance with codes, regulations, manufacturer specifications, and construction methods related to the building structure. In no circumstance is CONSULTANT responsible for any portion of the building, especially as it relates to moisture or mold.**

INDEMNIFICATION

CONSULTANT agrees, to the fullest extent permitted by law, to indemnify and hold harmless CLIENT, its officers, directors, and employees (collectively, CLIENT) against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by CONSULTANT's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom CONSULTANT is legally liable.

In addition, Article II, Section 29 of the Tennessee Constitution prohibits municipalities from lending their credit to private or public entities and, therefore, prohibits an agreement by the CLIENT to indemnify a third party. Notwithstanding any other provision of this Agreement, any indemnity or hold harmless provision contained in

this Agreement, along with any provision that is contained in any of the CONSULTANT's agreements with subconsultants requiring the CLIENT (City of Spring Hill) to indemnify or hold harmless the subconsultant, vendor, or any other person or entity in favor of subconsultant or vendor, shall be deemed null, void and unenforceable against the CLIENT (City of Spring Hill) under any and all circumstances.

Neither CLIENT nor CONSULTANT will be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence or for the negligence of others.

CONSEQUENTIAL DAMAGES

Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither CLIENT nor CONSULTANT, their respective officers, directors, partners, employees, contractors, or subconsultants will be liable to the other or will make any claim for any incidental, indirect, or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages includes, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation, and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract, and breach of strict or implied warranty. Both CLIENT and CONSULTANT shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

INSURANCE

Consultant will provide and maintain, until the services are completed and accepted by Client, the following insurance coverage:

- (1) **Workers' Compensation – As per Statutory requirements.**
- (2) **Employer's Liability – \$1,000,000 per occurrence and \$2,000,000 in aggregate.**
- (3) **Commercial General Liability – \$1,000,000 per occurrence and \$2,000,000 in aggregate.**
- (4) **Automobile Liability – \$1,000,000 per occurrence and \$2,000,000 in aggregate.**
- (5) **Professional Liability – \$1,000,000 per claim and \$2,000,000 in aggregate.**

Any insurance on a "claims made" basis will be maintained for three (3) years after completion of the Services or any period required by this Agreement, whichever is longer. Consultant will include these insurance requirements in its subcontracts.

DISPUTE RESOLUTION

Any dispute or claim arising out of or relating to this Agreement will be determined as follows: CONSULTANT and CLIENT will negotiate in good faith to reach agreement. If negotiations are unsuccessful, CONSULTANT and CLIENT agree the dispute will be settled by mediation. In the event the dispute or any issues remain unresolved after the above steps, the disagreement will be decided by such remedies of law as they are available to the parties. The appointment of a mediator and location will be subject to agreement between CONSULTANT and CLIENT with each party being responsible for their portion of those costs.

JOBSITE SAFETY

Neither the professional activities of CONSULTANT, nor the presence of CONSULTANT or its employees and subconsultants at a project site, imposes any duty on CONSULTANT, nor relieve a general contractor of its obligations, duties, and responsibilities including, but not limited

CLIENT'S INITIALS

CONSULTANT'S INITIALS

to, construction means, methods, sequence, techniques, or procedures necessary for performing, superintending, and coordinating the work in accordance with the Contract Documents and any health or safety precautions required by any regulatory agencies. CONSULTANT and its personnel have no authority to exercise any control over any contractor or its employees in connection with their work or any health or safety programs or procedures. CLIENT agrees that the general contractor will be solely responsible for jobsite and worker safety and warrants that this intent will be carried out in CLIENT's contract with the general contractor. CLIENT also agrees that the general contractor will indemnify and hold harmless CLIENT, CONSULTANT, and CONSULTANT's subconsultants. CLIENT also agrees that CLIENT, CONSULTANT, and CONSULTANT's subconsultants will be made additional insureds under the general contractor's policies of general liability insurance.

DELAYS

CLIENT agrees that CONSULTANT is not responsible for damages arising directly or indirectly from any delays for causes beyond CONSULTANT's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war, or other emergencies; failure of any government agency to act in timely manner; failure of performance by CLIENT or CLIENT's contractors or consultants; or discovery of any hazardous substances or differing site conditions.

In addition, if the delays resulting from any such causes increase the cost or time required by CONSULTANT to perform its services in an orderly and efficient manner, CONSULTANT will be entitled to a reasonable adjustment in schedule and compensation.

