

COUNTY OF SUMMIT EXECUTIVE

Purchasing Department

Request for Qualifications
Professional Design and Surveying Services
Peninsula Wastewater Treatment Plant and Sanitary Sewer System
Project Q-208
County of Summit Department of Sanitary Sewer Services



Solicitation of Proposals on Monday, January 22, 2023
Questions due by Friday, February 9, 2023
Proposals due by Friday, February 19, 2023

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**REQUEST FOR QUALIFICATIONS
PENINSULA WASTEWATER TREATMENT PLANT AND SANITARY SEWER SYSTEM
PROJECT Q-208
VILLAGE OF PENINSULA
SUMMIT COUNTY
DEPARTMENT OF SANITARY SEWER SERVICES**

I. INTRODUCTION

The County of Summit Department of Sanitary Sewer Services (DSSS), 1180 South Main Street, Suite 201, Akron, Ohio 44301, is seeking the services of a design professional to furnish planning, survey, and engineering design efforts necessary to provide a sanitary sewer collection system and wastewater treatment facilities to serve the Village of Peninsula. In general terms, the Provider will perform the following services:

- a. Meet with DSSS staff to develop a detailed scope of work for the project;
- b. Perform surveying, geotechnical work, other field investigations, and property/easement acquisition services necessary for design and construction of proposed sanitary facilities;
- c. As directed, conduct research and prepare reports, analyses and recommendations of alternates for proposed sanitary facilities for selection by DSSS for construction;
- d. Perform necessary professional services to provide DSSS with specifications, drawings, detailed estimate of cost and completed Contract Documents, and required permits necessary for the bidding and construction of the proposed facilities.

The Provider shall have the capability of performing all project tasks with self-sufficiency and minimal guidance and will report to a Project Engineer/Manager assigned by DSSS.

II. BACKGROUND

The County of Summit Department of Sanitary Sewer Services (DSSS) is a Wastewater Collection and Treatment utility provider operating as a regional metropolitan sewer district serving both incorporated and unincorporated areas of Summit County. The DSSS system consists of 5 (five) wastewater treatment plants, approximately 200 (two hundred) pumping stations and about 1000 (one thousand) miles of collection system lines.

DSSS has been working since 2009 with the Village of Peninsula and other parties, including the Ohio Environmental Protection Agency (OEPA), on determining the most feasible means to address the need for sanitary sewer services in the Village of Peninsula, most particularly in its downtown area. Existing wastewater treatment facilities were and are privately-owned and inadequate to support water quality needs in the Cuyahoga River at this location, or to address local residential and commercial concerns over the economic impacts due to the lack of a publicly owned sanitary sewer system in the Village. Copies of correspondence from the OEPA concerning resolution of the wastewater issues

in the Village are attached to this Request for Qualifications (RFQ) for informational purposes as Exhibit A.

One of the primary goals of the engineering studies directed by DSSS was the delineation of the proposed wastewater collection and treatment service area required to meet the current needs of the Village of Peninsula. Refer to Exhibit B attached to this RFQ. This exhibit shows the specific boundaries of this service area. The engineering studies performed to date also determined a recommended location for the proposed wastewater treatment facility to serve the Village of Peninsula. This is shown along with a proposed sanitary sewer collection system layout in Exhibit C of this RFQ. Copies of the engineering studies pertinent to the design of the Peninsula wastewater collection and treatment system are available and listed as exhibits at the end of this RFQ.

In summary, the purpose of this Request for Qualifications (RFQ) is to provide engineering survey and design services necessary for the construction of the proposed sanitary sewer collection and treatment facilities to serve portions of the Village of Peninsula within the service areas as detailed and described in the exhibit(s) attached to this RFQ.

III. GENERAL PROCEDURES

A. **Qualifications:** Each consultant receiving an RFQ and that wishes to be considered for selection to perform the scope of services, shall submit to the County of Summit a concise and complete description of their organization and ability to perform the work described in Section IV, Scope of Work. The County of Summit is not responsible for any costs incurred in responding to the RFQ.

B. **Submittal of Qualifications:** Qualifications are to be uploaded in electronic format in accordance with the County of Summit's current on-line public purchasing process. Hard copies will not be accepted and will be returned unopened.

