



## CITY COUNCIL AGENDA REQUEST

**Meeting Type:** Mayor & Council Meeting

**Meeting Date:** 06/03/2024

**Agenda Item:** West Hill Cemetery Columbarium Site Design & Expansion Master Plan

**Department:** Public Works

**Requested By:** Chad Townsend

**Reviewed/Approved by City Attorney?** No

**Cost:** \$163,771.00

**Funding Source if Not in Budget** N/A

**Please Provide A Summary of Your Request, Including Background Information to Explain the Request:**

The following agenda request is for consideration of execution of the Columbarium Site Design & Cemetery Master Plan Professional Services Agreement with the engineering consultant Arcadis.

This proposal provides engineering and design support for the West Hill Cemetery Columbarium design and Master Plan. The Columbarium design will provide a complete construction plan set, and the Master Plan shall encompass engineering and architectural services to illustrate the expansion of the cemetery's current road network and plot layout.

Should this proposal be awarded, the total cost is \$163,771.00, and work shall be completed within 160 calendar days from Notice to Proceed to the consultant.

Please refer to the attached Professional Services Agreement for more information.

## **PROFESSIONAL SERVICES TASK ORDER**

**Task Order Number: 012**  
**Task Order Date: May 9, 2024**

Subject to the Master Services Agreement between *the City of Dalton, Georgia* [Client] and *Arcadis U.S., Inc.* [Arcadis], dated March 1<sup>st</sup>, 2020, Client hereby authorizes Arcadis to perform services as specified in this Task Order and in accordance with the above-mentioned Agreement.

**1. Project Description:** A description of Client's Project for which work is requested is provided in Attachment 1, incorporated into this Task Order.

Client's Project Number: \_\_\_\_\_

Project Name: Columbarium Site Design & Cemetery Master Plan  
 Client's Representative: Chad Townsend

**2. Scope of Work:** Arcadis shall perform its services as described in Attachment 1, incorporated into this Task Order.

Arcadis's Job Number: \_\_\_\_\_

Arcadis's Representative: Richard Greuel, P.E.

**3. Time Schedule:** Arcadis shall use reasonable efforts to complete its work by: 160 days from Notice to Proceed

**4. Compensation:** Arcadis's Compensation authorized under this Task Order, which shall not be exceeded without prior written authorization of Client, is:

\$ 163,771 This Task Order's Method of Payment is incorporated and attached as Attachment 2.

**5. Special Conditions:** This Task Order is subject to the special provisions as described in Attachment 3, attached, and incorporated into this Task Order:

**6. Amendment:** ☐ This Task Order amends a previously executed Task Order:

Previous Task Order Number: \_\_\_\_\_ Previous Task Order Date: \_\_\_\_\_

**ISSUED AND AUTHORIZED BY:**  
 Client

**ACCEPTED AND AGREED TO BY:**  
 Arcadis, INC.



By: \_\_\_\_\_

By: Richard A. Greuel, PE

Title: \_\_\_\_\_

Title: Principal Engineer

# PROFESSIONAL SERVICES TASK ORDER

## Task Order Number: 012

### Attachment 1

#### Description of Project & Scope of Work

#### **Introduction**

The City of Dalton has requested that Arcadis prepare this proposal to provide engineering and design support for the West Hill Cemetery Columbarium design and Master Plan. The Columbarium design will be performed to provide a complete construction drawing package. It is Arcadis's understanding that the cemetery expansion work includes Master Plan level work to illustrate the expansion of the cemetery's current road network and plot layout. The Master Plan will include conceptual grading of the future cemetery expansion area.

#### **Task 1 – Boundary Survey**

Arcadis will subcontract Southeastern Engineering, Inc. (SEI) to conduct a survey of the Columbarium site area. Lidar information will be utilized for the Cemetery Master planning and the Columbarium Design.

SEI will perform a boundary survey prepared in accordance with the State of Georgia requirements for land surveys as shown in Attachment 4 Project Map Area referenced property. Only the Northern and Westerly edges of the property will be surveyed per the Client request. Boundary resolution pricing is based on a reasonable amount of research and field work in accordance with industry standards. Should the reconstruction of the subject property involve more than what is deemed reasonable, and the need arises for additional tracts to be surveyed (e.g. subject property does not have suitable monumentation or is not properly recorded), Arcadis will notify the client immediately of any additional charges needed to complete the survey. Additionally, Arcadis will provide proof satisfactory to the client that additional work/fees are required prior to proceeding.