HAZARDOUS MATERIAL

Both parties acknowledge that CONSULTANT's Scope of Services does not include any services related to the presence of any hazardous or toxic materials and/or mold. In the event CONSULTANT or any other person or entity involved in the project, encounters any hazardous or toxic materials and/or mold, or should it become known to CONSULTANT that such materials may be present on or about the jobsite or any adjacent areas that may affect the performance of CONSULTANT's services, CONSULTANT may, at its sole option and without liability for consequential or any other damages, suspend performance of its services under this Agreement until CLIENT retains appropriate qualified consultants and/or contractors to identify and abate or remove the hazardous or toxic materials and warrants that the jobsite is in full compliance with all applicable laws and regulations.

CLIMATE CHANGE

In no event will CONSULTANT be responsible or liable for any failure or delay in the performance of its obligations or impact to the project in any way hereunder arising out of or caused by, directly or indirectly, climate change, including but not limited to sea level rise.

APPLICATIONS FOR PERMITS AND CERTIFICATES REQUESTED ON BEHALF OF CLIENT

CLIENT shall indemnify and hold harmless CONSULTANT from and against any and all judgments, losses, damages, and expenses (including attorney's fees and defense costs) arising from or related

to claims by third parties to challenge the issuance of permits or certificates for the Project by agencies with jurisdiction over the project. Defense costs include the time and expenses of CONSULTANT's personnel to assist in the defense of the issuance of the permit or certificate.

TERMINATION

In the event of termination of this Agreement by either party, within fifteen (15) calendar days of termination CLIENT shall pay CONSULTANT for all services rendered and all reimbursable costs incurred by CONSULTANT up to the date of termination, in accordance with the payment provisions of this Agreement.

Either party may terminate this Agreement for the convenience and without cause upon giving the other party not less than fifteen (15) calendar days' written notice.

Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days' written notice for any of the following reasons:

- Substantial failure by the other party to perform in accordance with the terms of this Agreement and through no fault of the terminating party;
- Assignment of this Agreement or transfer of the Project by either party to any other entity without the prior written consent of the other party;
- Suspension of the Project or CONSULTANT's services by CLIENT for more than ninety (90) calendar days, consecutive or in the aggregate;
- Material changes in the conditions under which this Agreement was entered into, the Scope of Services or the nature of the Project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

In the event of any termination that is not the fault of CONSULTANT, CLIENT shall pay CONSULTANT, in addition to payment for services rendered and reimbursable costs incurred, for all expenses reasonably incurred by CONSULTANT in connection with the orderly termination of this Agreement, including but not limited to demobilization, reassignment of personnel, associated overhead costs and all other expenses directly resulting from the termination.

SIGNAGE

CLIENT agrees to allow CONSULTANT to place a sign on the project site during construction. The sign will include general information relative to CONSULTANT. CONSULTANT will be responsible for the sign installation and removal.

AMENDMENT

This Agreement can be amended by addenda if agreed to in writing and signed by both parties.

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CLIENT'S INITIALS

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CONSULTANT'S INITIALS



Thomas & Hutton provides services on a time and expense basis as follows:

1. This basis includes allowance for direct salary expenses and for direct non-salary expenses. It also provides for services we may subcontract to others.
2. Direct salary expenses are generally based upon our payroll costs. The payroll costs include the cost of salaries and wages (including sick leave, vacation, and holiday pay) for time directly chargeable to the project; plus, unemployment, excise, payroll taxes, and contributions for social security, employment compensation insurance, retirement benefits, and medical and insurance benefits.

The current hourly rate charges for each skill position for 2025 are as follows:

Hourly Rate	Engineer	Survey	Landscape	GIS	Quality Control	Business/ Administrative
\$ 320.00	Consultant	Consultant	Consultant	Consultant	Consultant	
\$ 290.00	Senior Manager	Senior Manager Survey Party (3-Men)	Senior Manager	Senior Manager	Senior Manager	Senior Manager
\$ 265.00	Project Manager V Project Engineer V	Survey Manager V Project Surveyor V	Landscape Architect V LA Project Manager V	GIS Manager V		
\$ 240.00	Project Manager IV Project Engineer IV	Survey Manager IV Project Surveyor IV	Landscape Architect IV LA Project Manager IV	GIS Manager IV		Senior Application Developer IV, Software/Computer Consultant IV
\$ 230.00	Project Manager III Project Engineer III	Survey Manager III Project Surveyor III	Landscape Architect III LA Project Manager III	GIS Manager III		Senior Application Developer III, Software/Computer Consultant III
\$ 215.00	Project Manager II Project Engineer II	Survey Manager II Project Surveyor II Survey Party (2-Men)	Landscape Architect II LA Project Manager II	GIS Manager II	Construction Administrator II	Senior Application Developer II, Software/Computer Consultant II
\$ 200.00	Project Manager I Project Engineer I	Survey Manager I Project Surveyor I	Landscape Architect I LA Project Manager I	GIS Manager I	Construction Administrator I Field Representative V	Grant Administrator, Senior Application Developer I, Software/Computer Consultant I
\$ 180.00	Designer IV Engineering Technician IV	Staff Surveyor V Survey Field Supervisor	Landscape Designer IV	GIS Analyst IV	Field Representative IV	Application Developer IV
\$ 170.00	Designer III Engineering Technician III	Staff Surveyor IV	Landscape Designer III	GIS Analyst III	Field Representative III	Application Developer III Permit Coordinator III
\$ 160.00	Designer II Engineering Technician II	Staff Surveyor III Survey Party (1-Man)	Landscape Designer II	GIS Analyst II	Field Representative II	Application Developer II Permit Coordinator II, Admin IV
\$ 145.00	Designer I Engineering Technician I	Staff Surveyor II	Landscape Designer I	GIS Analyst I		Application Developer I Permit Coordinator I
\$ 125.00	CADD Technician III	Staff Surveyor I Survey Technician III	Landscape Technician III	GIS Technician III		
\$ 115.00	CADD Technician II	Survey Technician II	Landscape Technician II	GIS Technician II	Field Representative I	Admin III
\$ 110.00	CADD Technician I	Survey Technician I	Landscape Technician I	GIS Technician I		
\$ 105.00						Admin II
\$ 100.00						Admin I
\$ 485.00	Expert Witness					

