



October 5, 2023

Matthew J. Anderson
Assistant Director
Parks and Recreation Department
City of Clearwater
100 Myrtle Avenue
Clearwater, FL 33756

**RE: CITY OF CLEARWATER MUNICIPAL CEMETERY SITE
CEMETERY MAPPING
1300 S MYRTLE AVE, CLEARWATER, FL 33756**

Dear Mr. Anderson:

Pennoni Associates Inc. (Pennoni) is pleased to submit this proposal to provide GIS and engineering services for a mapping of the City of Clearwater Municipal Cemetery. It is our understanding that the City is requesting location of all grave sites identified and a GIS geodatabase be provided to the City for staff to use for ongoing updates.

The Scope of Services anticipated for this project includes:

TASK 1 – PROFESSIONAL CONSULTING SERVICES

Meet with City of Clearwater stakeholders to discuss the mapping program and develop an approach. In general, this task includes all calls, emails, meetings, invoicing and administrative tasks for implementation and setup of the work. An onsite kickoff meeting will be held along with (2) virtual meetings per month with Client to review the progress of the project and discuss findings. In-person meetings with Stakeholders will be made during as required to discuss project specific findings and to review the final project submission.

TASK 2 – SURVEY SERVICES

In accordance with the Florida Standards of Practice for Land Surveys, Chapter 5J-17, Florida Administrative Code, Pennoni Survey Department will provide professional surveying and mapping services necessary to provide survey services to produce a CAD File of a plot map for the cemetery.

1. Survey the approximate horizontal location of the cemetery plots based on maps provided by the client.
2. Depict the cemetery plot maps in a Cad file. Due to the inaccuracies in the maps and field monumentation, the Cad file will be an approximate representation of the plot plans provided.
3. Horizontally coordinate the survey to the Florida State Plane Coordinate System, North American Datum 1983, adjustment 2011 (NAD83/11).
4. It is estimated temporary 60-100 block markers to be placed at the corners during the survey.
5. Conduct site/parcel research, field coordination, and quality control measures as deemed necessary by Pennoni in order to produce the survey.
6. Provide a digital CAD file of the survey from AutoCAD Civil 3D 2020, excluding title block and certifications.
7. Convert CAD file to geodatabase for inclusion in final deliverable.

TASK 3 – GPR SERVICES

Ground Penetrating Radar (GPR) will be used to determine the location of all grave sites. Once the locations are identified, flags will be placed in the four corners of each gravesite to identify the data collection point for Task 2. Additionally, GPR can collect the individually location of crypts which is included as an optional fee in the proposal fee below. GPR will be conducted in the winter because ground will be drier and less mowing will be happening, therefore allowing the flags to remain in place longer.

High-density scan and documentation of three areas within the cemetery will also be conducted. The three areas include smaller crypts and areas of burial associated with a scarlet fever outbreak.

TASK 4 – GIS DATA COLLECTION AND MAPPING

Pennoni GIS staff will create a field data collection application using ESRI's Field Maps which will give users the ability to locate, inventory, plot locations and attributes. All collection can be completed entirely on handheld tablets or smart phones and will be tested prior to implementation by the ENGINEER to ensure complete functionality.

The collection process will include visiting the locations identified by GPR and collect a GPS location of the top and bottom of each identified anomaly as outlined in Task 3 and fill out any pertinent information about the headstone. We will use a GPS unit which connects via Bluetooth to the mobile device providing centimeter accuracy on average. Field staff will enter data in real time that will be immediately visible to staff in the ENGINEER's offices to understand overall project progress and provide support to field collectors as needed. Field staff will also use the mobile app to collect notes and photos of headstones to provide as much information as possible within the mapping application.

The following potential features and corresponding attributes are anticipated to be included in the GIS data collection effort for the cemetery. The geodatabase design will contain dropdowns and additional standardization features, allowing for a reduction in human error and other potential issues in the field.

