



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](http://www.ci.mequon.wi.us)

**PUBLIC WORKS**

## **CITY OF MEQUON**

### **REQUEST FOR PROPOSALS MEQUON ROAD: TRAFFIC SIGNALS AND OIT CROSSING CONSTRUCTION PLAN DESIGN**

#### **OVERVIEW**

The City of Mequon is pleased to announce this Request for Proposals for traffic signal and roadway construction plan design services on Mequon Road between Buntrock Avenue (west) and Cedarburg Road (east). Proposed consultant services include the preparation of plans, specifications and engineer's estimates related to the design of traffic signal modification work at Buntrock Avenue, design of a new traffic signal at Weston Drive, design of the road improvements required to incorporate a Danish crossing at the existing Ozaukee Interurban Trail (OIT) crossing, and narrowing of the Mequon Road cross section (per WisDOT approval) within the corridor.

#### **BACKGROUND**

Mequon Road is a State Trunk Highway under the jurisdiction of the Wisconsin Department of Transportation (WisDOT). Between Buntrock Avenue (west) and Cedarburg Road (east) (excluding the intersection), this portion of Mequon Road is Connecting Highway and therefore under the jurisdiction of the City of Mequon with WisDOT having jurisdiction of traffic control/signals and the functional area of the signalized intersections along Mequon Road. The objective of the Mequon Town Center is to be a pedestrian oriented neighborhood, comfortable for bicycle and pedestrian traffic.

In early 2020, the City released an RFP which resulted in a selected design for a safer alternative for the OIT crossing. Please see the attached. In the course of that discussion, the Common Council also confirmed the decision to narrow the cross section through the Mequon Road corridor as a traffic calming measure. Additional traffic calming including RRFBs, speed limit reduction and landscaping elements were also contemplated.

As City staff and the consultant initiated conversations with WisDOT, WisDOT identified supplemental data and a corridor TIA study required for the proposed new traffic signal at Weston Drive. That data collection and corridor TIA study is ongoing. When the corridor TIA is accepted by WisDOT (expected in December/January), WisDOT will provide the requirements for right turn lane lengths, tapers and narrowing sections along Mequon Road from Buntrock Road to Cedarburg Road, as well as a timeline for when the signal at Weston Drive can be installed.

The Common Council identified this corridor project as a high priority. Therefore, while the supplemental corridor TIA is being completed, submitted and reviewed by WisDOT for the traffic signal warrants at Weston Drive and supplemental right turn lanes/narrowing, the City will engage a consultant for the subsequent design services. The goal of the release of the RFP is to provide a seamless transition into design of the corridor. Please note that the design and construction plans should be structured so that the City could bid the project in the following phases:

1. OIT Danish Crossing improvements as shown on the concept plan.
2. Temporary and permanent signal modification design plans for Mequon Road with Buntrock Road.
3. Signal Design and pavement marking at Mequon Road with Weston Drive. The sidewalk improvements between Weston Drive and the OIT crossing shall also be included in this phase.
4. Road narrowing, right turn lanes, tapers on Mequon Road from Buntrock Road to Cedarburg Road.

While phasing is contemplated, the consultant should also provide associated cost impacts. For example, is there a benefit to installing the underground infrastructure or conduits associated with the traffic signal at Weston Drive, if WisDOT indicates that the traffic signal cannot be installed until a point in the future.

### **SCOPE OF WORK**

The scope of the design project includes, but is not limited to:

- Design of the revised OIT crossing, as generally shown in the concept plan. Design shall include the relocation/switch of the City Hall driveway and OIT, the Danish crossing/switchback in Mequon Road, and the associated connections to the existing trail.
- Design of the traffic signals and associated intersection improvements at both Buntrock Avenue and Weston Drive.
  - Design of a replacement traffic signal to be installed at Buntrock Avenue utilizing decorative poles and equipment meeting the Mequon Town Center design standards; signal design shall include consideration of installation of emergency vehicle induced traffic signal change (pre-emption) to accommodate the adjacent Public Safety Building.
  - Design of a new traffic signal to be installed at Weston Drive which shall include consideration of installation of emergency vehicle induced traffic signal change (preemption) as well as railroad preemption.
  - Traffic signal design shall consider installation of traffic cameras in lieu of loop detectors.
  - Design of crosswalks at both signalized intersections, including Americans with Disabilities Act (ADA) compliant accessibility ramps.
  - Traffic signal designs and intersection design shall incorporate the Town Center Design Standards and at a minimum include black posts, black fluted pedestals, etc.
  - Traffic signal design scope of work may include but is not limited to the following: relocation of existing traffic signal poles, pull boxes, vehicular and pedestrian signal heads and their alignments, pedestrian push buttons, and luminaires, crosswalks, etc. The Traffic Signal Design Consultant shall prepare all such traffic signal-related documents to prepare traffic signal design plans, specifications and engineer's estimates that will ultimately be issued for bidding purposes.
  - Consultant shall also include temporary signal plans for the Mequon Road intersection with Buntrock Road.

