

**Entry Level Permanent Non-Freeway Traffic Signing Plans-**

Consultant services of development of Permanent Non-freeway traffic signing plans. Including but not limited to the design of Non-Freeway Signing.

**Professional Registrations**

One (1) licensed Professional Engineer in the State of Michigan is required.

**Equipment**

Submit a statement certifying that your staff is familiar with and has access to the Michigan Traffic Sign Inventory System (MTSIS).

Submit documentation listing familiarity and access to hardware and software (i.e., SignCad) used to provide quality products and services.

(Note that each version of software must be identified and must be MDOT's current version)

**Staff Education and Experience**

- Documentation (Résumé) detailing the education and training of at least one (1) licensed Professional Engineer working directly on the design.
- Documentation (Résumé) showing experience of at least three (3) Permanent Non-Freeway Traffic Signing related projects completed in the last eight (8) years.

**Consultant Project Experience**

No vendor experience is required for this classification.

*This classification does not require the submission of a QA/QC plan.*

### **Entry Level Simple Traffic Signal Operations-**

Consultant services for traffic signal operations including but not limited to the following examples of such services: warrant analysis for traffic signal installation, phasing studies of new/existing electrical devices, and retiming of traffic signal corridors and individual locations. This also includes recommendations for geometric configurations to accommodate operations of devices. Example projects for this classification are traffic impact studies for private developments or any other signal analyses on state trunkline that include a **maximum of 3 signals**. These may or may not require signal warrant analyses and may also include time-space analysis of proposed or existing signals within an existing signalized corridor. **For any engineering study including more than 3 traffic signals, the Consultant must be pre-qualified in Complex Traffic Signal Operations.**

### **Professional Registrations**

One (1) licensed Professional Engineer in the State of Michigan is required.

### **Equipment**

Submit a statement certifying that your staff is familiar with and has access to the following. (Note that each version of software must be identified and must be MDOT's current version):

- Adobe Acrobat Professional
- Both Federal and Michigan Manual on Uniform Traffic Control Devices
- Synchro 7 Software or newer
- Michigan Signal Optimization Guidelines
- Michigan Timing Plan Preparation Guidelines
- Guidelines and forms are found at the following website:

<http://mdotwas1.mdot.state.mi.us/public/tands/plans.cfm>

<http://mdotwas1.mdot.state.mi.us/public/webforms/index.cfm>

### **Staff Education and Experience**

- Documentation detailing the education and training of personnel directly working on analysis. A minimum of one (1) licensed engineer is a key person involved with the analysis.
- Demonstrate at least three (3) projects related to Simple Traffic Signal operations completed in the last eight (8) years.

### **Consultant Project Experience**

No vendor experience is required for this classification.

*This classification does not require the submission of a QA/QC plan.*

**Entry Level Traffic Signal Design-**

Design services of electronic/electrical devices. Including but not limited to the following examples of such designs: traffic signals, overhead flashing beacons, sign opticals, and interconnect methods including radio, hardwire, and fiber optic.

**Professional Registrations**

Minimum of one (1) licensed Professional Engineer in the State of Michigan is required.

**Equipment**

Provide a document certifying that your staff is familiar with and has access to MicroStation CADD software. (Note that each version of software must be identified and must be MDOT's current version)

**Staff Education and Experience**

- Documentation (Résumé) detailing the education and training of personnel directly working on analysis. A minimum of one (1) licensed Professional Engineer is a key person involved with the analysis.
- Documentation (Résumé) showing experience of at least three (3) Traffic Signal Design related projects completed in the last eight (8) years.

**Consultant Project Experience**

No vendor experience is required for this classification.

*This classification does not require the submission of a QA/QC plan.*

### **Entry Level Roads & Streets-**

3R work on non-freeways which include mill & resurface, bridge approach work, concrete joint repair, safety upgrades, shoulder widening, shoulder paving or other work along existing alignment within the existing ROW, including log plans.

### **Professional Registrations**

One (1) or more engineers licensed in Michigan.

### **Equipment**

Provide a document certifying that your staff is familiar with and has access to the software listed below. (Note that each version of software must be identified and must be MDOT's current version):

- Microsoft Office
- MicroStation
- GEOPAK
- Critical Path Software. *\*Microsoft Project is recommended but not required.* The software must be capable of producing the printout to be submitted with the plans in a bar chart format.

Provide a document certifying that your staff is familiar with and has access to the current versions of the following items:

- MDOT Road Design Manual
- MDOT Drainage Manual
- MDOT Traffic & Safety Geometric Design Guides
- MDOT Standard Plans
- MDOT Pay Item Code Book
- MDOT Standard Specifications for Construction, 2003
- MDOT PPMS Task Manual
- AASHTO "A Policy on Geometric Design of Highways and Streets, 2004"
- AASHTO "Roadside Design Guide, 2002"

### **Staff Education and Experience**

A minimum of one (1) licensed Professional Engineer and one (1) Engineer or CADD Technician.

Provide résumés showing the following:

- Documentation (Résumé) detailing level of education
- A minimum of three (3) projects related to Roads and Streets.
- Provide a list of projects for each staff member:
  - List only projects completed in the past eight (8) years.
  - Provide all pertinent information about the projects listed. The name of the client, project description, location, construction cost, and the employee's role on the project. Also, provide the name and phone number of the client's representative. This person may be contacted to provide a reference.
  - Knowledge of AASHTO and MDOT standards and procedures.

### **Consultant Project Experience**

No vendor experience is required for this classification.

*This classification does not require the submission of a QA/QC plan.*