

11333 N. Cedarburg Rd 60W Mequon, WI 53092-1930 Phone (262) 236-2938 Fax (262) 242-9655 klundeen@ci.mequon.wi.us

www.ci.mequon.wi.us

### **PUBLIC WORKS**

## **CITY OF MEQUON**

## REQUEST FOR PROPOSALS HAWTHORNE ROAD TECHNICAL REPORT

Hawthorne Road is a two mile gravel road with Rustic Road designation located in the City of Mequon on the half section line between Highland Road and Bonniwell Road, spanning from Granville Road to Wauwatosa Road. While the road was originally constructed as gravel, it was not built to current gravel road standards. Throughout the decades and most recently in the fall of 2018, the City reviewed the long term maintenance of the road with residents. Some residents are in favor of paving the road, while others want the surface to remain gravel. Most all want to maintain the rustic characteristics of the roadway.

In March 2019, the gravel road surface failed to the point that residential vehicles were stuck and the City was forced to close the roadway. The City completed an emergency repair by installing 2,255 tons of 3" stone to add strength to make the road passable. The emergency repair will be completed by rolling or grading the stone and adding smaller aggregate to make the road better for vehicular travel.

The City is issuing a Request for Proposals to complete topographical survey, road coring and subsequent material/gradation testing and issuance of a technical report for the City to use in its long term decision making for the roadway. This Request for Proposals does not include any roadway design. The survey and coring information is intended to provide sufficient technical information to compile a complete list of feasible options for maintaining the roadway long term.

### **SCOPE OF SERVICES**

1. Topographic Survey

The intent of the topographic survey is to identify the location of required drainage improvements, tree removal and right-of-way acquisition. The scope of services does not include road design, therefore the final survey shall simply call out areas for clearing and grubbing, areas of tree removal (but not specific trees) and areas for drainage improvements. The topographic survey is intended to supplement the technical information required to generate the technical report.

- a. Topographic survey shall be from the intersections of Granville Road to Wauwatosa Road.
- b. Identify and document property corners, where available.
- c. Cross sections of the right-of-way shall be surveyed no less than every 500 feet, or as required to document changes in condition.
- d. Additional cross sections at locations where field conditions may require specific consideration of improvements for drainage, property acquisition, driveway impacts, etc.
- e. The survey points shall be provided to the City of Mequon in AutoCAD version for utilization in future analysis.

f. Identification of wetlands or navigable streams should be documented on the survey.

# 2. Road Coring

- a. Coring and material testing shall follow ASTM or AASHTO standard for material sampling.
- b. Fine material shall be tested for and reference the plasticity index (PI) or Atterberg Limits. The subsequent Technical Report shall speak to the acceptability of the fine material as it relates to gravel roadway support.
- c. Identify the material striation, specifically referencing and defining presence of aggregate, sand and fines.
- d. To the extent practical, the road coring should provide sufficient information so that the technical report can evaluate the quality of the aggregate and plasticity of the fines can be utilized to determine the structural integrity of the roadway.
- e. Coring shall be provided a minimum of every 500 feet, or as recommended by the material testing firm.
- f. Core locations shall be shown on the topographic survey.
- 3. Technical Report

The technical report is intended to be used by City staff to guide the elected officials and residents through the decision regarding the long term maintenance for the roadway. It is important to note that the technical report should review the full extent of all repair and reconstruction options, and not simply conclude which is the "best" option. The merits of each option should be evaluated based upon the level of improvement over existing conditions, the ease of long term maintenance, cost effectiveness of both the repair/reconstruction and long term maintenance and impact to the rustic road characteristics of the roadway, in addition to any other terms defined by the selected firm.

- a. The report should provide a summary of the existing road with descriptions of existing conditions, including location references, as appropriate.
- b. The report should provide a needs assessment for the roadway citing concerns, structural failures, or other general summaries that would be utilized in contemplation of the long term maintenance. The needs assessment should rate the level of service of each section of the roadway.
- c. Full analysis of repair/reconstruction options shall include, but not be limited to:
  - i. Areas of tree removal (a tree inventory/survey is not required; marking areas of general tree removal is acceptable until the road design is complete at a later stage).
  - ii. Areas requiring drainage improvements and descriptions of the required improvements (i.e. can a ditch be established, would a pipe/culvert be required, etc.).
  - iii. Review and analysis of existing material gradation and analysis of strength of the existing material, as well as recommendations for supplemental/replacement material and depths.
  - iv. Review and analysis of the existing material gradation and analysis of the strength of the subgrade material, as well as recommendations for support material and depths/specifications.
  - v. Review and analysis of existing culverts and identification of maintenance or replacement needs.

- vi. Review and analysis for the consideration of the use of geotextile fabric, geogrid or other structural support.
- vii. Reconstruction options shall consider both gravel and paved surfaces. Typical cross sections should be provided for each, and reference both minimum and optimal standards.
- viii. Anticipated level of service at the completion of each repair option.
- d. In addition to the firm's expert engineering analysis, provide a review summary of Appendix D: When to Pave a Gravel Road from the Gravel Roads Construction & Maintenance Guide, FHWA Publication No.: FHWA-OTS- 15-0002, by answering the 10-part question.
- e. Each repair should include a range of costs associated with both the repair/reconstruction and the long term maintenance.

# **PRE-PROPOSAL MEETING**

If requested or required, the City will host a pre-proposal meeting on Tuesday, April 23<sup>rd</sup> at 1:00pm. Weather depending, the pre-proposal meeting will either be at the Department of Public Works, 10800 North Industrial Drive, or onsite on Hawthorne Road. If you are interested in attending a meeting, please send an email indicating such to <u>klundeen@ci.mequon.wi.us</u>. The City will send notice of the meeting and location on Monday, April 22<sup>nd</sup>.

# **PROPOSAL FORMAT**

Consultants' proposals should include a brief resume of the firms' qualifications and specific references to gravel road projects. The cost for each task shall be broken down by task.

The City reserves the right to reject any and all proposals. The City reserves the right to negotiate the terms of the contract, including the award amount, with the selected proposer prior to entering into a contract. If contract negotiations cannot be concluded successfully with the preferred proposer, the City may negotiate a contract with the next preferred proposer.

# **PROJECT SCHEDULE**

Engineering Consultants must submit their proposals to the City of Mequon Engineering Department by 3:30 P.M. on May 1, 2019. Emailed proposals are preferred and can be sent to <u>klundeen@ci.mequon.wi.us</u>. If hard copy is submitted, please provide 3 proposal copies, as well as a .pdf version on a USB drive. Consultant selection will be based on quality of proposal, qualifications of the design team, and fee to complete the work.

The schedule shall adhere to the following:

Proposal Submittal Deadline:	May 1, 2019 (3:30 pm)
Anticipated Award Date:	May 14, 2019 (dependent on cost)
Technical Report Due Date:	July 26, 2019

Thank you for your interest in this project, and feel free to call Kristen Lundeen, Director of Public Works/City Engineer at (262) 236-2938 or <u>klundeen@ci.mequon.wi.us</u>. Please note Kristen will be out of the office from April 15-19. During that timeframe, please email questions to be addressed upon her return.