BID DOCUMENTS

FOR

2024 Street Light Project



CITY OF OWOSSO 301 W. MAIN STREET OWOSSO, MICHIGAN 48867

February 19, 2024

NOTICE TO BIDDERS 2024 STREET LIGHT PROJECT FOR THE CITY OF OWOSSO, MICHIGAN

Sealed proposals will be received by the city of Owosso for the

2024 STREET LIGHT PROJECT

and should be addressed to: Bid Coordinator City of Owosso

301 W. Main Street Owosso, Michigan 48867

Major items include removal and installation of street lights with concrete restoration on various streets within the city of Owosso.

Bids will be accepted until **3:00 p.m. Tuesday, March 12, 2024** for the **2024 Street Light Project** at which time bids will be publicly opened and read aloud. This bid will be considered "All or None".

"All or None" means that bidders are required to submit pricing for all items requested. Any proposal received that does not meet this requirement will be disqualified. If said bid is not listed as "All or None" the City reserves the right to split said bid to our best benefit.

All bids must be in writing and must contain an <u>original</u> signature by an authorized officer of the firm. Electronic bids (i.e., telephonic, fax, email, etc.) are **NOT** acceptable.

All bids must be accompanied by a certified Cashier's Check or Bid Bond for a sum of not less than 5% of the total bid and shall be made payable to the city of Owosso. This amount shall be forfeited in the case of failure on the part of the successful bidder to sign a contract and furnish satisfactory bonds as required within ten (10) consecutive calendar days after the acceptance of the bid by the city of Owosso.

The bidder agrees that if the city accepts their proposal, the bidder will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal and will furnish the surety for performance, for one hundred percent (100%) of this bid, which shall be accepted and approved by the city.

All bids shall clearly contain on the outside of the **sealed** envelope in which they are submitted:

2024 STREET LIGHT PROJECT

Hard copies of the proposal, contract forms and specifications are on file and may be obtained for a fee in accordance with the city's FOIA Policy at the office of the Bid Coordinator, City Hall, 301 West Main Street, Owosso, Michigan 48867. Bid documents are available at no charge on our website at <u>www.ci.owosso.mi.us</u> or on the MITN website at <u>www.mitn.info</u>.

The city reserves the right to accept any proposal; or to reject any proposal; to waive irregularities in a proposal; or to negotiate if it appears to be in the best interest of the city of Owosso.

Work can begin no earlier than August 5, 2024 and all work is to be completed by October 26, 2024.

INQUIRIES/ADDENDUMS

Addendums will be available on the city's website at <u>www.ci.owosso.mi.us</u> and on the MITN website at <u>www.mitn.info</u>.

All inquiries regarding this bid request must be submitted to Clayton Wehner, P.E. and received at least seven (7) calendar days prior to the submission and shall be received in, and responded to, in writing, or via FAX at 989-723-8854 or by e-mail to: <u>clayton.wehner@ci.owosso.mi.us</u>, Call 989-725-0551 to arrange a field inspection.

INSTRUCTIONS TO BIDDERS

- Each proposal must be signed by the bidder with his usual signature. Bids by partnerships should be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing. Proposals by corporations must be signed with the name of the corporation, followed by the signature and designation of the president, vice-president or person authorized to bind it in the matter. Any paperwork not filled out properly or signed will cause the bid to be considered non-responsive and shall be rejected by the city.
- 2. Proposals, to receive consideration, must be received prior to the specified time of opening and reading as designated in the invitation.
- Bidders are requested to use the proposal form furnished by the city when submitting their proposals. Envelopes must be **sealed** when submitted and clearly marked on the outside indicating the name of the bid.
- 4. Proposals having and erasures or corrections thereon may be rejected unless explained or noted over the signature of the bidder.
- 5. References in the specifications or description of materials, supplies, equipment, or services to a particular trade name, manufacturer's catalog, or model number are made for descriptive purposes to guide the bidder in interpreting the type of materials or supplies, equipment, or nature of the work desired. They should not be construed as excluding proposals on equivalent types of materials, supplies, and equipment or for performing the work in a manner other than specified. However, the bidders' attention is called to General Condition seven (7).
- 6. Proposals should be mailed or delivered to: Bid Coordinator's Office, City Hall, 301 W. Main Street, Owosso, MI 48867.
- 7. Special conditions included in this inquiry shall take precedence over any conditions listed under General Conditions or Instructions to Bidders.
- 8. Insurance coverage The winning bidder, prior to execution of the contract, shall file with the city copies of completed certificates of insurance naming the city of Owosso as an additional insured party, as evidence that the contractor carries adequate insurance satisfactory to the city.
- 9. The following items must be included with the bid response:
 - a. Vendor Proposal
 - b. Signature Page & Legal Status/ Acknowledgement of Addendum(s)
 - c. W-9 Request for Taxpayer ID No. and Certification

BID Proposal

2024 STREET LIGHT PROJECT

TO: THE CITY OF OWOSSO (HEREINAFTER CALLED THE "CITY")

Bidder must provide pricing for each item listed. If additional pricing elements are being offered by the bidder, they are to be listed under "other services/items offered."