#### **Deliverables:**

- Boundary Survey Digital File (AutoCAD)

#### **Assumptions:**

- The City will coordinate all on-site access for private property.

#### **Task 2 – Geotechnical Investigation**

Arcadis will subcontract Terracon to conduct a geotechnical investigation of the Columbarium site within the West Hill Cemetery property.

#### **Field Exploration (Exhibit E)**

The field exploration program is expected to be completed with 1 day of on-site activities and includes subsurface borings as described below:

<b>Number of Borings</b>	<b>Planned Boring Depth (feet)<sup>1</sup></b>	<b>Planned Location<sup>2</sup></b>
4	25-feet	Proposed Columbarium Location
2	10-feet	Parking/Driveway Area

1. Although not anticipated based on the geology in the vicinity of the project site, borings would be terminated at shallower depths if refusal is encountered.
2. Locations of borings to be determined once a site plan is approved by the City.

#### **Boring Layout and Elevations**

Handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-20 feet. Field measurements from existing site features may be utilized. If available, approximate elevations will be obtained by interpolation from a

site specific, surveyed topographic map. Terracon can alternatively coordinate with your Project Surveyor to include locations and surface elevations in project information if so requested.

#### Subsurface Exploration Procedures

Borings with a truck-mounted drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions) and/or rotary wash boring techniques. Four samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using thin-wall tube and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, Terracon will observe and record groundwater levels during drilling and sampling. Terracon exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation and include modifications based on observations and laboratory tests.

#### Property Disturbance

Terracon will take reasonable efforts to reduce damage to the property. However, it should be understood that in the normal course of our work some disturbance could occur including rutting of the ground surface and damage to landscaping. They will backfill borings with auger cuttings upon completion. Pavements will be patched with cold-mix asphalt and/or ready-mixed concrete, as appropriate. Services do not include repair of the site beyond backfilling our boreholes and patching existing pavements. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. They can provide this service or grout the boreholes for additional fees at your request.

#### Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials observed while drilling will be noted on our logs. Exploration efforts require borings into the subsurface, therefore Terracon will comply with local regulations to request a utility location service Georgia 811. They will consult with the landowner/client regarding potential utilities or other unmarked underground hazards. Based upon the results of this consultation, they will consider the need for alternative subsurface exploration methods as the safety of our field crew is a priority. Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities not disclosed to them.

#### Site Access

Terracon must be granted access to the site by the property owner. Without information to the contrary, they consider acceptance of this proposal as authorization to access the property for conducting field exploration in accordance with the Scope of Services. The proposed fees do not include time to negotiate and coordinate access with landowners or tenants. Terracon will conduct field services during normal business hours (Monday through Friday between 7:00am and 5:00pm). If their exploration must take place over a weekend or at night, please contact us so they can adjust our schedule and fee.

#### Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of fieldwork, but they anticipate the following laboratory testing may be performed:

- Water content

- Atterberg limits
- Grain size analysis

The laboratory testing program often includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, Terracon will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

#### Geotechnical Report

The results of Terracon's field and laboratory programs will be evaluated, and a geotechnical engineering report will be prepared under the supervision of a licensed professional engineer. The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Recommended foundation options and engineering design parameters
- Estimated settlement of foundations
- Recommendations for design and construction of interior floor slabs
- Seismic site classification
- Earthwork recommendations including site/subgrade preparation
- Lateral earth pressure recommendations
- Recommended pavement options and design parameter

#### Deliverables:

- Geotechnical Engineering Report, including the professional engineer's seal and signature

#### Assumptions:

- The City will coordinate all on-site access for private property.
- Clearing will not be required by Terracon to perform the borings. If clearing is required, an additional fee will be required.

### **Task 3 - Columbarium Concept Design**

Arcadis will prepare a design submittal of the Columbarium and Columbarium Plaza within the Cemetery Expansion Master Plan.

#### 30% Plans

The purpose of the 30% plans are to provide an engineering design that identifies all constraints to the design and provide "proof of concept". The Columbarium site plan concept will be within the expansion Master Plan.

