

**BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards**



**MACOMB COUNTY PURCHASING DEPARTMENT
REQUEST FOR BID**

BID ITEM NO. : RFB-18-53

BID TITLE: Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards

REQUEST FOR BID

The Macomb County Department of Roads will be receiving sealed bids for Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards

This bid specification describes two (2) solar-powered trailer-mounted changeable message boards 126" x 76", consisting of a sign display panel, a supporting structure for the sign display panel, a photovoltaic array, a battery power supply, an energy management system control unit and an electronic control console, all mounted on a heavy duty trailer frame. Bidders must submit their bid on units that meet or exceed these specifications.

The units MUST be delivered on or before September 30, 2018 to 34592 Nova Drive, Clinton Township MI 48035 - no exceptions.

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OBJECTIVE

The purpose of this Request for Bid (RFB) is to select a vendor to provide **two (2) solar-powered trailer-mounted changeable message boards**; the goal is to select the most capable vendor offering the most competitive price. This proposal is in accordance with the Macomb County Procurement Policy.

SUBMISSION PROCEDURES

Date Due: August 3 at 10:00 AM (ESDT)

Bids will be publicly opened and read.

DELIVER via FEDEX, UPS, or hand deliver DIRECTLY TO 117 SOUTH GROESBECK HWY, Mt. Clemens., MI 48043 DEPARTMENT OF ROADS ADMINISTRATION BUILDING

PLEASE NOTE: If USPS is utilized for submissions, there is no guarantee of a timely delivery as the Post Office does not deliver to individual County Buildings

NO LATE BIDS ACCEPTED.
NO FAX OR EMAIL BIDS ACCEPTED.

Deliver to: Macomb County Department of Roads – Administration Building
Tammy Goike, Fleet Manager
117 South Groesbeck Hwy.
Mt. Clemens., MI 48043

Return: One (1) hard copy original
One (1) copy of the Bid.
Clearly mark on the envelope SEALED BID ITEM RFB-18-53 Two (2) solar-powered trailer-mounted changeable message boards. Label all submission envelopes with the **company name on the outside.**

Complete and return all pages requiring vendor response.

All Bids must be submitted on the forms provided, properly executed and with all items filled out in ink or typed. Do not change or add words to the forms. Unauthorized conditions, limitations, or provisions on or attached to the forms may be cause for rejection of the Bid. Any Bidder information that is altered by erasure or by inter-lineation prior to submittal must be initialed and explained by notation above the signature of the Bidder.

Macomb County vendors should be registered on the BidNet Michigan Inter-governmental Trade Network (MITN) website www.bidnetdirect.com/mitn.

QUESTIONS

Due: July 30, 2018 at 3:00 PM (ESDT)

Submit to: Email: tammy.goike@macombgov.org
Fax: 586-463-8682

Questions regarding bid specifications may be directed in writing only, by email or fax. All questions or clarifications must be directed to the Fleet Manager. Answers will be posted to Bid Net /MITN.

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MODIFICATIONS

Macomb County vendors should be registered on the BidNet Michigan Inter-governmental Trade Network (MITN) website www.bidnetdirect.com/mitn. Clarifications, modifications, or amendments may be made to this document at the discretion of the Macomb County Purchasing Department prior to the opening of the solicitations. Should any such changes be made, an addendum will be issued and posted on the BidNet website. It is the responsibility of each Bidder to check the website and verify that he/she has received all Addenda prior to submitting a Bid.

It is also the responsibility of each Bidder to verify that all sub-Bidders and material suppliers whose prices are incorporated in the Bidder's Bid are familiar with the Bidding Documents in their entirety, including all Addenda issued up to the time of the Bid opening. (See also *ERRORS, OMISSIONS, AND/OR DISCREPANCIES, below.*)

All addenda issued to Bidders prior to date of receipt of Bids shall become a part of these specifications, and all Bids are to include the Work therein described.

DEFINITIONS

- A. Bidding Documents include this Request for Bid, (including drawings, specifications and all Addenda issued prior to execution of the Contract) and the proposed Contract Documents.
- B. Addenda are written or graphic instruments issued by Macomb County prior to the execution of the Contract that modify or interpret the Bidding Documents.
- C. The Base Bid is the sum state in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted.
- D. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work as described in the Bidding Documents.
- E. A Bidder is a person or entity who submits a Bid to Macomb County, and who meets the requirements set forth in the Bidding Documents.
- F. Default is the failure of the Bidder to fulfill the obligations of the contract, including but not limited to, failure to deliver on time or the unauthorized substitution of articles other than those quoted and specified on the contract; or failure to deliver specified quantities (repetitive shortages).
- G. Owner is the County of Macomb.
- H. Contractor is a person or business which provides goods or services to the County of Macomb under terms specified in a contract.

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BIDDING DOCUMENTS

All Bidding Documents are available on the BidNet Michigan Inter-governmental Trade Network (MITN) website www.bidnetdirect.com/mitn. Bidders shall use complete sets of Bidding Documents in preparing Bids. Macomb County assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

EXAMINATION OF BIDDING DOCUMENTS AND SITE

Before submitting a Bid, the Bidder shall carefully read the specifications and all other Bidding Documents. Submission of a bid will be construed as a conclusive presumption that the bidder is thoroughly familiar with the Bid Proposal and Specifications and that he understands and agrees to abide by each and all of the stipulations and requirements contained therein.

BIDDER'S QUALIFICATIONS

Bidders must be properly licensed under the state laws governing their respective trades. Bidders shall meet qualifications indicated in the Bidding Documents. Macomb County may make such investigations as necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to Macomb County all such information and data for this purpose as Macomb County may request. Macomb County reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy Macomb County that such Bidder is not properly qualified to carry out the obligations of the Contract.

Submission of a Bid shall serve as evidence that the Bidder has confirmed that the Bidder is properly qualified to perform the work and is capable of obtaining the required bonds and insurance.

COMPONENT/PRODUCT RESPONSIBILITY

The successful Bidder will provide field instructions for Macomb County's operators, mechanics and/or supervisors. The successful Bidder shall be responsible to insure that all components delivered operate properly and with the intent and details of these specifications.

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STATUS OF BIDDERS

Proprietors submitting Bids shall indicate their status as proprietors.

Bidders submitting Bids for partnerships shall indicate their status as partners and shall submit, upon request of Macomb County within 24 hours following receipts of Bids, a certified copy of the power of attorney authorizing the executor of the Bid to bind the partnership.

Bidders submitting Bids for corporations shall indicate their status as corporations and shall submit, upon request of the Owner within 24 hours following receipt of Bids, a certified copy of the board of directors' authorization for the Bidder to bind the corporation and shall affix the corporate seal on the Bid.

Bidders shall provide, upon request of Macomb County, within 24 hours following receipt of Bids, the following:

1. Names and addresses of proprietors, of all members of a partnership, or of the corporation's officers.
2. Name of county or state where the partnership is registered or where the corporation is incorporated. Corporations must be licensed to do business in the project state at the time of executing the contract.

