



AGENDA INFORMATION

TIFFIN CITY COUNCIL COMMUNICATION

DATE: August 14, 2025

AGENDA ITEM: Discussion and Consideration of Professional Services Agreement Proposal from MSA Professional Services, Inc., for Village Drive & Roberts Ferry Road Signal Design

ACTION: Motion

Purpose:

To seek Council approval of a Professional Services Agreement with MSA Professional Services, Inc. for the design of a traffic signal at the intersection of Village Drive and Roberts Ferry Road.

Background:

The intersection of Village Drive and Roberts Ferry Road has been identified as a location requiring improved traffic control due to increased traffic volumes and anticipated future development. The proposed signal design will enhance safety and traffic flow, particularly in coordination with nearby I-80 ramp terminals and future commercial access points.

MSA Professional Services has submitted a Professional Services Agreement under the existing Master Agreement to provide comprehensive design services for the signal installation.

Scope of Services:

The agreement includes:

- Project management and coordination with City staff and Iowa DOT
- Field survey and topographic mapping
- Intersection assessment and traffic analysis using Synchro software
- Full traffic signal design including layout, equipment specifications, and timing plans
- Pedestrian and curb ramp improvements
- Utility coordination and permitting
- Preparation of bid documents, specifications, and cost estimates
- Bidding assistance and contractor evaluation

The design also includes provisions for emergency vehicle preemption, camera detection, and integration of roadway lighting with signal poles.

Recommendation:

Staff recommends approval of the Professional Services Agreement with MSA Professional Services, Inc. for the Village Drive & Roberts Ferry Road Signal Design Project in the amount of \$58,525.

ATTACHMENTS: Agreement



Task Order

MSA Project Number: 13603027

This AGREEMENT (Agreement) is made effective _____ 2025 by and between

MSA PROFESSIONAL SERVICES, INC (MSA)

Address: 6045 Rockwell Drive NE, Cedar Rapids, IA 52402

Phone: (319) 364-4773

Representative: Andrew Inhelder, PE

Email: ainhelder@msa-ps.com

CITY OF TIFFIN (OWNER)

Address: 300 Railroad St, PO Box 259, Tiffin, IA 52340

Phone: (319) 545-2572

Representative: Doug Boldt

Email: dboldt@tiffin-iowa.org

Project Name: Intersection of Village Drive & Roberts Ferry Road Signal Design

The scope of the work authorized is: See Attachment A: Scope of Services

The estimated fee for the work is: \$58,525

This authorization for the work described above shall serve as the Agreement between MSA and OWNER. All services shall be performed in accordance with the Master Professional Services Agreement currently in force. Any attachments or exhibits referenced in this Agreement are made part of this Agreement. Payment for these services will be on a time and materials basis. A list of reimbursable expenses is included on the attached rate schedule.

Approval: MSA shall commence work on this project in accordance with your written authorization. This authorization is acknowledged by signature of the authorized representatives of the parties to this Agreement. A copy of this Agreement signed by the authorized representatives shall be returned for our files.

CITY OF TIFFIN

Doug Boldt
City Administrator
Date: _____

MSA PROFESSIONAL SERVICES, INC.

Andrew Inhelder, PE
Senior Project Manager - Engineering
Date: 08/08/2025

OWNER ATTEST:

Abigail Hora
City Clerk
Date: _____

Brian Huibregtse, PE, PTOE
Team Leader - Engineering
Date: 08/08/2025

ATTACHMENT A: SCOPE OF SERVICES

Introduction

This proposal outlines the scope of services and estimated costs for the development of traffic signal plans at the intersection of Village Drive and Roberts Ferry Road. The services include project management, field survey, intersection assessment, traffic signal design, pedestrian and curb ramp improvements, utility coordination, signal timing plan implementation, and permitting.