Field	Information to Collect
Cemetery Name	Name of Cemetery
Date of Inspection	Date Inspection was performed
Section	Section of cemetery plot is within
Row	Row plot is within
Type	Document burial type based on GPR flag color (crypt, casket, etc)
Name	Full name of the deceased (Last Name, First Name, Middle Name)
Date of Birth	Date of birth of the deceased (MM/DD/YYYY)
Date of Death	Date of death of the deceased (MM/DD/YYYY)
Epitaph	Any epitaph visible on the headstone
Language	Denote what language the stone is written in (specifically if non-English)
Notes	Any notes regarding the headstone or gravesite, and any special circumstances
Pictures	Images of each headstone and any other key information about the burial plot

Following data collection, staff will review the database and prepare it for delivery to the City of Clearwater. This deliverable will be in the form of a ESRI file geodatabase that can be directly integrated into the City's existing GIS framework. Pennoni will ensure that all images and attribute information is correctly attached and input for each headstone prior to delivery. The geodatabase can be modified in the future by the ENGINEER or City GIS staff for further data collection or the addition of more attributes or attachments.

FEES AND REIMBURSABLE EXPENSES

Our lump sum fee is **One Hundred and Forty Thousand One Hundred Dollars (\$141,100)** and is derived as follows:

Clearwater Municipality Cemetery		
Task 1	Professional Consulting Services	\$ 21,500.00
Task 2	Site Survey for Updated Plot Map	\$ 27,000.00
Task 3	GPR Identification for Grave Sites (Exhibit A)	\$ 39,600.00
Task 4	GIS Data Collection (In Field)	\$ 40,000.00
	GIS Mapping (In Office)	\$ 12,000.00
Total		\$140,100.00

SCHEDULE

We will start work after acceptance of this proposal. We will endeavor to meet your schedule for progress and final submissions. The following preliminary schedule has been developed considering that site access will need to be scheduled around onsite maintenance.

- Task 1 – 14 Weeks (Total Project Duration)
- Task 2 – 10 Days onsite
- Task 3 – 22 Field working days onsite
- Task 4 – 22 Field working days onsite, 10 days office processing data

If this task order proposal is acceptable in the current format, please sign below and return the original copy to us. We will then await your Official Notice to Proceed **prior** to initiating work. Any additions or modifications to the aforementioned scope of work would require a revised proposal.

ADDITIONAL SERVICES

In the event that additional services become necessary, Pennoni will provide a separate scope of services and fee proposal to address the required services. Additional services can include, but are not limited to, the following items.

- Evaluation that is not specifically listed above.
- Exploratory demolition to expose hidden conditions.
- CAD drawings beyond what is described in scope of work.
- ALTA/NSPS Land Title Survey, Boundary & Topographic Survey.
- Any services not expressly stated in the Scope of Services herein.

REIMBURSABLE EXPENSES

Extraordinary expenses identifiable to the specific project will be billed in addition to the above stated fee. Overnight mail are considered reimbursable expenses and will be billed accordingly. We do not bill for such items as small amounts of in-house printing and normal mailing expenses.

BILLING AND PAYMENT

An invoice for professional services completed will be presented for payment on a monthly basis. Invoices are due upon receipt. The Client acknowledges that the method of billing and payment has been discussed in detail, that the terms agreed upon can only be changed by a written addendum agreed to by both parties, and that work may be stopped until payment is made in accordance with the agreement.

STATUTORY DISCLOSURE:

PURSUANT TO §558.0035, FLORIDA STATUTES, AN INDIVIDUAL EMPLOYEE OR AGENT OF PENNONI ASSOCIATES INC. CANNOT BE HELD INDIVIDUALLY LIABLE FOR DAMAGES RESULTING FROM NEGLIGENCE OCCURRING WITHIN THE COURSE AND SCOPE OF THIS PROFESSIONAL SERVICES CONTRACT OR IN ANTICIPATION OF, ARISING OUT OF OR RELATED TO THE PERFORMANCE OF PROFESSIONAL SERVICES HEREUNDER.

TERMS AND CONDITIONS

Pennoni Associates Inc. General Terms and Conditions are attached hereto and are a part of this agreement. The Client indicates by the execution of this proposal that they have reviewed and understand the General Terms and Conditions.

This proposal is based on the scope as described by you and the clarifications noted above.

We appreciate the opportunity to submit this proposal and look forward to working with you.

Sincerely,

PENNONI ASSOCIATES INC.



E. Michael McCarthy, PE SI
Vice President



Vince Barnes III, PE SI-Limited
Forensics Division Manager