C. **Evaluation of Submittals:**

The County of Summit staff will download and review the submittals. Following the review of each submittal, at the sole discretion of the DSSS, firm(s) determined to be the most qualified will be selected for interviews. The purpose of these interviews is for the selected firms to explain their qualifications and approach to the project work in more detail. Interviews will be no longer than forty-five minutes in length, the complexity of the presentation to be at the discretion of the firm being interviewed. The DSSS intends to have a quick turn-around time between the submission of the RFQ and selection of a consultant. Based upon the initial response to the RFQ and the interview results, DSSS will select the most qualified firm. Negotiation of the fee for services and a detailed scope of services will follow the selection process.

The respondents to this RFQ will be evaluated and ranked by the DSSS using the following criteria:

1. Project staff (individual) qualifications:

a. Expertise and demonstrated proficiency in the design and construction of wastewater treatment plants, wastewater pump stations, force mains, and appurtenances, services to include field surveying, easement and land acquisition, and estimating the costs of construction of these facilities;

b. Expertise and demonstrated proficiency in design and construction of gravity sanitary sewer collection systems, service to include field surveying, easement acquisition, and estimating costs of construction of sanitary sewers, other underground utilities, and pavement restoration and construction;

c. Expertise in area-wide facility planning processes and procedures;

d. Personnel certifications and licenses.

2. Firm Information and qualifications:

a. Number of offices;

b. Locations of offices;

c. Number of years in business as it relates to the proposed work;

d. Overall qualifications and experience of personnel;

e. Firm's equipment and facilities.

3. Firm's responsiveness to request for Proposal and the ability of its organizational structure to provide the required services to the DSSS:

a. Size/availability of staff;

b. Proposed project structure and methods for internal communication as well as interfacing with the DSSS staff;

c. Proximity to the work site;

d. Firm's demonstrated ability to produce work on schedule;

e. Firm's demonstrated experience and proficiency in the types of work to be undertaken on the project.

4. Sub-consultants: Listing and brief description of roles and responsibilities of proposed sub-consultants.

5. Method of Approach: A brief but sufficiently comprehensive summary of the scope of services the firm will supply to complete the project.

6. References:

- a. Indicate other county or municipal governments for which the firm has performed similar work in the past 3 (three) years;
- b. Projects on which the firm has performed similar work in the past 3 years;
- c. Level of satisfaction of current and / or prior clients.

DSSS will rely on the firm's competence and experience to develop a scope of services identifying all necessary tasks, meetings, and deliverables.

IV. SCOPE OF WORK

The primary purpose of the professional services being requested through this RFQ is the provision of the necessary planning, survey, and engineering design efforts necessary for the construction of a sanitary sewer collection system and wastewater treatment facilities, to serve specific wastewater service areas in the Village of Peninsula. As noted previously, these service areas are defined in Exhibits B and C of this RFQ.

Scope of work will include, but not necessarily be limited to, the following elements:

- a. Review of previous engineering studies, planning documents, and existing topographic information along with performance of field investigations as necessary to confirm existing conditions, design parameters, service area boundaries, and applicability of the recommended design options for wastewater facilities;
- b. Analysis of the proposed system service area maps, planning documents, and topographic data to verify future and current wastewater system design capacities and flows;
- c. Preparation of a preliminary design report with analyses and recommendations for the detailed design and construction of the proposed sanitary collection system and wastewater treatment plant, to include options to address expansion of the collection system and wastewater treatment plant to accommodate future increases in sanitary flow;
- d. Performance of all surveying efforts required for the project, per the Requirements and Standards Section as outlined in the Surveying Services for Sewer System Projects (Exhibit D);
- e. Prepare and submit, as applicable to the project, a geotechnical plan for subsurface evaluation. Required components of the plan shall be in accordance with the Scope of Work for Geotechnical Services for Utility Work (Exhibit E);
- f. Preparation of easement and property descriptions, and as well as all efforts necessary for acquisition of all easements and property required for the construction of all facilities included in the project (Exhibit F);

g. Professional engineering design services for the preparation of specifications and detailed drawings specifically for the construction of new sanitary sewer collection facilities, wastewater treatment facilities, and other sanitary system improvements as necessary, easement/property acquisition (if required), completion of the Ohio Environmental Protection Agency (OEPA) Permit-to-Install (PTI) application and related documents, completion of the Army Corps of Engineer 404 permit applications (if required), securing of other State and Local approvals as required, and preparation of detailed construction cost estimates;