Project Management

- Four (4) progress meeting with City staff are included of the project. It is assumed that these meeting will have a virtual option. Meetings are intended to review plans and provide project updates.
- One meeting with Iowa DOT is included to discuss the City's plans for a traffic signal

Field Survey

- Contact Iowa One Call to request utility marking and mapping within the project limits.
 - Up to two site visits are assumed to survey located utilities within the project area.
- Conduct a topographic survey to collect location and elevation of existing features within the project limits to serve as the basis of design. Topographic survey will be collected within 300 feet in all directions of the intersection.
- Drainage and public utility structures are not anticipated to be in conflict with the proposed signals, so no investigation for depth and condition is included for these facilities.
- Create base mapping of the existing site conditions.
- Set appropriate horizontal and vertical controls to be used during the design and construction phases (include on plans).
- Assumptions to topographic/data collection:
 - The proposed improvements are located entirely within public road right of way.
 - MSA is allowed to access portions of the project area located outside of the public road right of way.
 - Acquiring title reports is not necessary.
 - There are monuments identifying the limits of each road right of way.
 - It is not necessary to establish or reestablish a right-of-way monument.
 - This project does not require surveying, mapping, describing, dedicating, or staking lines of ownership.
 - A level loop is not necessary.

Intersection Assessment

- Complete weekday AM and PM peak hour traffic counts at the intersection (IowaCounts) in the summer of 2025.
- Using available historical traffic data, forecast traffic counts for the next 5 years.

- Use known land development and future roadway connections to develop anticipated turning movements within the next 5 years.
- Complete a 5-year operational analysis of a signalized intersection using Synchro software to confirm appropriate lane designations and signal phasing. It is assumed that the existing footprint of the intersection will remain. A summary memorandum discussing the results of the operational analysis will be developed.
 - The operational analysis will prioritize northbound movements to ensure queues do not impact operations at the I-80 ramp terminals.
- MSA will contact Iowa DOT to discuss the City's intent to install a signal at the intersection. The operational assessment memorandum will be provided. If Iowa DOT requires additional information or analysis, it will be completed as part of a contract amendment.

Traffic Signal Plans

- Develop traffic signal plans to include the following:
 - Layout showing the location of poles, signal heads, cabinets, handholes, detection, and conduits.
 - The location, orientation, and legend/indications of traffic signal heads and signs.
 - A schematic wiring diagram detailing the size and type of cables and conduits.
 - Phasing, timing, and operation of the controller and associated equipment.
 - Specification of equipment, materials, and construction methods.
- The City of Tiffin will confirm equipment preferences related to:
 - Emergency Vehicle Preemption (EVP)
 - Camera Detection
 - Traffic Signal Controller
 - Other misc. equipment
- Roadway lighting will be combined with the traffic signal poles.
- New pavement marking plans will be included with the signal plans.
- Standard design bases are assumed and anticipated for this location. Nonstandard details design for signal bases is not anticipated or included as part of the signal plans.
- Traffic Control Design: For installation of the signals and curb ramps, single-lane closures of right turn lanes may be required. No detour is assumed. During construction, the intersection will remain two-way stop-controlled.
- Erosion Control Design: Determine location and type of erosion control devices needed to meet regulatory requirements. Minimal group disturbance is anticipated, but isolated areas are assumed and restoration will be required.
- It is assumed Type A Foundations for signals can be used. No Geotechnical investigations is included or anticipated. If bedrock is encountered, it is assumed the contractor will investigate and confirm the need for a Type B or Type C foundation.

Pedestrian Path and Curb Ramps

- A new sidewalk crossing and associated curb ramps will be added on the east approach of the intersection.
- A new 10-foot-wide multiuse trail crossing and associated curb ramps will be added to

the north approach of the intersection.

Utility Coordination

- Local utilities will be contacted, and system maps requested to help identify utilities in the area.
- Preliminary and Final plans will be shared with the utilities and impacts that require relocation will be identified.
- The design will attempt to avoid utility impacts when possible.

Signal Timing Plan Implementation

- Complete new weekday AM and PM peak hour traffic counts and Saturday counts at the intersection (IowaCounts) in the spring of 2026 after Kwik Star and future connection have been in use.
- Utilize new traffic counts and Synchro traffic model, to develop traffic signal timing plans for up to four scenarios to cover both weekdays and weekends.
- Timing Plans will be provided to the selected contractor for implementation by the contractor once signal is operational.
- It should be noted that the City/Contractor may need to make adjustments in the field to accommodate operations that fall outside of the modeling parameters (e.g., slower initial response times by motorists in the corridor, faster travel speeds).

