

Town of Mansfield, CT
July, 2010
Request for Qualifications (RFQ)
Sewage Pump Station Design for the
Four Corners Area in the Town of Mansfield

The Town of Mansfield seeks to engage an engineering firm to provide consulting services for the design of a new sewage pumping station for a 500 acre Four-Corners commercial and residential sewer service area in northern Mansfield. Engineering design services will include the complete design and permitting of the pump station in accordance with the Town's 2008 Four Corners Area Wastewater Facilities Plan. The consultant will prepare plans and specifications for the pump station which will serve the sewage collection system which is being designed by the Town's Engineering staff. Construction estimates; the review of the plans and specifications by state regulators, the Town staff, the Town's oversight committee and the public; the development of construction documents; the preparation of bid documents and assistance during bidding; and construction administration may all be within the consultant's scope of services. The approximate location of the pump station and force main has been determined. The force main (designed by the Town) will discharge to the University of CT's sewage collection system as outlined in the 2008 Facilities Plan. The Facilities Plan flow estimates for this pump station are approximately 50,000 gpd currently and up to 170,000 gpd at the end of the 20 year planning period.

Funding for this study and design has been approved by the Town at a June 28, 2010 Town meeting. A preliminary draft scope of services is attached. (See Attachment A Scope of Services.) The four corners project and service area is described on the Town's web page at <http://www.mansfieldct.gov/content/5168/5391/default.aspx>

The Contract for engineering services resulting from this RFQ will be subject to the availability of funds. In the event that funding is decreased, the Town reserves the right to terminate the Contract or modify it accordingly.

Each firm will be evaluated, ranked and selected based on its (1) proposed scope of services, (2) qualifications and experience of personnel to be assigned to the project team, (3) ability to provide the services within the project schedule time constraints, (4) the project team's composition and experience on similar projects, (5) the firm's quality and performance of past services of this type, (6) the firm's hourly fees and expense schedule and (7) the firm's references. Firms responding to this request should be of adequate size and sufficiently staffed to perform the assignment described.

The selected firm(s) agrees to comply with all applicable federal, state and local laws, rules and regulations, all as amended, in the performance of its contract with the Town. The selected firm(s) acknowledges and agrees that the contract by and between the Town and the selected firm(s) shall include contract provisions required by Federal law and/or by Connecticut General Statutes. Such contract shall be construed under, governed by and enforced in accordance with Connecticut law without regard to conflict of law principles.

The selected firm must meet all Town, State and Federal affirmative action and equal employment opportunity practices. The design contract and all construction contracts shall be subject to and shall contain all of the Town's required contract clauses.

A selection committee of at least five officials will be assembled to review the responses to this RFQ, and rank the firms according to the above criteria. A number of the top-ranked firms may be interviewed.

This committee will then develop a “short list” of the top three to five firms, which in its judgment are deemed to be the most qualified to perform the required professional services. These “short listed” firms will be asked to submit a fee proposal for complete services based on a final draft scope of services. Proposals will be judged by the professional competence of the firm, the technical merits of the proposal, the ability of the firm to perform the required services within the time and budgetary limits of the contract and the fee for which the services are to be rendered.

A final selection will be made and all firms will be so notified. The Town shall select the highest rated qualified proposal subject to negotiation of fair and reasonable compensation.

If the Town is unable to negotiate a satisfactory final scope of services and fee with the first-ranked firm within 30 days, negotiations shall be terminated with that firm and undertaken with the remaining firms in the order in which they were ranked by the selection committee until an agreement is reached. The Town will select for award the highest ranked responsible, responsive, qualified respondent, which does not render this procurement financially infeasible and is judged to be most advantageous to the Town based on consideration of the evaluation. The selected firm will be requested to prepare and submit to the Town an EJCDC or AIA contract for its services along with any required contract certifications and affidavits as well as certificates of insurance.

Six copies of a letter of interest, together with general information on the firm and proposed subconsultants, the firm’s brochure, current Federal GSA Form 330, resumes of key personnel, Affirmative Action Plan and Employee Profile, contact information for not less than three professional references, experience of the firm on similar projects and a proposed scope of services should be submitted to Lon Hultgren, Director of Public Works, Town of Mansfield, 4 South Eagleville Road, Storrs/Mansfield, CT 06268. Proposed sub-consultants should be clearly identified. The relationship to any “parent” firm or subsidiary firm with any of the parties concerned must be clearly identified.

