

## **ATTACHMENT B – STATEMENT OF WORK**

### **DESCRIPTION/SPECIFICATION/STATEMENT OF WORK**

#### **Underground Sprinkler Systems – System Inspection and Maintenance**

##### **1. GENERAL**

Work consists of monthly inspection, reporting and minor maintenance of the irrigation system located at the Ohio Western Reserve National Cemetery, 10175 Rawiga Rd, Seville, Ohio 44273. The irrigation system is comprised of and serves 90 acres of lawn and burial areas. The water source for the system is Manmade pond/ City water which is located on the edge of the cemetery. The irrigation system is primarily supported by standalone controllers located throughout the cemetery.

Consideration of and curtesy to cemetery visitors is imperative. The contractor may at times be required to suspend activities briefly for funeral services or in consideration of visitors. Planning maintenance times and locations with the COR will help minimize conflicts with funeral services.

##### **2. SITE VISIT**

All prospective offerors are encouraged to visit the Ohio Western Reserve National Cemetery for a tour of the grounds and to inspect the facility blueprints. The blueprints may only be viewed at the Ohio Western Reserve National Cemetery. Prospective contractors should contact Brian Cheesman, Cemetery Foreman, at 330-335-3069 to schedule an appointment to review blueprints.

##### **3. ADMINISTRATIVE REQUIREMENTS**

The contractor shall comply with all requirements listed within this “Description/Specification/Statement of Work”. The contractor shall work in conjunction with the Contracting Officer’s Representative (COR) at the Ohio Western Reserve National Cemetery, to ensure that proper documentation of all inspections and maintenance is submitted monthly. Prior to the first scheduled monthly inspection, the contractor shall be provided with an “Inspection Checklist Form” that they will use as a starting point when making their monthly inspection. The contractor shall utilize this checklist to certify (by their signature) the results of the inspection. Additionally, the contractor shall submit written records of any and all maintenance conducted as a result of their monthly inspection. The monthly report shall also contain any recommendations, potential problems or other issues the contractor has determined to be relevant.

##### **4. SYSTEM COMPONENTS**

The major components of the irrigation system include:

###### **Pump House:**

3 US MOTORS – FLOWTRONEX PSI pumping system ( Flow- 600, Pressure- 120, Voltage- 460, Phase- 3, Full load Amps- 127, Frequency- 60, Max H.P.- 30)

###### **Valves and Sprinklers:**

Various size hose and PVC pipe irrigation lines and fittings throughout the cemetery. Rain Bird 8000 & 5000 heads. Hunter, I-25 & I-20 & misters (6 and 12 inch popups).

**Irrigation Control stations-** Rain Bird PAR+ES Controller; Rain Bird ESP-LXME Controller; Hunter, I-CORE Controller

## **5. PERFORMANCE REQUIREMENTS**

### **5.1 Description**

The work specified herein shall be provided to facilitate the successful and ongoing operation of an automatically controlled underground landscape irrigation system, including system controllers and control devices, control valves, sprinkler heads and accessible field wiring.

### **5.2 Inspections and Maintenance**

- A.** This contract will cover Daily, weekly and monthly diagnostic, troubleshooting, and repair service, which includes emergency callback service, monthly inspections and preventative maintenance of all ground irrigation system components, controllers, control devices, and pump stations. The contractor shall be required to perform the following.
  - 1.** Underground Irrigation Systems with Stand-Alone Controllers.
    - a.** Provide monthly examination of irrigation system by walking site and performing a thorough inspection of grounds and irrigation components using the "Inspection Checklist Form".
    - b.** During each inspection, prepare a list of all trouble spots and problem issues that are visibly identifiable. In addition, review system operation with COR to determine and record additional issues experienced during daily operation that may not be readily observable. The contractor is required to prepare, sign and submit to the COR, weekly "Inspection Checklist Form", maintenance records, and any reports detailing any recommendations, potential problems or other issues the contractor feels are relevant.
    - c.** In accordance with inspection notes, physically inspect all field controllers, including visible wiring in controller cabinet. Adjust controller programs to reflect site specific requirement, seasonal changes, and cemetery staff needs.
    - d.** Visibly inspect controller grounding grid for good mechanical connection.
    - e.** Weekly verify operation of all irrigation valves and spray devices by manually running each station on each controller.
    - f.** Weekly adjust/Flush spray devices to assure proper spray pattern and radius of water pattern.
    - g.** When necessary, repair or replace broken or malfunctioning spray devices.
    - h.** If installed, verify that all flow sensors are operating properly.

Recalibrate/replace as required to meet manufacturer's recommendations.

- i. If installed, verify that all system master valves are operating properly. Perform preventive maintenance service to valves to meet manufacturer's recommendations.
  - j. As required, clean/replace all filtering devices on irrigation system, including but not limited to mainline filters, drip line filters, and spray head filter devices.
  - k. At least once annually, test all controller grounding for proper resistance according to equipment manufacturers recommendations. Provide written report detailing grounding resistance for each controller, highlighting deficient ground locations and notifying the COR of required action.
  - l. Provide annual Spring Start-Up and Winterization service for the entire irrigation system.
2. Underground Irrigation Systems
- a. Perform all system inspection and maintenance tasks as outlined in the previous section for Underground Irrigation Systems with Stand-Alone Controllers.
  - b. Check software event logs to verify system has been operating properly. Adjust program settings in the software and make required program modifications to respond to site issues or problems as necessary.
  - c. Verify communication is intact between Central Control computer and all field controller devices. Check program schedules for proper operation and adjust if necessary.
  - d. Adjust programs as necessary to allow for changing site conditions, seasonal changes, and cemetery staff needs.
  - e. Verify that system Weather Station is operating properly. Perform preventive maintenance service to Weather Station to meet manufacturer's recommendations.

### **5.3 Work not included under this agreement**

Maintenance service shall not include the performance of any work required as a result of improper use, accidents, or negligence for which the contractor is responsible.

### **5.4 Materials to be provided by the Ohio Western Reserve National Cemetery:**

- No repair/replacement parts will be provided by the government for this contract.
- Blueprints and any available manual's will be available for the contractor to view.

### **5.5 Materials to be provided by the vendor:**

Vendor will provide all replacement parts with identical parts when available or parts of equal performance.