Permitting

- Complete an IowaDOT work in right of way permit to accommodate the need for any traffic control signage near the interchange.
- Due to the limited scope and disturbance areas for this project, no additional permitting or coordination beyond what is included in the scope is anticipated or included.

Specifications, Quantities, Estimate, Bid Documents.

- MSA will develop specifications, quantities, estimates and bid documents based on the most recent edition of SUDAS standard specifications and the City of Tiffin Supplemental Specifications. Quantities for applicable bid items will be taken from the final plans and inserted on the bid form. MSA will provide a final opinion of probable cost on the design and local bid results of projects with similar size and scope.

Bidding Services

- Printing of bidding Documents
 - i. Provide OWNER with (2) 11x17 paper copies of final plans and (2) paper copies of the front-end documents.
- Assist Owner in Advertising and Soliciting for Bids
- Administer Bid Document Distribution Process utilizing QuestCDN
- Respond to Contractor questions during bidding process.
- Issue Addenda as appropriate to clarify, correct, or change the bidding documents

- Attend a Public Bid Opening at City Hall
- Prepare bid tabulation
- Assist the OWNER in evaluating bids and make a recommendation for award
- Preparation of construction contract for signature and distribute signed contracts
- Review completed contract, bonds, and insurance

Additional Services (can be completed as part of an amendment)

- Construction Observation & Administration
- Construction Staking.
- Survey/staking with temporary lathe of the proposed right of way and easements for R/W appraisals and utilities.
- R/W platting.
- R/W monumentation.
- Post-construction monumentation of disturbed or missing.
- monuments.
- Easement and R/W legal descriptions.
- Property acquisitions.
- Utility systems modeling.
- Additional meetings not specifically listed in the scope.
- Updates to owner's electronic Geographic Information System (GIS) to reflect changes from project.

Subconsultants

MSA will utilize IowaCounts to complete traffic counts for the project, all other work will be completed in-house.

ATTACHMENT B: RATE SCHEDULE

<u>CLASSIFICATION</u>	<u>LABOR RATE</u>
Administrative.....	\$ 85 – \$154/hr.
Architects	\$ 85 – \$198/hr.
Community Development Specialists.....	\$137 – \$198/hr.
Digital Design	\$115 – \$151/hr.
Environmental Scientists/Hydrogeologists	\$110 – \$193/hr.
Geographic Information Systems (GIS)	\$100 – \$193/hr.
Housing Administration	\$ 97 – \$198/hr.
Inspectors/Zoning Administrators	\$110 – \$160/hr.
IT Support	\$175 – \$193/hr.
Land Surveying	\$ 85 – \$198/hr.
Landscape Designers & Architects	\$ 85 – \$220/hr.
Planners	\$ 85 – \$215/hr.
Principals.....	\$225 – \$314/hr.
Professional Engineers/Designers of Engineering Systems	\$155 – \$204/hr.
Project Managers	\$120 – \$248/hr.
Real Estate Professionals	\$140 – \$193/hr.
Staff Engineers.....	\$ 85 – \$149/hr.
Technicians	\$100 – \$151/hr.
Wastewater Treatment Plant Operator	\$ 92 – \$118/hr.

REIMBURSABLE EXPENSES

Copies/Prints	Rate based on volume
Specs/Reports	\$10
Copies	\$0.14/page
Plots	\$0.01/sq.in.
Flash Drive.....	\$10
GPS Equipment.....	\$20/hour - \$10.75/hour for DOT
GPS R2 Equipment	\$20/hour - \$2/hour for DOT
Dini Laser Level	\$85/per day
Mailing/UPS	At cost
Mileage – Reimbursement.....	IRS Rate – IRS Rate + \$5/day
Mileage – MSA Vehicle.....	\$0.70 mile standard/ \$0.69 mile for DOT
Nuclear Density Testing.....	\$30/day
Organic Vapor Field Meter.....	\$100/day
PC/CADD Machine	Included in labor rates
Robotic Survey Equipment	\$20/hour - \$10/hour for DOT
Stakes/Lath/Rods	At cost
Travel Expenses, Lodging, & Meals	At cost
Traffic Counting Equipment & Data Processing	At cost
Geodimeter	\$30/hour
Drone Flight	\$375/flight - \$360/flight for DOT

Labor rates represent an average or range for a particular job classification. These rates are in effect until December 31, 2025.