h. Provide DSSS with a complete set of Contract documents for sanitary collection and treatment facilities, including 5 (five) sets of bound paper copies and a complete electronic set written in a compatible Word document format. Contract Documents include, but are not limited to, General Requirements, Site Work, Equipment, Electrical Work including Arc Flash hazard analyses, Mechanical Work, and any other technical specifications necessary for the completion of the improvements. The survey work shall be performed by a Registered Surveyor and the detailed design work shall be performed by a Licensed Professional Engineer. The Design Professional will be responsible for conducting a thorough Quality Control/Quality Assurance (QC/QA) review of the Design Documents before they are submitted to DSSS. Services shall include acquisition of all property, easements and permits required for construction of the final selected options;

i. Provision of professional services during bidding and construction to include responses to bidder/contractor requests for information (RFIs), shop drawing reviews, resolution of technical issues impacting the Design Professional's approved project design, and submittal of a final set of as-built drawings to DSSS following completion of construction;

j. Assist DSSS in efforts to develop and secure project funding, sources to include, but not necessarily be limited to OPWC, WPCLF and OWDA.

Procedural steps or components used to implement this Scope of Services should, as a minimum, include the following:

A. Determination of Basis of Design

At the Consultant's discretion, separate basis of design (BOD) reports can be prepared for the wastewater collection system and the wastewater treatment system, or a single report can be prepared covering both systems. The report detailing the efforts to determine the project basis of design should provide a fully developed description of the proposed project. At a minimum, the following information should be addressed and included in this document:

1. Confirmation of understanding of project purpose and scope.
2. Confirmation of service area boundaries, flow rates, system capacities, other specific design parameters, etc.

3. A review and assessment of the various alternatives considered for proposed improvements including construction and O&M cost estimates for each alternative, as applicable.

4. Identification and detailed description of the specific option chosen by the client to include, but not to be limited to, the following information:

a. Recommended sequencing of construction of wastewater system components;

b. Preliminary sanitary gravity sewer collection system details, including layout and location, alignment, depth, pipe material and diameter, manholes, anticipated easements;

c. For the wastewater treatment facility:

1) Proposed treatment processes and capacities, system design operating conditions, preliminary wastewater treatment plant layout and facility flow path, key process components and equipment to include piping, valves meters, blowers, pumps, etc.;

2) Proposed means for future plant expansion, i.e., modular construction, piping/tankage connection details, to include location and alignment, depth, piping, and anticipated easement and/or property acquisition requirements;

3) Preliminary emergency generator system requirements, to include generator, transfer switch, and associated items, for use with the new wastewater treatment facility, and related appurtenances;

4) Current land acquisition and easement requirements;

d. Pump station requirements, if any;

e. For all project improvements:

1) Flood plain identification and mapping requirements;

2) Riparian set-back requirements;

3) Species habitat evaluation and protection requirements.

6. Identification of potential future expansions of the existing service area, and the anticipated connection points for, and estimated projected flows from, these projects.

7. For new treatment facilities and other powered facilities, arc flash hazard analysis according to NFPA 70E, Sections 130.4 Approach Boundaries for Shock Protection and 130.5 Arc Flash Risk Assessment, and recommend all required design, labeling, etc. to minimize exposure to electrical hazards.

8. Conclusions and Recommendations: Summary of findings, and include any additional information and recommendations not specifically mentioned above that should be considered in the development of the project.

B. Geotechnical Report

Perform a geotechnical survey with report for the proposed project area as indicated on the attached map(s). Scope of the work and report should be tailored per the actual scope of the proposed project with necessary components of the proposed geotechnical survey and related items complying with the specific requirements of the enclosed "SCOPE OF WORK FOR GEOTECHICAL SERVICES FOR UTILITY WORK". Every element of work described in this standard scope of work may not be required for this project.

C. Field Survey

Perform a topographical centerline right-of-way and/or easement survey for the proposed project area as indicated in the attached map. Survey will include the collection of available information and topographical features including: right-of-way locations, easement locations, property lines, monuments or visible property pins, edge of pavements, curbs, sidewalks, drive aprons with pavement types, culverts, ditches, trees, shrubs, garden and planting areas, fences, utility poles, waterlines, valves, hydrants, marked water service lines, valves, and curb boxes, rim and invert elevations of all sanitary manholes, rim and invert elevations of all storm catch basins and storm manholes, and other visible topographic features and utilities that could affect the design or construction cost of the proposed sanitary sewer facilities. Sufficient surface elevation shots will be taken to develop 2-foot contours along the route of construction.