ERRORS, OMISSIONS, AND/OR DISCREPANCIES

Bidder shall not be allowed to take advantage of errors, omissions, and/or discrepancies found in the Bidding Documents. In the event a conflict or omission is discovered in the Bidding Documents after the issuing of the last addendum such that an interpretation cannot be issued by Macomb County prior to bidding, the Bidder is directed to estimate on and provide the quantity, quality and type of material and/or labor consistent with the overall represented bid item so as to provide all materials, equipment, labor, and services necessary for the completion of the work.

SUBSTITUTION OF MATERIALS AND EQUIPMENT

Whenever a piece of equipment is identified in the Specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or the like, it is so identified for the purpose of establishing a standard. Any piece of equipment of other manufacturers or vendors which will perform, adequately, the duties imposed by the general design will be considered equally acceptable provided that the piece of equipment so proposed is, in the opinion of the Department of Roads, of equal substance appearance and function.

To obtain approval to use unspecified products, Bidders shall submit written requests at least ten (10) days before the bid date. Requests received after this time will not be considered. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability.

If the product is acceptable, the Department of Roads will approve it in an Addendum which will be posted on the BidNet website. The product shall not be purchased or installed by the Vendor without the Department of Roads written approval.

Voluntary alternates or qualifications contrary to the Contract requirements made by the Bidder in or accompanying his/her Bid as a condition for the acceptance of the Contract will not be considered in the award of the Contract and will cause the rejection of the entire Bid.

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TERMINATION

Macomb County reserves the right to terminate any award to the Bidder without any liability, upon a 30 day notice from Macomb County.

DEFAULT (refer to Section: Definitions, Item F)

If continued abuse of any/or all of the default conditions persist, Macomb County will notify the Contractor in writing. The Contractor will be given thirty (30) days to correct this default condition. Failure to correct within the specified period will result in Macomb County canceling the Contract and procuring the articles or services from other sources. The Contractor will be responsible for any excess costs occasioned thereby.

RIGHT TO REJECT

Macomb County reserves the right to reject any or all Bids in whole or in part and to waive any informalities therein, or accept any Bid it may deem in the best interest of the County.

Note: Past experience and performance may be a factor in making an award.

MODIFICATION AND WITHDRAWAL OF BIDS

A Bid may be withdrawn on personal requests received from Bidder prior to submission time. A Bid being withdrawn may be re-submitted up to submission time. Negligence or error on the part of the Bidder in preparing his/her Bid confers no right for withdrawal of the Bid after it has been opened.

OFFER PERIOD

Bids will remain firm for a period of 120 days after official opening of Bids.

EXECUTION OF CONTRACT

Macomb County reserves the right to accept any and all Bids, or to negotiate contract terms with the various Bidders when such is deemed by Macomb County to be Macomb County's best interest.

UNIT PRICES: BID BREAKDOWN OF EQUIPMENT INFORMATION

Upon notice from the Macomb County Department of Roads, the low Bidders shall submit a detailed cost breakdown of all equipment outside of the Cab and Chassis. The breakdown shall show the cost of the body build up, (i.e., generators, aerial devices, plows, blades, road temp sensors, etc.)

SCHEDULE - TIME OF COMPLETION

Macomb County requires the equipment specified in the bid to be completed and delivered on or prior to September 30, 2018. Any equipment delivered after that date will not be paid for and will be denied and returned to the vendor.

TERM OF CONTRACT

The Contract will be for a minimum of one (1) year.

RENEWAL

The proposed agreement may be renewed for two (2) one-year extensions with a total of three possible years for the bid, provided that by at least 45 days prior to end of the contract both parties agree to an extension under the same terms and conditions as exist in the current contract.

BASIS OF BID

A single lump sum bid with a stated dollar amount for each message board.

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SALES AND EXCISE TAXES

The County of Macomb, being a governmental unit, is exempt from sales and federal excise taxes. The price is to be net, exclusive of any taxes. All prices stated in the Bid response will include all Federal, State, County and Municipal taxes, including Michigan State Sales and Use Taxes, or contributions required by Bidder's business.

INDEMNIFICATION

Macomb County will not be responsible for injury to Contractor's employees, Sub-Contractors, or to third parties caused by the Contractor's agents, servants or employees. Therefore, the Contractor agrees to incorporate the below hold harmless agreement into the required insurance and to be evidenced by being contained in the certificate of insurance. Further, the below listed indemnification is incorporated and is part of the subject contract.

The Contractor agrees to protect, defend, indemnify and hold the County of Macomb and its commissioners, officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees, or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, legal fees, liens, demands, court costs, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc. relating to personal injury, death, damage to property, defects in materials or workmanship, or any actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder.

The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc. at his sole expense and agrees to bear all other costs and expenses related hereto, even if it (claims, etc.) is groundless, false or fraudulent. In any case in which this indemnification would violate legal prohibition, the foregoing provision concerning indemnification shall not be construed to identify the County for damage arising out of bodily injury to persons or damage to property caused by or resulting from the sole negligence of the County, its commissioners, officers, employees or agents.

CONTRACTS WITH SUB-CONTRACTORS

All contracts made by the Bidder with Sub-Contractors shall be covered by the terms and conditions of the Contract. The Bidder shall inform all Sub-Contractors, i.e. body build-ups completed by a separate vendor, of these terms and conditions. Macomb County reserves the right to require of the Bidders tentatively selected for consideration in the awarding of the Contract, a list of the Sub-Contractors whom the Contractor intends to employ.

Macomb County reserves the right to disapprove the use of any proposed Sub-Contractor, and in such event, the Bidder submitting such Sub-Contractor shall submit another such Sub-Contractor in like manner within the time specified by Macomb County. Macomb County reserves the right to reject any proposal if such information required by Macomb County is not submitted as above indicated.

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INSURANCE

COMMERCIAL GENERAL LIABILITY INSURANCE

Shall be written on an occurrence basis with limits of Liability of not less than \$1,000,000 (one million dollars) as combined single limit for each occurrence of bodily injury and personal injury with an annual aggregate of not less than \$2,000,000 (two million dollars). The policy shall include;

- a. Contractual Liability
- b. Products and Completed Operations
- c. Independent Contractors Coverage
- d. Broad Form General Liability Extensions or equivalent

WORKERS' COMPENSATION

Workers' Compensation Insurance meeting Michigan statutory requirements. Employer's Liability Insurance with minimum limits of \$500,000 each accident, \$500,000 bodily injury by disease policy limit, \$500,000 bodily injury by disease each employee.

AUTOMOBILE LIABILITY INSURANCE

Motor Vehicle Liability Insurance including Michigan NO-FAULT Coverage for all vehicles, owned and non-owned, leased and hired used in the performance of this contract with limits of \$1,000,000 (one million dollars) as the combined single limit for each occurrence for bodily injury and property damage.

PROFESSIONAL LIABILITY/ERRORS & OMISSIONS

Professional Liability Insurance with minimum limits of \$1,000,000 (one million dollars) each occurrence and \$2,000,000 (two million dollars) aggregate.

INSURANCE INSTRUCTIONS

All certificates of insurance and duplicate policies shall contain the following:

The County of Macomb shall be named additional insured on all policies (excluding Worker's Compensation) and the underwriters will have no right of recovery or subrogation against the County of Macomb including its agents, employees, elected and appointed officials and agencies. It being the intention of the parties that the insurance policy so effected will protect both parties in primary coverage for any and all losses covered by the subject policy. The insurance carrier(s) must have an A.M. Best rating of no less than an A-, VII.

