

Scope of Work

Task Order Contract For Ground Penetrating Radar (GPR) Inspection & Subsurface Utility Location (SUL) Services in ODOT District One

D01-GPR/SUL-FY27, PID 113181

The Ohio Department of Transportation is contracting for Ground Penetrating Radar (GPR) inspection services for bridges and Subsurface Utility Location Services for projects in District One. The selected Consultant will be under contract for a period of two years. The Consultant will be tasked to complete GPR of selected bridges and SUL for various projects on an as-needed basis.

The Consultant hereby agrees that the scope of work under this contract shall be as follows:

Ground Penetrating Radar (GPR)

Inspection Requirements

GPR inspections shall be completed to provide information on the condition of bridge decks and approach slabs and location of voids under approach slabs. Information derived from the inspections will be utilized by the Department to verify bridge deck condition and provide accurate estimates of the concrete repair quantities necessary for rehabilitation contracts.

The inspection shall provide the following information:

1. GPR color maps showing location & relative severity of deterioration of bridge deck and approach slab concrete. Additionally, the map should show location of voids below approach slabs.
2. Table with estimated percentages of deteriorated and sound concrete for each deck and approach slab.
3. Field photos and visual inspection notes on conditions.
4. Estimate of asphalt overlay thickness, when applicable.
5. Estimate of reinforcing steel cover depth.
6. Other scope items, as deemed necessary by the Department, specific to structures.

Specifications

Distance Measurement System

- A distance measurement system consisting of an appropriate distance measurement instrument (DMI) with accuracy of +/- 100 mm per km (+/- 6.5 inch per mile) and a resolution of 25 mm (1 inch) shall be used to register GPR data relative to traveled distance.

Inspection Vehicle

- A vehicle shall be utilized, installed with all equipment necessary to perform the inspection and shall also include proper warning and safety devices installed.

GPR Inspection

- Testing shall be in accordance with the Ohio Department of Transportation most current Bridge Design Manual Section 403.1.3.

- Radar inspection passes shall be made in a longitudinal direction to the centerline of the bridge deck or mainline pavement. Radar data shall be gathered in a continuous manner from beginning of the rear approach slab to the end of the forward approach slab.
- Radar inspection passes shall be made as a series of parallel scan lines.
- No part of the test vehicle shall be permitted to straddle adjacent lanes while gathering data. The vehicle shall operate at speed sufficient to not warrant the need for traffic control.

GPR Data Processing

- All gathered GPR data shall be analyzed for the presence of concrete deterioration in the manner described in most current SHRP, ASTM and/or AASHTO reports.

Traffic Control

- Survey should be conducted at highway speeds without the need for traffic control. However, traffic control may be required when deemed necessary by the Department. Traffic control will follow applicable Standard Construction Drawings and sections in the OMUTCD.

Restrictions & Notification

- All locations shall be inspected in a dry surface condition.
- All inspections shall be completed when surface temperature of the deck is greater than 32 degrees Fahrenheit.
- The Consultant must provide the Department 24 hours minimum advance notification prior to inspection of bridge deck sites.

Items Provided by the Department

The Department shall submit a Request for Proposal for services to be rendered as the need for inspection arises. The Department shall provide the following with each request for services:

- Designation of structures to be inspected,
- Electronic copies of original design drawings and rehabilitation drawings showing the details of the deck, *where available and if needed*,
- Location coordinates of all structures to be surveyed,
- Person to act as liaison between the Consultant and the Department, and
- Copies of reports for each structure previously completed by other consultants.

The Department will provide an authorization to proceed letter upon agreement of fee amount for each subject cost proposal submitted by the Consultant.

Items Provided by the Consultant

- Reports describing the findings of the GPR inspections as described above.

Subsurface Utility Location (SUL)

General

The consultant shall provide subsurface utility engineering (SUE) services in accordance with ODOT's current Subsurface Utility Engineering Specifications. The desired positioning method will be provided in writing by the District/ODOT to aid in the development of the right-of-way, preliminary engineering, and construction contract plans for projects selected by the managing office.

The consultant may be required to perform miscellaneous tasks on a task order type basis. Basic services may include, but are not limited to, the following:

- SUE, Method A
- SUE, Method B
- SUE, Method C
- SUE, Method D

This on-call or indefinite delivery/indefinite quantity (IDIQ) scope is for the performance of services for a number of projects of a general scope, complexity, and professional nature, under task or work orders issued on an as-needed or on-call basis, for an established contract period and maximum total contract dollar amount.

Task Request by ODOT

ODOT will provide a written request that identifies the project designation, PID Number, and limits of the area where subsurface utility engineering is to be performed. Upon receipt of such a request, the consultant may meet or schedule a call with ODOT personnel to review the SUE limits (including potential test hole locations) within the project, existing plans (if any), project horizontal and vertical control and other relevant information.

Task Proposal by Consultant

Upon receipt of a request by ODOT, the Consultant shall submit a price proposal (along with any subconsultant's price proposals) broken down by man-hours and activities. Also included with the proposal, the consultant shall provide a maintenance of traffic plan to ensure conformance with OMUTCD as well as local ordinances. Note that a seven (7) day advance notice to ODOT prior to the erection of any maintenance of traffic devices is required.

Authorization of specific tasks under the agreement must include a Task Number, scope of services, payment method, payment terms (cost plus a fixed fee, rates of pay, unit of work amounts), maximum fee, completion schedule, invoicing information and authorization date, as outlined below.

Costs of services provided to specific projects are allocated to project PIDs through the invoice process. For each assigned task, the District or Office administering the agreement must provide specific invoicing information to the consultant.

Description	Information Needed
Part Number	
Task Number	
PID	
Task Description	

Description	Information Needed
Task Authorization to Proceed	
Task Max Fee	
Task Fixed Fee	
Encumbrance Number*	
Federal Aid Number (FAN)	
State Job Number (SJN)	
Federal Funding Percentage	
State Funding Percentage	
Other/Local Funding Percentage	

Project Schedule

ODOT will determine the required completion time (in calendar days) for each work order, measured from the date of authorization to proceed until the deliverables are received. ODOT will advise the Consultant of the required completion time for each work order within the work order request.

The duration of the agreement will be twenty-four months from the authorization date of the agreement.

Reference Documents

The following documents shall be included in this scope of services by reference:

- ODOT Subsurface Utility Engineering Specifications
- ODOT Location and Design Manual, Volume 3: Plan Preparation
- ODOT Surveying and Mapping Specifications
- ODOT CADD Engineering Standards Manual
- Ohio Manual of Uniform Traffic Control Devices

Compensation

The subsurface utility engineering work to be performed shall be compensated on a cost plus a fixed fee basis unless otherwise agreed to in writing. Compensation for services not contemplated by this Scope of Services or clearly not included within the services described herein shall be negotiated in accordance with Chapter 5 of the Specifications for Consulting Services. The consultant shall maintain a project cost accounting system that will segregate costs for individual tasks.