The 30-percent design drawings and deliverables will include:

- 30% Submittal Construction Plan Sheets
  - Title Sheet
  - Site Plan
    - Vehicular pulloff / drop-off,
    - Vehicle Parking
  - Landscape Plan
    - Location and layout of each niche

- Paved plaza space adjacent to each niche
- Proposed planting areas
- Proposed seatwalls
- Site furnishings

**Deliverables:**

- 30% Construction Plans (PDF Format)

**Assumptions:**

- No more than 2 Design Iterations for Final Concept.
- Arcadis will address one round of review comments for the 30-percent design.
- The City will provide one set of consolidated review comments for the 30% Design Plan submittal.
- The scale of plan drawings will be 1-inch equals 20-feet.
- This project will be exempt from water quality, channel protection, and detention requirements of the City's Land Development Ordinance.
- GDOT standard details and specifications will be sufficient for the project for drainage elements.
- The civil site grading design will provide approximate top and bottom of retaining wall elevations for the pond wall. Final wall elevations will be determined by the retaining wall designer. (If required).
- Once the concept plan is approved, Arcadis will generate photo-illustrative renderings to illustrate the proposed improvements.

## **Task 4 - Columbarium Design and Construction Plans**

### **60% Plans**

Arcadis will prepare a design submittal at the 60-percent design stage and submit to the city for review. The 60-percent design drawings and deliverables will include:

- 60% Submittal Construction Plan Sheets
  - Title Sheet
  - General Notes
  - Existing Conditions Plan
  - Demolition Plan
  - Tree Protection Plan (if required)
  - Site Plan
  - Grading and Drainage Plan
  - Pipe Profiles
  - Landscape Plan
  - Landscape Details
  - Columbarium Sections
  - Columbarium reinforced foundation plans and details
  - Elevations drawings;
  - Erosion & Sedimentation Plans
  - Erosion & Sedimentation Details
  - Standard Civil Details
  - Structural Foundation Plan
  - Structural Foundation Details

**Deliverables:**

- 60% Construction Plans (PDF Format and 1 hardcopy)
- (1) photo-illustrative rendering

**Assumptions:**

- Arcadis will address one round of review comments for the 60-percent design.
- The City will provide one set of consolidated review comments for the 60% Design Plan submittal prior to the plan review meeting.
- The scale of plan drawings will be 1-inch equals 20-feet
- The civil site grading design will provide approximate top and bottom of retaining wall elevations for the pond wall. Final wall elevations will be determined by the retaining wall designer. (If required).

**90% Plans**

Arcadis will prepare a design submittal at the 90-percent design stage and submit to the city for review. The 90-percent design drawings and deliverables will include:

- 90% Submittal Construction Plan Sheets
  - Title Sheet
  - General Notes
  - Existing Conditions Plan
  - Demolition Plan
  - Tree Protection Plan (if required)
  - Site Plan
  - Grading and Drainage Plan
  - Pipe Profiles
  - Landscape Plan
  - Landscape Details
  - Columbarium Sections
  - Columbarium reinforced foundation plans and details
  - Elevations drawings;
  - Erosion & Sedimentation Plans
  - Erosion & Sedimentation Details
  - Standard Civil Details
  - Structural Foundation Plan
  - Structural Foundation Details

**Deliverables:**

- 90% Construction Plans (PDF Format and 1 hardcopy)
- (1) photo-illustrative rendering

**Assumptions:**

- Arcadis will address one round of review comments for the 90-percent design.
- The City will provide one set of consolidated review comments for the 90% Design Plan submittal prior to the plan review meeting.
- The scale of plan drawings will be 1-inch equals 20-feet
- The civil site grading design will provide approximate top and bottom of retaining wall elevations for the pond wall. Final wall elevations will be determined by the retaining wall designer. (If required).

**Permitting**

Based upon the anticipated site size for the Columbarium to disturb more than 1 acre, as such, NPDES Construction permit will likely be required for this project. Following completion of the plans, it is assumed that the City Public Works staff will submit the plans to the appropriate agency for issuance of a Land Disturbance permit. Arcadis will provide support for the permitting effort of the land disturbance permit only. This will include plan revisions and answers to questions submitted by the plan reviewers. Following completion of the effort, Arcadis will provide a 100% set of

construction plans marked “For Construction” signed and sealed by a Georgia Registered Engineer with a Level II Design certification by the Georgia Soil and Water Conservation Commission.