3. When warranted, overtime will be charged for any non-salary employees. Overtime hours will be billed at 1.5 times the individual's charge rate.
4. Direct non-salary (reimbursable) expenses, including printing, reproduction, air travel, lodging, and meals are billed at cost. Travel in company or private vehicles will be billed at the IRS Standard Mileage Rate and may be revised based on fuel pricing. Outside consultant fees will be billed at 1.15 times the cost.
5. All rates and charges are effective through December 31st, 2025, including printing, reproductions, materials, and travel and are subject to change at that time. New rates and costs will become immediately effective to contracts in effect at the time of rate changes.

CLIENT'S INITIALS

CONSULTANT'S INITIALS

BORING SCHEDULE						
BORING ID	SURFACE EL. (FT)	TARGET BOTTOM EL. (ft)	TOTAL DEPTH (FT)	SOIL SAMPLING (ft)	ROCK CORING (ft)	PACKER TESTING
B-1	690	635	55	5	50	5 TESTS
B-2	696	635	61	5	56	5 TESTS
B-3	700	635	65	5	60	5 TESTS
B-4	690	635	55	5	50	5 TESTS
B-5	710	680	30	5	25	
B-6	704	680	24	5	19	
B-7	699	680	19	5	15	
B-8	700	680	20	5	15	
B-9	704	680	24	5	19	
B-10	715	680	35	5	30	
B-11	707	680	27	5	22	
B-12	707	680	27	5	22	
B-13	712	680	32	5	27	
B-14	715	680	35	5	30	
B-15	714	680	34	5	29	
B-16	716	680	36	5	31	
B-17	731	680	51	5	46	
B-18	740	680	60	5	55	
B-19	748	680	68	5	63	
B-20	745	680	65	5	60	5 TESTS
B-21	730	680	50	5	45	
B-22	724	680	44	5	39	
B-23	745	680	65	5	60	
B-24	738	680	58	5	53	
B-25	749	680	69	5	64	
B-26	738	680	58	5	53	
B-27	725	680	45	5	40	
B-28	722	680	42	5	37	
B-29	738	680	58	5	53	
B-30	758	680	78	5	73	
B-31	757	680	77	5	72	
B-32	750	680	70	5	65	
B-33	765	680	85	5	80	5 TESTS
B-34	749	680	69	5	64	
B-35	737	680	57	5	52	
B-36	721	680	41	5	36	
B-37	734	680	54	5	49	
B-38	748	680	68	5	63	
B-39	763	680	83	5	78	
B-40	763	680	83	5	78	
B-41	738	680	58	5	53	
B-42	754	680	74	5	69	
B-43	755	680	75	5	70	
B-44	741	680	61	5	56	
B-45	727	680	47	5	42	
B-46	717	680	37	5	32	
B-47	740	680	60	5	55	
B-48	738	680	58	5	53	
B-49	740	680	60	5	55	

Legend

- PROPOSED BORING LOCATION
- ELECTRICAL RESISTIVITY IMAGING LINES
- SEISMIC REFRACTION TOMOGRAPHY LINES
- MAJOR CONTOURS (10 FT)
- MINOR CONTOURS (2 FT)



Source: Maxar
Spatial Reference PCS: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
Scale: 1:3,400
1 inch equals 450 feet
0 225 450 900 US Feet



SPRING HILL NEW RESERVOIR
THOMAS & HUTTON
SPRING HILL, TENNESSEE
PROJECT NO. 24300025.000

BORING LOCATION PLAN
FIGURE 1
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