All survey work will be performed per the Requirements and Standards Section as outlined in the Surveying Services for Sewer System Projects (see enclosed), including the establishment of benchmarks (at least two per project and one per plan sheet), reference ties for any centerlines and/or baselines established and all horizontal and vertical control. All survey information shall be adjusted and reduced to the state plane grid. The consultant will create a separate coordinated system for design and construction purposes, by converting the state plane grid to ground coordinates, using a grid coordinate of a horizontal control point near the center of the project as a reference point. This reference point will be clearly defined on the centerline plat to be used to convert the final design to state plane for future use by Summit County. All benchmarks and survey reference ties will be provided for inclusion on the plans. Construction baseline is to be established along centerline of rights-of-way and/or easements. Properties shall be identified by owner name, street address and permanent parcel number inclusive of any existing easements.

Contact the Ohio Utilities Protection Service (OUPS) 48 hours prior to surveying and notify any non-member utilities as indicated by OUPS to collect locations of, and information on, all existing utilities located within the right-of-way and/or easements for inclusion in the plans. Review existing drawings and other pertinent information concerning existing utilities.

D. Bid Document Preparation

1. Base Mapping. Base mapping will be completed using AutoCAD 2021 or later and shall utilize the County of Summit Engineers drawing standards. The base map will include information obtained from the field survey as indicated above.

2. Specifications. All specifications shall conform to the Construction Standards Specification Institute (CSI) standards except as mandated or otherwise specified as determined by the DSSS. The DSSS, where applicable, may also require adjustments in design to conform to special conditions inherent within this area including, but not limited to, wetlands, quicksand, springs, and landslides. All sanitary sewerage systems shall become owned and operated by the County Council, as approved by the County Executive pursuant to Section 3.04 of the Summit County Charter through the DSSS, and shall conform to the design standards, specifications and procedures of the DSSS as adopted by the County Council, as approved by the County Executive pursuant to Section 3.04 of the Summit County Charter. Upon request, DSSS will furnish sample specifications from previous projects for use by the Design Professional in development and preparation of specifications and bid documents for this project.

3. Standard Drawings: Standard drawings shall be per Summit County Department of Sanitary Sewer Services Standards, as currently amended.

4. Preparation: A copy of the Improvement Plan and drawings showing plan views, profiles, specifications, and all calculations and computations for all required improvements shall be prepared by a professional engineer registered in the State of Ohio. The Improvement Plans shall be prepared in a manner as directed by DSSS and shall be subject to the Director's approval.

5. Drawings: All hard-copy drawings shall be made with opaque black ink on paper. An additional separate title sheet for original signatures and seals printed in black ink on mylar may also be required from which clear and legible prints may be obtained. A set of the Improvement Plans shall also be submitted to DSSS in digital format.

a. Drawings sheet size shall be 24" X 36". Marginal lines shall be drawn around the entire sheet leaving a one (1) inch margin on all edges.

b. Scales to be used:

Plan 1" = 20' or 1" = 50'

Profile 1" = 20' or 1" = 50' Horizontal
1" = 5' Vertical

Cross sections 1" = 5' Horizontal
1" = 5' Vertical

c. Title Sheet: The Title Sheet shall include the following items:

1) Overall plan of the Improvement. Include a separate drawing drawn at the maximum scale that will allow the entire Improvement to be shown on one (1) 24" x 36" plan sheet in as much detail as possible including all existing and proposed utilities;

2) Location map;

3) Title of project and location;

4) Places for necessary approvals;

5) Index of sheets.