The insurance company(s) issuing the policy or policies will have no recourse against the County of Macomb for payment of any premiums or for assessments under any form of policy.

The Contractor will assume any and all deductibles in the above any and all deductibles in the above-described insurance policies.

The term "INSURED" is used severally, not collectively, but the inclusion in this policy of more than one insured will not operate to increase the limit of the Owner's liability.

All certificates are to provide a thirty (30) day notice of material change or cancellation. Certificates of insurance must be provided no less than ten (10) working days before commencement of work to the County of Macomb, 120 North Main Street, Mt. Clemens, Michigan 48043 Attention: Department of Risk Management and a second copy to Macomb County Dept. of Roads, 34592 Nova Dr., Clinton Twp., MI 48035 Attention: Purchasing Department.

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SPECIFICATIONS/SCOPE OF WORK

MACOMB COUNTY DEPARTMENT OF ROADS

Specifications for:

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards

General Description:

This bid specification describes two (2) solar-powered trailer-mounted changeable message boards 126" x 76", consisting of a sign display panel, a supporting structure for the sign display panel, a photovoltaic array, a battery power supply, an energy management system control unit and an electronic control console, all mounted on a heavy duty trailer frame. Bidders must submit their bid on units that meet or exceed these specifications.

General Requirements:

Bids will be considered only from vendors who offer equipment that is manufactured by companies that are known to be skilled and have been regularly engaged in the manufacture of equipment of the type, class and size specified herein for a period of not less than five (5) years. Bidders must be a manufacturer authorized sales and service facility for the product offered.

The origin or manufacturing location of the unit, as well as the availability of service and parts for the major components must be stated. Qualified service and factory replacement parts must be available on a regular basis, and at a permanently established location.

The bidder shall include in the bid package a list of at least five (5) users of the equipment type offered in the package, so that department personnel can check the references.

The vendor shall furnish equipment that is established, reliable, and in successful operation.

All equipment shall be new and the manufacturer's latest model. If modifications to the manufacturer's standard model are necessary in order to comply with Macomb County Department of Roads specifications, those modifications should be identified and so indicated on the spec sheet.

Bidders are expected to bid a price and delivery of equipment they propose to furnish giving careful consideration to the specification. Any deviations from these specifications shall be submitted with the bid in writing, with full detail of each variation and with reference made to each item to which the variation applies. If these variations are not submitted with the bid, the entire bid will be considered non-responsive.

Delivery time, past performance of the bidder and/or the equipment offered, as well as price, will be considered major factors in determining the successful bidder.

The manufacturer's warranty and/or component warranties must be stated. Unsatisfactory or inadequate warranty provisions shall, be justification for the denial of the award of this bid.

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COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
GENERAL			
Meet or exceed the standards for Portable Changeable Message Signs as listed in the U.S. Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD)			
DIMENSIONS			
Overall Length (including sign and standard hitch): 180"			
Overall Width: 92"			
Overall Height (sign erect, top mounted solar panel): 162"			
Height in transport/ stowed position: 103"			
Weight :2,960 lbs.			
PERFORMANCE OBJECTIVES:			
Visibility up to 1 mile			
Legibility up to 1/2 mile.			
Minimal glare from sunlight to headlights			
Continuous, uninterrupted operation on solar power			
ENVIRONMENTAL			
Temperature, operating and storage, -40 to +185°F			
Relative Humidity -20% to 98%, non-condensing			
Electrical Interference – Must be unaffected by RFI (Radio Frequency Interference) and EMI (Electromagnetic Interference)			

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Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
TRAILER CHASSIS:			
FRAME CONSTRUCTION			
Trailer frame shall be constructed of welded 7 Gauge (3/16-inch) CNC formed steel plate and structural steel tubing with 3 x 5 x 3/16 inch structural steel tubing extending from the sign mast mounting frame cross members (2 x 4 x 11 gauge tubing) forward to the coupler/brake actuator. Tongue shall be braced with diagonal 2 x 4 x 11 gauge tubing extending outward from the forward section of the tongue at 45 degrees, rearward to the front main cross member.			
Trailer shall be equipped with a 7 Gauge (3/16-inch) CNC formed steel plate rear cross member to provide support for sign panel and protect structure against rear end collisions.			
The trailer tongue shall have a 3-inch pintle hitch with height coupler adjustable from level to plus 10-inches. The pintle ring shall be of sufficient thickness and hardness as to ensure its longevity with a capacity rating of 5,000 lbs.			
Trailer frame shall be equipped with tie down points to facilitate securing unit to utility trailer or truck deck for transport.			
Trailer shall be equipped with 2 ea. 36" long 1/4-inch safety chains with snap-type hooks for secure attachment to tow vehicle hitch			
SUSPENSION AND BRAKE SYSTEM			
Trailer shall be equipped with an independent suspension, torsion-type #10 axle with electric brakes. Axle load capacity shall be set to 3,400 pounds			
Trailer shall be equipped with electric brake controller for axles equipped with electric brakes			
Tires and Wheels			
Wheels shall be 15-inch x 6-inch, 5-lug pattern (4 1/2-inch bolt circle),			
Tires shall be ST225/75R15 Load Range C.			
Wheels and tires shall be sized in accordance with load requirements of trailer and axle.			

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COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
LIGHTING			
Trailer shall be equipped with sealed flush-mounted combination stop, tail and turn lights.			
Trailer shall be equipped with flush-mounted front and rear side marker lights.			
Trailer shall be equipped with a rear center identification light bar.			
Trailer shall be equipped with a lighted license plate holder.			
Trailer wiring harness shall be completely sealed and water resistant			
FENDERS			
Trailer shall be equipped with unbreakable, molded, solid color, UV-stabilized HDPE (High Density Polyethylene) fenders, completely closed on the inner side to protect trailer frame.			
Fenders shall be secured to trailer frame with zinc-plated steel thread forming screws and fender washers so as to facilitate easy repair or replacement.			
LEVELING JACKS			
Trailer shall be equipped with four swivel type screw jacks, minimum capacity rating of 2,000 pounds, mounted at each corner of the trailer frame			
The outrigger jacks shall be capable of lifting the trailer frame so trailer wheels and tires can be removed for additional security.			
Trailer shall be constructed such that the outrigger jacks are protected by 7 Gauge (3/16-inch) CNC formed steel plate guards when the jacks are in the travel position to prevent damage to jacks during transport.			
Surface Preparation and Finishing			
Trailer chassis and superstructure shall be completely cleaned and deburred prior to finishing.			
A polyamide epoxy primer shall be applied to a dry film thickness of 1.5 mils.			
A high gloss federal safety orange aliphatic acrylic urethane finish shall be applied to a dry film thickness of 1.25 mils.			
SIGN SUPPORT			
Sign panel shall be attached to a telescoping mast assembly to facilitate raising and rotating the display panel from the transport position to the operating position safely and quickly by an unassisted operator.			