The Town of Mansfield reserves the right to waive any informality, to accept or reject, in whole or in part any and all letters of interest (or subsequent proposals), or take whatever other action may be deemed to be in the best interest of the Town.

Personnel in responsible charge of the project will be required to possess and maintain valid Engineering licenses/certifications for the state of Connecticut. All letters of interest must be received by the Department of Public Works office no later than 12:00 noon EDT on Friday August 6, 2010. Responses received after this date will not be considered.

Lon R. Hultgren
Director of Public Works
Town of Mansfield, CT 06268
(860) 429-3332
HultgrenLR@MansfieldCT.org

Town of Mansfield, CT

Design Services – Four Corners Sewer Pump Station

Attachment A – Draft Scope of Services

(July, 2010)

A public sanitary sewer system has been planned for by the Town of Mansfield Water Pollution Control Authority. The area to be served by the pump station is locally known as the Four Corners Area and includes approximately 500 acres along Route 195 and Route 44 lying east of the UConn Depot Campus and northwest of the Storrs Campus. This service area has been defined and flows estimated in the 2008 "Four Corners Area Wastewater Facilities Plan" prepared by Earth Tech, Glastonbury, Conn. This system is known as the Four Corners Sewer System, and is slated to have flows initially at 47,000 gpd increasing to 170,000 gpd over the twenty year planning period. The Town is presently working on the design plans for this sewer collection system.

The construction of the system is expected to be funded by property assessments, Town bonding and grants the Town has not yet been awarded.

The Pump Station design is expected to include, but not be limited to: Complete architectural and structural design of the containment structure interiors, exteriors and facades; design of the interfaces the structures will have with the surrounding walkways, roadways and adjacent buildings; landscaping immediately adjacent to the buildings/structure; ingress and egress into the building for vehicles and maintenance

personnel; design of all building systems such as lighting, heating/ventilation, electrical, drainage, plumbing; building walls, ceilings, windows, stairways, and landing areas; access/gate control systems, alarm and security systems. Siting of the pump station is tentatively slated for the rear of the Jensen's mobile home park on Route 44 in the four corners area and must take into account an existing CL&P easement area, existing conservation easement areas held by the Dept. of Environmental Protection on adjacent UConn property, restrictions due to the existing mobile home park water supply wells, FEMA flood mapping of the nearby Cedar Swamp Brook, and wetlands limitations.

The design services required relate to the pump station containment structure, amenities, and its immediate surroundings. This scope does include review by the Town's project oversight team, the CT Department of Environmental Protection, the public, the Town staff, and any and all modifications made to the plans and specifications as a result of these reviews. The selected firm will also conduct a review of the Town's collection system design and make recommendations to the Town to improve its design.

Working with the:

1. Town staff,
2. Town's Four Corners Sewers Design Review Committee,
3. Mansfield Planning and Zoning Commission,
4. Mansfield Inland Wetlands Agency,
5. Eastern Highlands Health District and others

the selected firm will prepare pump station designs based on the current concept plan. The selected firm will also review and offer suggestions for improving the Town's collection system design. Expertise in sewer pump station design & construction methods, practices and procedures will be required. Considerable contact and coordination with Town staff, State regulators and reviewing boards during the preparation of the contract documents is anticipated. The Town will use the contract documents to obtain bids to construct the structure, equipment and other improvements. Technical assistance from the selected firm is also contemplated during the bidding and construction phases of the project.

Deliverables will include recommendations for collection system design improvements, and submittals of the pump station design at various percentages of completion and multiple copies of the final construction documents, both hard copy and in electronic format.

Construction is not yet scheduled so that design and permitting will take place during 2010 and 2011. A firm should be selected during the summer of 2010.

Draft task list for design scope of services (for RFQ purposes only):

A. Kick-off meetings

- a. Meet with staff, the project's design review committee, and others to obtain latest collection system drawings, facility plan concept information

and drawings, sustainability guidelines, design element targets, anticipated flow rates, etc.

B. Preliminary Design

- a. Review concept structure footprint and interface with adjacent structures, residents, roadways, CL&P easements, Conservation Easements, wetlands restrictions, and other amenities.
- b. Prepare design development plans for review with Town staff, funding agencies, and the project's design review committee. Design development plans will include architectural plans for the building housing the pump station, adjacent vehicle and personnel maintenance areas, ramps and controls. The design development plans will also identify major materials and systems to establish a level of quality for the project and construction cost estimates based on the plans. Designer will make recommendations regarding best alternative pump station types.
- c. Meet with the project review team to review/revise drawings with associated cost estimates, select equipment and alternative designs, etc.
- d. Revise concept drawings based on design review comments.