- Design of a road narrowing plan for the corridor, with the general layout as shown in the concept plan, subject to WisDOT approval. It is noted that WisDOT will provide the right turn lane requirements, turn bay lengths, tapers and narrowed sections upon acceptance of the corridor TIA, which is expected to occur in December/January, depending on WisDOT's workload for review of the corridor TIA.
- Design of a sidewalk plan for the corridor. Preference for maintaining the existing sidewalk where available, and widening to serve as a bicycle friendly trail between the OIT and Weston Drive, as shown in the concept plan.
- Design of a signage plan for the corridor, including both modifications to or elimination of existing signage, in addition to any supplementary signage required. At a minimum, the signage plan should include Push-Button Activated Rectangular Rapid Flashing Beacons (RRFBs), Advanced Warning with Beacons, and Speed Feedback as shown on the concept plan.
- Design of a striping plan for the corridor, with preference for Town Center standard striping at all crosswalks and crossings, as shown in the concept plan. At a minimum, the striping plan should include the crossing and yield lines shown on the concept.
- Design of a landscape and streetscape plan which incorporates Town Center design standards. At a minimum, the design should include decorative landscaping and fencing at the OIT crossing as shown on the concept plan.
- Design of any storm sewer modifications required as a result of the narrowing and design/modifications/relocations of any other utilities necessary as a result of the narrowing.
- Prepare public bid documents and contracts, and assist in the bidding process as requested by the City. The City will receive and compile the bids and negotiate the contracts. The engineer shall create project specifications as necessary and calculate the required quantities.
- Incorporate design elements including, but not limited to, those include in previous TC Streetscape and TIF Project Plans.
- Provide a potential phasing plan for construction/implementation.
- Provide a cost estimate broken down by the following 4 phases:
  1. OIT Danish Crossing improvements as shown on the concept plan.
  - ~~5.2.~~ Temporary and permanent signal modification design plans for Mequon Road with Buntrock Road.
  - ~~4.3.~~ Signal Design and pavement marking at Mequon Road with Weston Drive. The sidewalk improvements between Weston Drive and the OIT crossing shall also be included in this phase.
  - ~~2.4.~~ Road narrowing, right turn lanes, and tapers on Mequon Road from Buntrock Road to Cedarburg Road.
- ~~In addition, provide a cost benefit analysis for the installation of the underground infrastructure or conduits if the project is phased.~~
- Provide a project schedule for the design, permitting, bidding and construction for each of the four design/construction phases.

Provide a timetable that includes a sequence and relationship of tasks within the proposal which are necessary to complete the project.

Items the Consultant should consider when designing include:

- Whether or not existing conduit runs can be reused
- Whether or not existing pull boxes can be reused
- Location of pedestrian push buttons height and reach constraints
- Location of pedestrian head relative to existing crosswalk and visibility to pedestrians
- Location of traffic signal heads and their visibility to motorists
- Maintaining a workable traffic signal system during construction (Buntrock Avenue)
- Storm Sewer modifications/impacts along the corridor

- Utility impacts/relocations needed along the corridor

City will provide:

- Concept plan for the corridor
- TIAs for Civic Campus Parking Lot, MTC1, Spur 16 and Foxtown Development
- TC Streetscape Plans
- TIF Plan
- Survey (however, utilities should be verified)

Consultant to provide:

- Confirmation that the record traffic signal drawings were as-built in the field
- Underground utility information
- Preparation of the Traffic Signal Design Plans, Specifications and Engineer's Estimate, which are to be in compliance with ADA guidelines, City of Mequon Specifications for Land Development, the most recent Wisconsin Manual on Uniform Traffic Control Devices, and the WisDOT Traffic Signal Design Manual.
- Electronic CAD files in AutoCAD Release 2015 format for all drawings related to the design
- MS Word file for technical specifications
- MS Excel file for cost estimating

### **PROPOSAL FORMAT**

Consultants' proposals should be limited to 20 pages and should include a brief resume of the firms' qualifications, recently completed similar projects, and cost for each of the four phases. It is recommended that the proposal format consist of:

1. Firm qualifications
2. Project team that will be working on the project
3. Five recently completed similar projects (1 page per project)
4. Costs per each of the four phases

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 October 29, 2020. Emailed/electronic copies can be sent to [mseidl@ci.mequon.wi.us](mailto:mseidl@ci.mequon.wi.us). Confirmation of receipt is required, and the Consultant is responsible for obtaining confirmation of receipt. Consultant selection will be based on quality of proposal, qualifications of the design team, schedule and fee to complete the work. Depending on contract value, the City anticipates award of the contract at the November 10, 2020 Common Council meeting.

Thank you for your interest in this project, and feel free to call Kristen at (262) 236-2938 or email [klundeen@ci.mequon.wi.us](mailto:klundeen@ci.mequon.wi.us) to discuss the scope of work.