#### **Task 5 – Cemetery Master Planning**

Arcadis will prepare a Cemetery Expansion Master Plan illustrating the extension of the existing grid pattern of cemetery roads northward into the adjacent city property. The Master Plan will include the Columbarium site plan and area of Columbarium extension. Arcadis will submit one draft concept to the City for their review. The Master Plan shall include the following:

- Master Plan:
  - Overall Site Plan showing road extensions;
  - Burial plots layout;
  - Limits of disturbance;
  - Conceptual grading.
  - The plan will include the Columbarium site including area for Columbarium expansion.

#### **Deliverables:**

- (1) draft concept for review of the Cemetery Master Plan (PDF Format)
- (1) final Cemetery Master Plan (PDF Format)
- (1) Site Plan Rendering

#### **Assumptions:**

- No more than 2 Design Iterations for Final Concept.
- Arcadis will address one round of review comments for the Cemetery Master Plan.

#### **Task 6 - Modeling and Rendering**

Arcadis will produce an illustrative renderings as part of this project’s efforts for the Columbarium. Please note, (1) Site Plan Rendering of the Cemetery Expansion Master Plan is included in Task 4.

The following will be provided:

- Columbarium digital model
- Columbarium ground-level perspectives (2)

Each illustrative will be a photo realist digitally generated image suitable for the City’s use for public announcements, advertisements, and display.

#### **Task 7 – Public Meetings**

It is our understanding that the City will likely schedule one public meeting to present the status of the project to city officials and general public. Arcadis will prepare a Power Point presentation outlining the project status and present at City Hall.

#### **Deliverables:**

- Power Point Presentation

#### **Assumptions:**

- Arcadis will present at up to one Public Meeting.
- All coordination for time, location, and notifications to the public will be handled by the City.



**PROFESSIONAL SERVICES TASK ORDER****Task Order Number: 012****Attachment 2****Task Order Payment Terms**

All work will be completed on a time and materials basis for a fee not to exceed the amount listed in this Task Order based on the 2024 rate table below. The task budgets below are an estimate of the level of effort for each phase of the scope of work.

Task 1 – Survey	\$15,420
Task 2 – Geotechnical Investigation	\$9,650
Task 3 – Columbarium Concept Design	\$22,815
Task 4 – Columbarium Design and Construction Plans	\$79,685
Task 5 – Cemetery Master Planning	\$20,125
Task 6 – Modeling and Rendering	\$10,400
Task 7 – Public Meeting	<u>\$5,676</u>
	<b>\$163,771</b>

## 2024 Rate Schedule

Title	Rate \$/hr
Project Administrative Assistant	\$70
Project Assistant	\$90
Sr Project Assistant	\$120
Project Manager	\$215
Engineering Technician I	\$90
Engineering Technician II	\$110
Staff Engineer/Scientist/Architect I	\$90
Staff Engineer/Scientist/Architect II	\$100
Staff Engineer/Scientist/Architect III	\$110
Project Engineer/Scientist/Architect I	\$120
Project Engineer/Scientist/Architect II	\$135
Project Engineer/Scientist/Architect III	\$150
Senior Engineer/Scientist/Architect I	\$165
Senior Engineer/Scientist/Architect II	\$180
Senior Engineer/Scientist/Architect III	\$195
Principal Engineer/Scientist/Architect I	\$240
Principal Engineer/Scientist/Architect II	\$265
Principal Engineer/Scientist/ Architect III	\$290
Registered Land Surveyor	\$150
2-man Survey Crew	\$150
3-man Survey Crew	\$225

\* A rate schedule will be provided with each Task Order proposal based on the specific services that will be provided and the rates effective at that time.

\*All direct expenses will be billed at cost plus 10%

\*Mileage will be billed at the current federal mileage rate

\* Additional Services requested by the City beyond those in Scope of Work will be billed on an hourly basis in accordance with this rate schedule

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**Attachment 3**  
**Special Conditions**

None.

**PROFESSIONAL SERVICES TASK ORDER**  
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**Attachment 4**  
**Project Area Map**