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COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
The mast shall consist of a lower assembly and an upper assembly with a hydraulic cylinder mounted inside to provide for raising and lowering the message display panel			
A hydraulic power unit, mounted inside a lockable, weather-resistant, molded HDPE (High Density Polyethylene) enclosure, shall provide sufficient flow to raise the sign panel to the full operating position in less than twenty (20) seconds. The hydraulic power unit shall be equipped with a manual bypass dump valve to permit lowering of the mast in the event of a hydraulic control valve failure or total loss of electrical power			
The lower mast shall be fabricated from 6 x 6 x 3/16-inch structural steel tubing inserted through a 5\16-inch steel plate secured to the trailer frame with eight 5\8-inch diameter steel bolts. The lower mast assembly shall be reinforced with 5/16-inch steel gusset plates located below the trailer deck.			
The upper mast shall be fabricated from 8-inch structural steel round tubing.			
The mast assembly shall be equipped with a dual cam locking mechanism located at the bottom of the upper mast. The dual cam locking mechanism shall secure the message display panel in the appropriate viewing position. The locking cam mechanism shall automatically tighten to resist turning in windy conditions. Friction type (disc or band brake) locking mechanisms are not acceptable as slippage can occur in high wind conditions.			
The message display panel support mechanism shall be capable of being rotated through 360° and locked into position, at any angle.			
The message display panel rotation locking mechanism shall permit the operator to lock the message display into position, safely, at ground level, prior to elevation to full operating height			
The message display panel shall be equipped with a sighting device to facilitate proper alignment during setup.			
The upper and lower mast assemblies shall be equipped with nylatron wear pads to provide for smooth easy movement and to avoid metal to metal contact. The message display support mast shall be capable of extended operation without lubrication. Nylatron wear pads shall be adjustable to compensate for normal wear			
Message display panel support structure shall be of non-welded, modular construction to facilitate quick easy repair in the event of accidental damage.			
Message display panel shall be secured to a steel superstructure with stainless steel hardware and nylon spacers to minimize the effects of corrosion			

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COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
All mounting hardware shall be locking-type.			
Heavy gauge steel cradles equipped with rubber bumpers and HDPE wear pads shall securely support sign panel against vertical and lateral movement during transport. No locking pins or latches will be permitted. Sign panel shall automatically lock into the transport position, without operator intervention, when the sign panel upper mast is fully retracted			
Message Display Panel			
Width Overall - 126 in. (320 cm)			
Height Overall - 76 in. (193 cm)			
Depth Overall - 6 in. (15 cm)			
Construction - Message Display Panel Case			
The message display panel case shall be constructed of heavy duty aluminum extrusion secured at each corner by a molded, fiberglass-reinforced plastic corner and black powered coated stainless steel torx head screws and nylon insert locknuts.			
The back of the message display panel case shall be constructed of aluminum sheet bonded and riveted to the case frame.			
Interior of message display panel case shall be equipped with fabricated extruded aluminum channels to reinforce the display case and to support internal wiring and cables.			
The display panel case shall be equipped with eight breather filter vents, designed to allow the flow of vapor but not fluid, located at the top and bottom of the case to provide adequate ventilation to minimize condensation and fogging of the display panel door.			
Message Display Panel Door			
The display panel door shall be constructed of heavy duty extruded aluminum secured at the corners with glass fiber reinforced molded plastic inserts and black powered coated stainless steel torx head screws and nuts.			
The door shall fit within a flange around the perimeter of the message display panel case frame to provide for a secure weatherproof enclosure.			
A rubber seal shall be located inside of the flange on the case frame to provide a water tight, dust tight closure.			

