

Proposal for Professional Engineering Services

Kings Mills Road and
Cox-Smith Road

City of Mason, Ohio



CDS
engineers
architects
planners
surveyors

CDS Associates Inc.
www.cds-assoc.com

11120 Kenwood Road
Cincinnati, Ohio 45242-1818
513.791.1700
513.791.1936 FAX

7000 Dixie Highway
Florence, Kentucky 41042
859.525.0544
859.525.0561 FAX

July 31, 2001

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Mr. R. Ernest Stickler.
City of Mason, Ohio
3920 U.S. Route 42
Mason, Ohio 45040

**Re: Engineering Design Services for Kings Mills Road and Cox-Smith Road
2001600-041**

Dear Mr. Strickler:

CDS Associates, Inc., would like to thank you for inviting our firm to submit this proposal to provide engineering services for installation of new water mains in The City of Mason and is excited about the prospect of working with The City. With construction already scheduled for a new water tower in Pine Hills Park off Kings Mills Road, CDS understands the significant magnitude these upcoming water main projects will have to the further growth and development of Mason. We have closely compared our current workload with your proposed time schedule for this project. Given that information, CDS is very confident we can provide Mason with the attention this important project deserves.

CDS is a multi-discipline engineering/architectural firm with a long-standing history of providing our clients with a variety of professional services and well-managed projects. We have an on-going successful relationship with The City of Mason recently completing the water and sewer extensions across I-71 to Columbia Road, as well as the Snider Road Realignment design and continue to work with The City on the U.S. 42 / Butler-Warren Road Improvements. Challenges that arise during construction need a qualified source of information and know-how to get the job done on time and get it done right. CDS can be your source. If awarded to CDS, we will make sure this water main project will be on time and within budget.

CDS's well-established reputation has resulted in our firm employing talented registered professionals. CDS has the capability to provide Mason with a project team that possess the resources and experience necessary to complete projects satisfying your requirements and expectations. The education and experience of our staff will prove to be very valuable to Mason during the design and construction phase.

Project communication with Mason will be of high priority to CDS. As Project Manager for this work, I will be responsive and flexible to the City's schedule and other challenges that might arise during project design and construction.

Mr. R. Ernest Stickler.
City of Mason, Ohio
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I encourage you to review the information describing our water main design experience. Please feel free to contact the references we have provided to you. CDS is very proud of our relationship with our clients. Speaking with them will give you a better understanding as to why they enjoy working with us.

If you have any questions, please don't hesitate to contact me at (513) 791-1700.

Once again, thank you for this opportunity.

Sincerely,

CDS ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Steven N. Dragon". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Steven N. Dragon, P.E.
Associate
Project Manager

APPROACH

Based on our review of your RFP, telephone conversations with Mrs. Kathy Dorman and yourself, and a brief site visit to view the project areas, it is our understanding that the projects under consideration consist of installation of new water mains in existing public roadways in primarily residential areas in the City of Mason. The first project consists of replacement of the water main along Kings Mills Road and Cox-Smith Road from U.S. Route 42 to State Route 741 with new 12-inch and 16-inch water mains connected to the new water tank site in Pine Hills Park. We understand that it is the intent of the City to provide service connections to these new mains for all users currently served by the existing water main and to abandon the existing main at the completion of construction. For the purposes of this proposal we have assumed that this scope will include only that work necessary to reconnect existing services, and will not include extending new service significantly beyond the limits of the right-of-way.

The second project consists of construction of a new 12-inch diameter transmission water main along Hanover Drive and Parkside Drive from U.S. Route 42 to Cox-Smith Road. The existing water mains along this alignment will remain in service and existing service connections will not be transferred to the new main. Three interconnections, at a minimum, will be made between the new and existing water mains at the direction of the City.

It is our further understanding that, given the existing physical and property constraints present in the project areas, the proposed water mains may likely require construction in the existing public streets. Final location and alignment of the new water mains will be established as part of the design scope with the input and approval of the Public Utilities Superintendent. Design is to be prepared to minimize inconvenience to the existing residents to the extent possible and such that access to drives is maintained throughout construction. New fire hydrants are to be provided on all new mains.

We recommend the following scope of services and associated fee. The scope and fee described below includes both projects as described in the RFP. Anticipated man-hours are included as requested. These hours represent the anticipated effort required and the employee categories to be utilized. Reimbursable expenses as required during the design process such as plots, prints, postage, etc. will be invoiced separately in accordance with your Professional Service Agreement at cost plus ten percent. An allowance for such expenses (*) is included below for budgeting purposes.