6) A suitable title block shall be included on each sheet in the lower right corner. The title sheet shall have the seal of the design engineer who prepared the plans;

7) A note stating that the Engineer does hereby certify that all design data and calculations presented to DSSS are correct and do conform to the design criteria currently acceptable. The Engineer's signature, registration number and seal shall be affixed;

8) A note stating that DSSS, in approving these plans, does not in any way relieve the Engineer of his/her responsibility for accurate and complete engineering design;

9) Each set of plans shall include all notes as required by DSSS.

d. Detail Sheets: The Detail Sheets shall include the following items:

1) An indication of scale, data, north arrow, and sheet number shall be placed on each sheet;

2) All street, centerline data, right-of-way, and pavement widths shall be shown. Stationing shall begin at the south or west end of the improvement;

3) All existing and proposed underground structures located in the street or easement shall be shown on both the construction plans and profile drawings. Such underground structures include gas lines, sanitary and storm sewers, water mains, culverts, and existing electric and telephone conduits;

4) All above-ground structures or features located in such proximity to the proposed work as may be a factor affecting the construction shall be shown in the plans. Such above ground structures and features include trees, fences, buildings, poles, hydrants, bridges, driveways, drive culverts, and other structures;

5) All lots or acreages, abutting the streets where improvements are to be located, shall be drawn to scale. The front foot dimensions, property owners' names, and numbers shall be included;

6) The profile plan shall show existing center line and right-of-way elevation, ground elevations, and proposed grade elevations over sanitary improvements;

7) All elevations used on drawings shall be based on sea level datum as determined by the United States Geodetic Survey;

8) The location, description, and the exact elevation of sufficient number of bench marks shall be included on the drawings. These benchmarks shall be used for construction and inspection purposes;

9) All easements, including exact location and width, shall be shown on the drawings, (and if existing, record number of the document(s));

10) Include detail drawings of special construction such as headwalls, concrete aprons, rip-rap, and other construction not otherwise included.

E. Submittals

1. Basis of Design Report

a. Six (6) copies of the completed basis of design report shall be submitted to the DSSS.

b. The draft analysis shall be completed within 60 days of notice to proceed with the final document being due 30 days after receipt of DSSS comments. Upon request, the Consultant will provide a copy of all records used in the report to the County of Summit.

2. Geotechnical Report

a. Six (6) copies of the completed geotechnical report shall be submitted to the DSSS.

b. The Red Flag Summary shall be completed within 120 days of issuance of the notice to proceed. The final document is due prior to the 90% detail design submittal. Upon request, the Consultant will provide a copy of all records used in the report to the County of Summit.

3. Detailed Improvement Plans:

a. An initial review of improvement plans shall be submitted to DSSS for review when these documents are approximately 30% complete. Upon receiving

comments, the Design Professional shall confer with DSSS in a first Detailed Design Review Meeting.

b. Improvement Plans shall be submitted to local government agencies (including DSSS) and utilities that may be impacted when the documents are approximately 60% complete. Upon receiving comments, the Design Professional shall confer with DSSS in a second Detailed Design Review Meeting.

c. A third Detailed Design Review Meeting will be held when the Improvement Plans are approximately 90% complete and four (4) copies of the plan set shall be submitted to DSSS.

d. If changes from the 90% Review Meeting are significant, another Detailed Design Review Meeting will be scheduled.

e. After preparation and review with DSSS, four (4) copies of the Engineer's Opinion of Probable Cost for Construction shall be submitted in hard copy and in digital format acceptable to DSSS.

f. After approval by DSSS, Local Government Agencies, and OEPA, one (1) copy of the Improvement Plans shall be submitted to DSSS on wash-off Mylar or paper, and CD ROM, Flash Drive, or other approved electronic media. Plans are prepared using AutoCAD 2021 as a minimum.

g. Total design time for the completion of final plans, specifications, bidding documents, and related items necessary for execution of construction of the project is to be of no more than 200 days duration.

F. General Information

1. All documentation will be provided in an electronic format acceptable to Summit County DSSS.

2. As part of its response to this RFQ, the Consultant shall identify the specific individual who will succeed the Project Manager originally shown as the Project Manager on the team organizational chart developed for this project, in the event of the absence or unplanned departure of that individual.

V. ATTACHMENTS

Attached for use are the following documents:

- A. OEPA Correspondence
- B. Wastewater Service Area Map
- C. Proposed Wastewater System

- D. Scope of Work for Surveying Services for Sewer System Projects
- E. Scope of Work for Geotechnical Services for Utility Work
- F. Scope of Work for Property and Easement Acquisition
- G. Final Village of Peninsula Wastewater Study
- H. Peninsula WWTP Location Options