C. Site review, survey and testing

- a. Utilizing the agreed-upon concept drawings for the pump station and any interfaces with adjacent facilities, review existing site survey data, provide additional property and topographic surveys as needed, inventory site features that will be needed for detailed design, and set control points and test hole/boring locations.

- b. Recommend modifications to conceptual design plans based on site data and testing as appropriate; review final concepts with project oversight team as needed.
- c. Prepare one easement or taking map describing the property upon which the lift station building and adjacent facilities will sit (for the Town's use in obtaining the ability to build on, control, and access this property).
- d. Perform a preliminary hazardous material screening for the project area.
- e. Perform additional environmental analysis as required.

D. Preliminary Cost Estimate

- a. Finalize the preliminary cost estimate based on final conceptual design. Review this cost estimate and final conceptual drawings with the project oversight team; provide further project modification alternatives required by budgetary considerations.

E. Public Agency Review

- a. Assist the project review team with information dissemination on the final concept designs and estimated cost. Attend and assist in presenting the preliminary design at public meetings as needed. Provide for coordination with the town's ongoing design work.

F. Foundation, Roof and Structural Design – as dictated by the type of pump station

- a. Complete the structural design for the approved concept plans utilizing site data.
- b. Sustainability review for the pump station building and its mechanical elements (energy efficiency, recycled content materials, etc.).

G. Interior Design

- a. Complete the interior architectural design of the pump station building including walls and wall finishes, windows, floors, ceilings, staircases, doorways, etc.
- b. Sustainability review for above (energy efficiency, use of recycled content materials, etc.).

H. Exterior site landscaping, walkway and external site elements design

- a. Detailed design of plantings, trees, tree grates, screenings and rain gardens adjacent to building areas, and adjacent roadways
- b. Detailed design of exterior walkways, pathways leading to and from the building(s) including any signage, exterior lighting, pavement treatments, curbing, benches, trash receptacles or other recommended amenities

I. Mechanical and Systems Design

- a. Final design of pump station, building, power/electrical, lighting, fire, telecommunications/SCADA systems, security, HVAC, drainage, plumbing, refuse/recycling, water/sewer systems and building management systems as appropriate.
- b. Specification of maintenance equipment for the project building and the preparation of a maintenance and operations plan
- c. Sustainability system review for above (energy efficiency, use of recycled content, etc.).

J. Preparation of Final Construction Cost Estimate – plan revisions

- a. Utilizing the final design elements and current industry unit prices, a final detailed cost estimate will be prepared including construction inspection and testing, contingencies, construction administration, etc.
- b. Make revisions to the design based on the cost estimate, budget and recommendations from the design review team, including, where applicable the establishment of bid alternates for some design elements.

K. Preparation of design drawings and project specifications

- a. Preparation of complete design drawings and specifications for the project for review by the project design review team. Modifications of drawings and specifications as appropriate after design review.
- b. Preparation of a sediment and erosion control plan for the construction area showing erosion control details together with a construction narrative.
- c. Submission of final design drawings and specifications to the Town Planning and Building Departments for review and permitting; make modifications to plans and specifications to meet Town requirements.
- d. Preparation of final bid documents (plans, specifications, final cost and any specialized construction testing and oversight procedures).

L. Bidding services

- a. Provide the appropriate number of bid document sets to the Town for potential bidders and electronic documents for the Town's use.
- b. Assist Town during advertising period; respond to technical and design questions; attend pre-bid conference and bid opening.

- c. Tabulate and review bids received, investigate bidder qualifications and references; make recommendations for bid acceptance and bid alternates.

M. Construction services

- a. Assist the Town in all technical matters relating to the construction of the project.
- b. Assist in implementing the specialized construction testing and oversight procedures, making sure required tests are done in a timely manner, quality is ensured and testing and inspection reports are received and appropriately logged.
- c. Attend construction progress meetings; advise the Town on all construction matters; assist in the coordination of the construction.
- d. Prepare project progress reports for use by the Town to inform any grant funding agencies of the project's status.
- e. Review change orders and the resulting cost changes; make recommendations to the Town regarding all change orders.
- f. Prepare as-built drawings after construction of the project, provide two copies of the drawings and all building specifications to the Town.