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COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
The message display panel shall be enclosed over the display area by a 3/16-inch thick clear UV resistant, scratch resistant, acrylic coated polycarbonate material with a non-glare outer surface to reduce reflection of ambient light and oncoming vehicle head lamps.			
The polycarbonate material shall be secured in the door frame with an extruded rubber u-channel to provide a cushioned, weatherproof seal.			
The message display panel door shall be secured in the open position for servicing by a pair of zinc-plated steel telescoping lid supports equipped with automatic latches. The door supports shall be located completely inside of the display panel housing, protected from weather.			
The display panel door shall be secured in the closed position with adjustable, positive locking, stainless steel draw latches.			
The message display panel door and case shall be equipped with stainless steel locking hasps capable of accepting standard padlocks to secure the door in the closed position.			
Surface Preparation and Finishing			
Message display panel case and door shall be completely cleaned and deburred prior to finishing.			
A wash primer shall be applied to all prepared metal surfaces prior to applying final finish.			
A matte black acrylic urethane finish shall be applied to a dry film thickness of 2.5 mils			
Display Characteristics			
The message display area shall be approximately 120 inches in width by 70 inches in height.			
The display area shall consist of a continuous (full) matrix of 48 pixels or dots in width by 27 pixels in height), or 56 pixels in width by 30 pixels in height when equipped with the optional high definition display			
The pixels or dots shall consist of three (3) LEDs arranged in a triangular pattern so as to produce the appearance of a round image or dot at normal viewing distances.			
The display shall produce a brightness greater than 10,000 candela per square meter at maximum intensity.			
The display shall produce a minimum viewing angle of 24 degrees standard with consistent intensity and color across the entire display panel.			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
The message display shall be capable of displaying one, two, three or four lines of alphanumeric characters or text with a nominal character height ranging from a minimum of 13 inches (33 cm) to a maximum of 52 inches (132 cm)			
The message display panel shall be capable of displaying three lines of text with a minimum of three pixels (7.5 inches / 19 cm) between lines.			
The message display shall also be capable of displaying graphic images and symbols using the full 48 pixel width and 27 pixel height (56 pixel width by 30 pixel height when equipped with the optional high definition display).			
General Operation			
Control console shall provide for full local and remote (via integrated cellular transceiver and antenna) control of the dynamic message sign including dynamic message sign geographic location monitoring (via integrated GPS module and antenna), radar speed monitoring and statistical data collection (when equipped with optional radar speed monitor) and sign panel orientation monitoring (when equipped with optional digital flux-gate compass), without the need for additional hardware, software, external computers or hand-held control devices.			
Control console shall include all necessary hardware and software to operate the dynamic message sign locally (via integrated full color LCD display and touch-screen) and remotely (via integrated cellular transceiver and antenna), including geographic location monitoring (via integrated GPS module and antenna), radar speed monitoring and statistical data collection (when equipped with optional radar speed monitor), and sign panel orientation monitoring (when equipped with optional digital flux-gate compass). Full remote control (including GPS mapping) via internet accessible server based remote control software shall be included free of charge from date of purchase (i.e. cellular service shall be included free from date of original purchase for life of the unit).			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Control console, in conjunction with the message display panel, shall have the capability of monitoring and detecting sign panel communication loop failures. In the event of a sign panel communication loop failure, the control console, in the case of soft errors (temporary disruption of message display), shall have the ability to correct the failure immediately and in the case of hard errors (hardware failure), shall have the ability to completely blank the sign panel so as to prevent the display of incorrect and/or potentially misleading messages. Additionally, control console, in conjunction with the message display panel, shall have the capability of continuously and dynamically (as well as on command) testing and reporting the operational status of each and every individual pixel in the sign panel. Non-operational pixels shall be indicated as such on both local and remote user interfaces. Control console shall have the capability of reporting complete sign panel operational status remotely (including web-access, NTCIP, and UTMC). Additionally, control console shall have multiple diagnostic modes (manual & automatic with both local and remote controls) for troubleshooting sign panel (including a graphical representation of all modules with non-operational pixels) to enable an operator to quickly console shall have the capability of reporting complete sign panel operational status remotely (including web-access, NTCIP, and UTMC). Additionally, control console shall have multiple diagnostic modes (manual & automatic with both local and remote controls) for troubleshooting sign panel (including a graphical representation of all modules with non-operational pixels) to enable an operator to quickly track down and replace faulty display modules in the sign panel</p>			
<p>Control console embedded CPU shall incorporate an ARM based microprocessor design to insure future hardware and software compatibility through upgrades provided by manufacturer free for life of the machine. Operating system shall be Linux based and include multiple watchdog timers to ensure automatic system restarts in the event that any critical function stops working properly or communication with remote control servers is interrupted</p>			
<p>Control console shall be capable of connection to any standard IBM or compatible desktop or portable (lap-top) computer via a standard serial interface (COM) or Ethernet port to facilitate routine service or repair, extensive diagnostics, and the analysis of user files or operating programs.</p>			
<p>Control console shall be equipped with at least one USB port, one Ethernet port, two (2) serial ports (DB-9 connector), two (2) digital outputs, six (6) digital inputs, and two (2) analog inputs.</p>			
<p>Control console shall be capable of simultaneously driving more than one sign panel for dual sign panel installations</p>			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Control console operating processor, firmware and software shall be field (locally) upgradeable with a standard USB flash-drive (memory key) or remotely upgradeable over an IP addressable network connection - wire-line or wireless via IP addressable modem. Additionally, upgrades shall be provided by manufacturer free of charge for life of machine and automatically applied via integrated cellular transceiver and included remote control service from date of original purchase</p>			
<p>Full color LCD display shall be equipped with an automatic backlight with automatic dimming capability to accommodate both direct sunlight daytime and low ambient light level night time operation. Backlighting shall automatically activate upon any touch-screen activity and remain on for five minutes following the last touch-screen activity. Additionally, an automatic log-out feature shall be incorporated to insure security of the unit when left unattended. Automatic log-out feature shall be capable of being disabled by the operator as desired (i.e. for vehicle mounted applications)</p>			
<p>Main power to the sign panel and the control console shall be controlled by a combination switch and circuit breaker in order to provide electrical protection without the need for fuses. All connections to controller and Energy Management System shall be made with locking type quick disconnect connectors. The use of fuses and/or terminal strips for connections shall be strictly forbidden.</p>			
<p>Programming</p>			
<p>Control console shall provide an intuitive icon-driven graphical user interface (GUI) along with step by step instructions to the operator, via the LCD display, as the various programming functions are performed, for simple easy programming and operation. On-screen help files shall be included in all languages. Control console shall support a minimum of six (6) standard operating languages (English, Spanish, French, Dutch, German and Portuguese) and four (4) standard keyboards (English, French, Portuguese/Spanish, and Arabic) along with associated font sets. Controller shall be capable of being setup for either a Standard US DOT, Power-Miser US DOT, Standard US 3-Line DOT, French Canadian, Ontario MTO-2, Quebec Road Safety, MTQ, or an International font set by an operator with Administrator access to prevent unauthorized use of inappropriate fonts by operators with User access</p>			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Control console shall be capable of storing all messages in alphabetical order by the first letter of the first word of the name assigned to the message to permit quick recall of messages without the need for maintaining a numeric listing of pages and/or messages. Messages shall be automatically named and sorted any time messages are added to or deleted from the library. Because of difficulty in locating and retrieving stored pages and/or messages via numerical codes, number coded storage of pages and/or messages requiring any form of a lookup table/directory shall be strictly forbidden.</p>			
<p>Control console shall accommodate a minimum of fifty (50) full alphanumeric passwords each providing one of four levels of access to various control console functions. Each password shall allow access to only the functions required by that particular dynamic message sign operator. The four levels of access are as follows:</p> <ul style="list-style-type: none"> • Quick-Picks: Select from up to six (6) pre-programmed messages with no programming required. Simply touch a message for display. No access to any permanent data files. • User Menu: Create, Edit, Delete, Save, Display, and Schedule messages. Create, Assign and Edit Quick-Picks. Check System Status and perform basic diagnostics. • Supervisor Menu: All User Menu Functions. Create and delete Quick-Picks and User passwords. Set system operating parameters. • Administrator Menu: All Supervisor Functions. Create and delete Administrator and Supervisor passwords. Set controller operating parameters 			
<p>Control console shall be capable of displaying a message on the message sign display panel during such time as the operator may be adding, editing or deleting messages from the control console user files. Blanking of the message sign display panel during normal operator activity is considered unsafe and shall be strictly forbidden.</p>			
<p>Control console shall be capable of monitoring ambient light conditions and making appropriate adjustments to the intensity of the sign panel to maintain an acceptable display contrast during all ambient lighting conditions. The control console shall provide a minimum of sixteen (16) intensity levels between minimum and maximum display brightness. An operator with Supervisor access shall be capable of adjusting the upper and lower photocell set-points as to adjust the overall range for the automatic brightness control to accommodate any local variations in ambient lighting. Manual control of sign panel intensity shall be provided as well enabling an operator with Supervisor access to override automatic sign panel intensity control and set sign panel intensity manually from 1% to 100% in 1% increments.</p>			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Control console shall be equipped with a Scheduler that utilizes a real time clock and calendar feature to accommodate automatic, unattended changing of messages at predetermined dates and times. Scheduler shall support unique, single event schedules along with recurrent schedules such that messages may be easily scheduled for daily, weekly or monthly repetition. Recurrent schedules shall be capable of incorporating a start and stop date as desired. Scheduler shall also be capable of displaying messages based upon data driven events such as input from a radar gun, photocell, battery voltage, temperature and/or switch closures (up to six). Data driven events shall also be capable of being restricted to specific dates and times. Scheduler shall incorporate a priority system for resolution of conflicting schedules and/or events to permit one schedule/event to override another based upon level of importance (i.e. priority). Additionally, the control console shall have the capability to create and display on the sign panel an Override Message that takes priority and overrides all programmed Schedules and Events until cleared to enable an operator to display a message continuously on the sign panel regardless of programmed schedules and/or events.</p>			
<p>Control console shall provide special function buttons to provide access to common user functions in a single step including (from the main log-on screen) Managing Messages, Scheduling Messages, Blanking the Sign Panel, creating an Instant Message, and selecting from Quick Picks.</p>			
<p>Control console shall provide a system status page that enables an operator to quickly and easily determine the unit's current time, date, photocell reading, photocell set-points, battery bank voltage, battery bank current, solar array voltage, solar array current, temperature, MAC address, IP address, run-time since last re-boot, current run-time (resettable timer), lifetime run-time, and serial modem type along with modem signal strength and quality, latitude & longitude and sign panel heading.</p>			
<p>Control console shall be capable of storing a minimum of 5,000 messages, each message capable of accommodating a minimum of 500 pages (text or graphic images).</p>			
<p>Control console shall provide a minimum of twelve (12) font sizes (with full uni-code support for each font) including an adaptive font that automatically and dynamically sizes text to fit on a page as it is typed such that the largest font is always used for a given amount of text on a page to ensure maximum visibility and legibility. One of the included font sizes shall be a standard 5x7 DOT pixel font.</p>			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Control console shall support the incorporation of multiple dynamic data sources per page during message creation such that multiple pages within a message can include output from multiple dynamic data sources. Pages containing dynamic data sources shall be automatically refreshed and updated prior to each display such that the most recent data is always displayed on the sign panel. System shall include, as a minimum, the following data sources: radar gun (if equipped), real-time clock (time and date - day, month, year and time in various formats), photocell (ambient light level), battery voltage, and countdown & count-up features from a specified date and/or time. System shall also provide operator with the ability to create and incorporate additional dynamic data sources for display and scheduler control for maximum flexibility during system integration</p>			
<p>Control console shall be capable of page display times from 0.1 seconds to a minimum of 99 seconds in 0.1 second increments.</p>			
<p>Control console shall be capable of displaying messages in a preview screen, during message creation, editing or selection, exactly as they will appear on the message display panel including an exact graphical representation of all non-operational/failed pixels on sign panel.</p>			
<p>Control console shall permit the editing of messages that are currently being displayed, showing the revised message as soon as message editing has been completed.</p>			
<p>Control console shall enable an operator to create, copy, add/insert, move about, edit and delete/remove pages to/from a message dynamically during message creation and/or editing. It shall not be necessary to create pages first and then assemble the pages into a message. Control console shall have the ability to insert pages and/or messages from a master library into a new message and move them about within the message. Control console shall also accommodate the creation and editing of graphic images directly from the GUI during message creation. Additionally, control console shall provide the operator with the ability to easily flash a page within a message, flash a line(s) within a page and/or add static or dynamic arrows/chevrons to a page within a message through the use of page annotations. Control console shall have the capability (if enabled by an operator with Supervisory access) to create pages with scrolling text.</p>			
<p>Control console shall provide a selection of standard highway work zone sign graphic images, including but not limited to: flagman, fixed left and right arrow images, moving or sequential left and right arrow images, and moving or sequential left and right chevrons, etc.</p>			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS ?	YES	NO	EXPLAIN DEVIATIONS
Control console shall provide the capability to display Battery Bank Voltage to 0.1 Volt accuracy, Battery Bank Current to 0.1 Amp accuracy, Solar Array Voltage to 0.1 Volt accuracy and Solar Array Current to 0.1 Amp accuracy directly on the control console display. Additionally, control console shall have the capability to calculate and display an estimated run-time (autonomy) based on current battery bank status and historical system energy (generation vs. consumption) trends to provide the operator with an estimated number of days system is capable of operating prior to shutting down on a low-battery condition.			
Control console shall provide for a user selectable low-battery-voltage caution message when the battery voltage drops to a user specified level (above the low-battery automatic shutdown voltage). The low-battery-voltage caution message shall be user programmable by an operator with Supervisor access. Additionally, control console shall incorporate a feature know as Adaptive Blanking that will as necessary, based upon current battery bank voltage and/or recorded battery bank voltage trends, automatically insert variable length blanks between pages (0.25s to 0.50s) of messages to reduce overall power consumption and extend run-time. An operator with Supervisory access shall be capable of either enabling or disabling the Adaptive Blanking feature.			
Control console shall be equipped with three (3) Run-Time counters: an Up-Time counter that indicates total number of days, hours and minutes since last re-boot, a Current Run-Time counter that indicates total hours of operation since last reset of the counter (resettable run-time counter), and a Lifetime Run-Time counter that indicates total hours of control console operation (non-resettable).			
Control console shall include the ability to reset the Current Run-Time counter, Message Library, Scheduler, and all Factory Settings automatically, individually or all at once through performing a variety of Master Resets which will clear all memory and reset all settings to original factory set-points to various levels.			
Control console, in addition to an integrated GSM transceiver, shall support both dynamic and static IP address network connections along with direct serial communications to support legacy NTCIP installations.			
Control console shall provide a method for setting a battery offset and temperature offset to calibrate battery voltage and temperature readings			
Control console shall provide a method for switching radar gun output from MPH to KPH directly from control console GUI or remotely via remote control software.			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS ?	YES	NO	EXPLAIN DEVIATIONS
Control console shall be NTCIP compatible. The following NTCIP standards must be supported: <ul style="list-style-type: none"> • NTCIP 1201 (v3.15r) - Global Object Definitions • NTCIP 1203 (v2.39b) - Object Definitions for Dynamic Message Signs • NTCIP 2101 (v1.19) - Subnetwork Profile: PMPP over S232 • NTCIP 2104 (v1.11) - Subnetwork Profile: Internet • NTCIP 2201 (v1.15) - Transport Profile: Transportation • NTCIP 2202 (v1.05) - Transport Profile: Internet 			
Unit shall support an administrator community string along with 255 other communities. Each community shall be capable of being assigned read-only or read-write access.			
Unit shall support up to 65,535 user-defined permanent messages			
Unit shall support a configurable number of changeable (persistent) messages. This number shall be configurable between 1 and 65,535, and shall default to 32.			
Each message shall support at least 16 pages.			
Unit shall support a scheduler with support for up to 16 schedule, 16 day plans, and 96 day plan events.			
Unit shall support at least 255 graphics via the monochrome 1 bit color scheme			
Unit shall support a configurable number of user-definable fonts. This number shall be configurable between 1 and 127, and shall default to 32.			
Web-Interface (Smart-Phone Control): Control console shall function as a Web-Server which enables an operator (via user name and password access) through any standard Web-Browser to: <ul style="list-style-type: none"> • Create a unique Web-Name for the unit for browser ID • View the current status of the unit to include current message displayed on sign panel, battery voltage, photocell reading, date & time, and NTCIP control status • Blank the unit's sign panel - Select, preview, edit and activate any message from the unit's message library • Create, edit, preview and activate a new multi-page text message (up to 6 pages) • Turn NTCIP control on/off if NTCIP control is enabled on control console 			