I. Pre-Design Services and Investigation

- A. Visit site and review project conditions.
- B. Review existing project information:
 1. As-built plans for the project area (water, sanitary sewer, storm sewer)
 2. Water Master Plan
 3. Utility drawings (gas, electric, telephone, cable)
- C. Attend a project kick-off meeting to establish project requirements, schedule, City needs and goals.

II. Water Main Design Services

- A. Analyze existing conditions and constraints.
- B. Coordinate with the City to identify design issues and alternatives, establish preliminary design constraints and to provide on-going accounts of project status.
- C. Perform a field visit to the project site following marking of existing utilities with City representatives to walk the project and identify anticipated water main routing.
- D. Prepare construction drawings, details and specifications:
 - 1. Prepare a basemap using available GIS information and aerial photography supplemented with GPS field locations based on anticipated routing illustrating existing conditions including:
 - a. Utility locations
 - b. Drainage features (culverts, storm structures, etc.)
 - c. Surface features, as needed.
 - 2. Prepare preliminary design and water main layout for City review and approval.
 - 3. Prepare detailed construction plans, details and specifications:

a. Title sheet	1 sheet
b. General and special notes	1 sheet
c. Maintenance of traffic plans	2 sheets
d. Plan and profile sheets (1"=40')	16 sheets
e. Details	<u>1 sheet</u>
Total	21 sheets
- E. Prepare technical specifications for inclusion with bid documents and front-end specifications, to be prepared by the City.
- F. Coordinate with private utility companies to identify utility requirements and to coordinate any associated utility relocations.
- G. Prepare engineer's opinion of construction cost for the completed design.

III. Construction Services

- A. Prepare record drawings based on as-built information provided by the City and the Contractor. Provide drawings to the City in electronic (AutoCAD) and hard copy (Mylar) formats.
- B. Prepare application and coordinate submittal for an OEPA Permit to Install.
- C. Review and evaluate project bids and provide a recommendation of award.
- D. Review shop drawings and change orders.
- E. Limited coordination through construction to answer questions and assist with issues arising during construction.

Lump Sum Fee \$59,500.00

*Estimated Allowance for Reimbursable Expenses \$2,000.00

The following services are not included in the above scope but may be provided by CDS Associates on a time and expense basis or for a negotiated fee:

- Boundary surveys
- Topographic survey
- Geotechnical, or environmental testing, studies or investigations
- Traffic studies
- Wastewater/process water treatment
- Water system modeling/analysis
- Improvement plans for other utility, drainage or roadway construction except as specifically related to installation of the proposed water mains
- Right-of-way plans/easement documents or descriptions, and right of entries
- Review of pay requests
- Construction staking
- Construction observation/administration
- Right-of-Way of easement acquisition

ANTICIPATED HOURLY EFFORT BY TASK

I. Pre-Design Services and Investigation

<i>Position</i>	Principal	Project Manager	Graduate/ Designer	Senior Technician	Survey GPS	Administrative
<i>Hours</i>	4	18	20			

II. Water Main Design Services

<i>Position</i>	Principal	Project Manager	Graduate/ Designer	Senior Technician	Survey GPS	Administrative
<i>Hours</i> A.		8	4			
<i>Hours</i> B.		8	8			
<i>Hours</i> C.		6	6			
<i>Hours</i> D.	4	80	210	160	80	
<i>Hours</i> E.	1	12	8			12
<i>Hours</i> F.		8	20			
<i>Hours</i> G.	1	4	8			

III. Construction Services

<i>Position</i>	Principal	Project Manager	Graduate/ Designer	Senior Technician	Survey GPS	Administrative
<i>Hours</i>		40	40			

ANTICIPATED DESIGN SCHEDULE

Project Kickoff Meeting	August 10, 2001
Base Map Preparation	
Collect/organize GIS information	August 17, 2001
Field walk of proposed routing with City Representatives	August 20, 2001
Field locations, utility information	August 30, 2001
Coordination Meeting	
To establish design layout	August 31, 2001
Preparation of Design Plans & Details	Sept. 3 to Oct. 17, 2001
Submission for City Plan Review	October 17, 2001
City Review and Comment	Oct. 17 to Oct. 24, 2001
Plan Revisions and Final Opinion of Construction Cost	Oct. 24 to Oct. 31, 2001
Submission of Final Design	November 1, 2001