BID ITEM 18-53

Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
<p>Access to the Web-Server shall be through any standard web browser over a standard network connection and/or public IP address (i.e. IP addressable modem). Access shall be protected by a user name and password created by the operator through the manufacturer's proprietary remote control software to ensure security is maintained at all times. The Web-Server shall be capable of being controlled (i.e. turned on and off) via manufacturer's proprietary remote control software. Web-Access to the control console shall not require access to a central server. All access to the Web-Server shall be logged and recorded.</p>			
<p>Battery Bank</p>			
<p>Eight (8) 6-Volt, heavy duty, deep cycle, gel-cell batteries.</p>			
<p>Battery / Equipment Compartments shall be constructed of molded HMWPE (High Molecular Weight Polyethylene), color impregnated with Federal Safety Orange with 0.5% UV stabilizer added to prevent fading.</p>			
<p>Compartments shall be designed to completely contain spills from a failed or damaged battery case.</p>			
<p>Compartments shall be capable of supporting an operator standing on top of the battery / equipment compartment to service unit.</p>			
<p>Compartments shall be designed such that the lid automatically latches in the closed position and holds the batteries in place. Lid shall be capable of being locked in the closed position with a standard padlock.</p>			
<p>Lid shall be secured to compartment by an integral plastic hinge that permits the lid to be completely removed from the compartment for service. Lid on the compartment containing the control console shall be automatically supported in the open position by a telescoping lid support.</p>			
<p></p>			
<p></p>			
<p>DRAWING/PICTURE/SPECS</p>			
<p>A drawing or picture brochure of unit along with the manufacturer's specifications shall be submitted with bid</p>			
<p>ADDITIONAL ITEMS</p>			
<p>One (1) set of operators, shop and parts manuals shall be provided with each unit at the time of delivery. CD-ROM disc versions may be substituted where applicable and upon approval.</p>			
<p></p>			

**BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards**



COMPLIES WITH SPECIFICATIONS?	YES	NO	EXPLAIN DEVIATIONS
Warranty			
Bumper to Bumper – 5 year			
Ten-years on LED lamps.			
WARRANTY DOCUMENTATION PROVISIONS			
<p>General Terms and Conditions: Warranty certificates or letters on all applicable and requested warranty items shall be provided upon delivery of the unit. All warranties shall start from the in-service date with the Macomb County Department of Roads.</p> <p>Penalty Clause: Failure to provide any of the above referenced manuals or warranty documentation at the time of delivery shall be grounds for withholding five hundred (\$500.00) dollars of the monies due for payment of the units, until such time as the requested documentation is provided.</p>			

FORMS

INSTRUCTIONS

All Bids must be submitted on the forms provided, properly executed and with all items filled out in ink or typed. Do not change or add words to the forms. Unauthorized conditions, limitations, or provisions on or attached to the forms may be cause for rejection of the proposal. Any Bidder information that is altered by erasure or by inter-lineation prior to submittal must be initialed and explained by notation above the signature of the Bidder.

LIST

The following is a list of forms that are to be completed and returned:

- Specifications/Scope of Work. Page 10-26
- County Vendor Disclosure Form. Page 27
- Non-Collusion Affidavit Page 29
- General Information Page 30
- Work References Page 31
- Federal E-Verify Program Page 32
- Iran Economic Sanction Act Page 33
- Bid Form Page 34-36 SIGNATURE MUST BE PRESENT TO
CONSIDER THE BID FOR AWARD
- List of Sub-Contractors Page 37
- Vendor Certification Debarment. Page 38

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



County of Macomb, Michigan
VENDOR DISCLOSURE FORM

The Macomb County ethics ordinance requires vendors of the County to complete and file a disclosure statement, the purpose of which is to disclose any financial relationships or other conflicts of interest that may exist between vendors and employees or elected officials (or their appointees) of the County. Once filed, the disclosure form does not need to be updated unless there is a change in circumstance that would cause the answer to any of the questions to change, at which time an amended disclosure form must be filed. Filing of the disclosure form is considered a condition of payment.

PLEASE RETURN THE COMPLETED FORM TO:

Macomb County Purchasing Department
ATTN: Vendor Disclosure
34592 Nova Dr.
Clinton Twp., MI 48035

VENDOR NAME: _____

1. Does the vendor currently employ a relative of any employee, elected official or appointee of an elected official of Macomb County? Relative is defined as husband or wife, father or mother, son or daughter, brother or sister, uncle or aunt, first cousin, nephew or niece, great uncle or great aunt, grandfather or grandmother, grandson or granddaughter, father-in-law or mother-in-law, son-in-law or daughter-in-law, brother-in-law or sister-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister, half-brother or half-sister, the parents or grandparents of the individual's fiancée.

YES NO

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
County Department or _____
- C. Agency: _____

2. Does any employee or elected official of Macomb County have an interest in the vendor organization in any of the following capacities, either compensated or non-compensated: director, officer, partner, beneficiary, trustee, member, employee or contractor.

YES NO

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
- C. County Department or Agency: _____
- D. Position/Title with Vendor: _____

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



3. Does any current employee or elected official of Macomb County have legal or beneficial ownership of 10% or more of the outstanding stock of the vendor organization?

YES NO

If yes, please answer the following:

- A. Name of County employee or elected official (or appointee): _____
- B. County Position/Title: _____
- C. County Department or Agency: _____
% of Ownership of Vendor
- D. Organization: _____

4. In the last five calendar years, has the vendor failed to perform or otherwise deliver on the terms of a contract or agreement with Macomb County, or any other public entity, including suspensions or debarments?

YES NO

If yes, please provide further explanation:

I hereby certify that the information included on this form is complete, true and accurate to the best of my knowledge and belief. I understand that neither I nor the organization to which this form applies may be subject to sanctions and/or penalties as set forth in the ethics ordinance if any information has been falsified or omitted.

Name (Please Print)

Title

Signature

Date

**BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards**



NON-COLLUSION AFFIDAVIT

STATE OF)
) ss
COUNTY OF)

_____, being first duly sworn, deposes and says that he/she is authorized on behalf of _____ (Bidder Name) who is making the foregoing proposal(s) that:

- 1) Such proposals are genuine and not collusive or a sham.
- 2) This Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder or person to submit a proposal which is a sham.
- 3) This Bidder has not in any manner agreed with any other persons or businesses to fix the proposed price, overhead, profit, or any cost element of the submitted proposal.
- 4) This Bidder has not attempted to secure any advantage against any other Bidders through collusion with any other Bidder or employees or representative of the County.
- 5) That the proposals submitted are true and accurate to the best of my knowledge and belief and are made in good faith.
- 6) This Bidder has not directly or indirectly submitted or disclosed its proposal or its contents or divulged information or data relative thereto to any association or to any member or agent of any other Bidder to this proposal.

Further, Affiant sayeth not.

Subscribed and sworn to before me
this ___ day of _____, 20___.

Notary Public
County of _____,
State of _____,
My Commission Expires:

BIDDER: THIS AFFIDAVIT MUST BE COMPLETED, SIGNED, NOTARIZED AND INCLUDED IN YOUR PROPOSAL SUBMISSION.

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



GENERAL INFORMATION

In further description of this Bid, we desire to submit sheets marked as follows:

Bidding under the name of: _____

DUNS Number: _____

Federal Employer Identification Number: _____

which is (check one of the following):

() Corporation, incorporated under the laws of the State of:

() Partnership, consisting of (list partners):

() Assumed Name (Register No.) _____

() Individual

AUTHORIZED SIGNATURE: _____

Printed or typed signature: _____

Title: _____

Address: _____

City, State: _____

Date: _____

Telephone Number: _____

Fax Number: _____

Email: _____

When payment on such order or contract is to be directed to the same company at an address different from above, please list the address to be used below:

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



WORK REFERENCES

BIDDER'S COMPANY NAME _____
Please list at least three (3) companies or public agencies for which you have done similar work.

Macomb County reserves the right to reject low Bids for poor past performance or inadequate references.

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

NAME OF COMPANY _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



FEDERAL E-VERIFY PROGRAM

The Macomb County Board of Commissioners has established a policy regarding the Federal E-Verify Program. This policy states that future contracts (including both new and reviewing contracts) between Macomb County and contractors and vendors who provide services in excess of twenty-thousand dollars (\$20,000) shall require the contractors and vendors to register with, participate in, and utilize the E-Verify Program (or any successor program implemented by the federal Department of Homeland Security and Social Security Administration) when hiring their employees and require the County's Human Resources Department to utilize the E-Verify Program (or any successor program implemented by the federal Department of Homeland Security and Social Security Administration) when hiring new employees.

For more information about E-Verify, go to www.uscis.gov. Click on the E-Verify icon on the bottom left-hand corner of page.

ACKNOWLEDGMENT OF MACOMB COUNTY'S POLICY
REQUIRING PARTICIPATION IN THE FEDERAL E-VERIFY PROGRAM
AND CERTIFICATION OF COMPLIANCE

The undersigned hereby acknowledges receipt of a copy of the policy of the Macomb County Board of Commissioners requiring contractors, including those providing professional services, who provide services **in excess of \$20,000 a year** to the County to register and participate in the Federal E-Verify Program.

The undersigned hereby certifies that (he/she/it) will comply with this policy and will register with, participate in and utilize the E-Verify Program or any successor program implemented by the Federal Department of Homeland Security and Social Security Administration when hiring employees.

DATED: _____

Authorized Signature

Printed or Typed Signature

Name of Company



CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below-named Bidder _____, hereby certifies, represents and warrants that the Bidder, including its officers, directors and employees, is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Bidder is awarded a contract, the Bidder will not become an “Iran linked business” at any time during the course of performing any services under the contract.

BIDDER: _____
Name of Bidder

By: _____

Its: _____

Date: _____

**BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards**



BID FORM

**Bid Item 18-53
Two (2) Solar-Powered
Trailer-Mounted Changeable
Message Boards**

Bidder: _____
(print or type company name)

County of Macomb
Mount Clemens, Michigan

OWNER

(Telephone Number)

MACOMB COUNTY
DEPARTMENT OF ROADS
MT. CLEMENS, MICHIGAN 48043

GENERAL AGREEMENTS

- A. The Bidder acknowledges that he/she has had the opportunity to examine the site and locality where the Work is to be performed and has become familiar with the legal requirements, laws, rules, regulations and conditions affecting the cost, progress and performance of the Work; and has made such independent investigations as Bidder deemed necessary to prepare the Bid. Further, Bidder hereby states that the Base Bid set forth in this Bid Response is true and correct.
- B. The Bidder agrees that this Bid shall not be withdrawn for a period of 120 calendar days after the scheduled closing time for receiving Bids.
- C. The Bidder declares that in preparing this Bid, Bidder is assured of the availability of all labor, materials and products to meet the substantial completion date.
- D. The Bidder acknowledges that the price stated below includes all taxes of whatever character or description.
- E. The Bidder agrees to execute a Contract for work covered by this Bid, provided that he/she be notified of its acceptance within one hundred twenty (120) days after the opening of Bids.

ACKNOWLEDGEMENT OF ADDENDA

The Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

Addendum No. 1, dated _____, Addendum No. 3, dated _____
Addendum No. 2, dated _____, Addendum No. 4, dated _____

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



BID FORM SUPPLEMENTS

Attached to this Bid Form and incorporated herein are the following documents, completed in full by the undersigned:

Base Bid Form Supplement – Unit Prices/Supplemental Fees

BASE BID

The undersigned Bidder, having carefully examined the Bidding and Contract Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, all as issued by the Owner, and being familiar with all conditions and requirements of the work, hereby proposes and agrees to furnish **Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards to be delivered FOB to 34592 Nova Street. Clinton Township MI 48035 on or prior to September 30, 2018**

MAKE: _____

MODEL: _____ YEAR: _____

ORIGIN: _____

ESTIMATED DELIVERY DATE: _____

BODY COMPANY: _____

UNIT PRICE:

_____ Dollars \$ _____

(Sum to be written out)

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



VOLUNTARY ALTERNATES / OPTIONS

The following voluntary alternates are offered by the Bidder. The undersigned agrees that the amounts indicated below shall be added to or deducted from the Base Bid, as the case may be for each alternate / option which is chosen , when the PO is issued.

Description of Voluntary Alternates / OPTIONS AVAILABLE	Add	Deduct
1. _____	\$ _____	\$ _____
2. _____	\$ _____	\$ _____
3. _____	\$ _____	\$ _____
4. _____	\$ _____	\$ _____

Respectfully submitted this ____ day of _____, 20__.

By: _____
 (Name of bidding firm or corporation)

Witness:

By: _____
 (Signature)

Attest: _____
 (Signature)

 (Type or print name)

By: _____
 (Type or print name)

Title: _____
 (Owner/Partner/President/Vice Pres.)

Title: _____
 (Corporate Secretary or Assistant Secretary Only)

Address: _____

Phone: _____

License: _____

Federal ID No.: _____

(Affix Corporate Seal Here)

 Company Name

 Company Representative

 Title

 Date

BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards



BID FORM SUPPLEMENT - LIST OF SUB-CONTRACTORS

All sealed bids for construction contracts shall provide a list of preferred sub-contractors and identify, with documentation, whether each subcontractor is a County-based Enterprise.

NAME OF BIDDER: _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

NAME OF SUB-CONTRACTOR _____

CONTACT PERSON _____

ADDRESS _____

TELEPHONE NO. _____

MACOMB COUNTY BASED ENTERPRISE (Y/N) _____

**BID ITEM 18-53
Two (2) Solar-Powered Trailer-Mounted Changeable Message Boards**



**COUNTY OF MACOMB
VENDOR CERTIFICATION DEBARMENT**

All information requested in this section must be completed and the document notarized. Any information omitted, or erroneously reported, may result in disqualification for current or future bidding and supply on behalf of the County of Macomb.

The undersigned warrants and presents that they have full complete authority to make representations for and on behalf of the undersigned company and that their representations are fully binding upon the undersigned company.

1. The undersigned are not presently debarred, suspended, proposed for debarment, declared ineligible, or excluded from transactions by any federal department or agency, or any state, county or local municipality, department or agency.
2. The undersigned has not within a three (3) year period preceding this bid been convicted of, or had a civil judgment rendered against them for the commission of fraud, a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction, or a contract a public transaction, violation of federal or state antitrust statutes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. The undersigned are not presently indicted for or otherwise criminally or civilly charged by any governmental entity (federal, state or local) with commission of any of the offenses set forth in paragraph 2.
4. The undersigned have not within a three (3) year period preceding this bid, had one or more public transactions (federal, state or local) terminated or attempted to be terminated for cause or default.

IF THE APPLICANT IS UNABLE TO CERTIFY TO ANY OF THE STATEMENTS IN THIS CERTIFICATION, CERTIFICATION AND EXPLANATION SHALL BE ATTACHED AND PRESENTED WITH THIS CERTIFICATION.

THE UNDERSIGNED CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED MADE ON BEHALF OF THE UNDERSIGNED BIDDER.

Bidder: _____

Bidder Address: _____

Applicant/Bidder Representative: _____

Signature: _____
(Print full name)

Subscribed and sworn to before me this
_____ day of _____, 20__.

Notary Public
County of _____,
State of _____
My Commission expires: _____