The undersigned, having examined the bid proposal forms and specifications, does hereby offer to 2024 STREET LIGHT PROJECT to begin no earlier than August 5, 2024 completed by October 26, 2024 listed below at the following prices to wit:

Base Bid (Items 1-44):

Item	Description	Approx. Quantity	Unit	Unit Price	Total Price
1	Mobilization, Max \$45,400	1	LSUM		
2	Curb and Gutter, Rem	70	Ft		
3	Pavt, Rem, Modified	50	Syd		
4	Sidewalk, Rem, Modified	815	Syd		
5	Erosion Control, Inlet Protection, Fabric Drop	13	Ea		
6	Subbase, CIP	95	Cyd		
7	Aggregate Base, 8 inch, Modified	50	Syd		
8	Hand Patching	25	Ton		
9	Curb and Gutter, Conc, Det F4	40	Ft		
10	Detectable Warning Surface, Modified	20	Ft		

11	Curb Ramp Opening, Conc	30	Ft	
12	Curb Ramp, Conc, 4 inch	100	Sft	
13	Curb Ramp, Conc, 7 inch	100	Sft	
14	Sidewalk, Conc, 4 inch	6575	Sft	
15	Sidewalk, Conc, 6 inch	105	Sft	
16	Sidewalk, Conc, 4 inch, Decorative	590	Sft	
17	Sign, Type III, Rem	5	Ea	
18	Sign, Type III, Erect, Salv	5	Ea	
19	Post, Steel, 3 Pound	50	Ft	
20	Maintenance Gravel	50	Ton	
21	Barricade, Type III, High Intensity, Double Sided, Furn & Oper	18	Ea	
22	Pedestrian Type II Channelizer, Temp	1500	Ft	
23	Lighted Arrow, Type C, Furn & Oper	1	Ea	
24	Minor Traf Devices, Max \$10,000	1	LSUM	
25	Plastic Drum, High Intensity, Furn & Oper	100	Ea	

26	Sign, Type B, Temp, Prismatic, Furn & Oper	140	Sft		
27	Hh, Rem	28	Ea		
28	Light Std Fdn, Rem	49	Ea		
29	Light Std Shaft, Rem and Salv	48	Ea		
30	Luminaire, Rem and Salv	48	Ea		
31	Conduit, Directional Bore, 1, 1 ¹ / ₂ inch	2395	Ft		
32	Conduit, Directional Bore, 2, 1 ¹ / ₂ inch	35	Ft		
33	Cable St Ltg, 2kV, 2, 1/C #6 and 1, 1/C #6 Neutral	2435	Ft		
34	Cable St Ltg, 2kV, 1, 1/C #10 and 1, 1/C #10 Neutral	4435	Ft		
35	Cable, Equipment Grounding Wire, 1/C #6	2435	Ft		
36	Cable, Equipment Ground Wire, 1/C #10	4435	Ft		
37	Hh, Polymer Conc	22	Ea		
38	Metered Serv	3	Ea		
39	Metered Serv, Rem	2	Ea		
40	Serv Disconnect	3	Ea		

41	Serv Disconnect, Rem	2	Ea	
42	Light Std Fdn	26	Ea	
43	Light Std Shaft, Install	26	Ea	
44	Luminaire, Install	26	Ea	

Bidder's Initial

BID TOTAL (ITEMS 1-44)

(use words)

\$

(use figures)

VARIANCE FROM SPECIFICATIONS: If the bidder is unable to comply with the specifications as outlined, the bidder shall clearly note these variations from the specifications. The bidder may also propose additions to these specifications for the city to consider, but the costs associated with these additions shall be stated separately.

If the work in not complete on or before the date set for completion or any extension, the Contractor shall pay the city liquidated damages of **\$800.00** a calendar day until the work is satisfactorily completed. Liquidated damages for delay may be deducted from payments due the contractor or may be collected from the Contractor or the Contractor's surety.

The undersigned agrees that if the city accepts this proposal, Contractor will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal. Contractor will furnish the surety for performance, for 100% of this bid, which shall be accepted and approved by the city.

The undersigned agrees that if the city accepts this proposal, Contractor will start this project no earlier than August 5, 2024 and will substantially complete the entire work under this contract by October 26, 2024. This schedule may be extended for rain days or cold weather for calendar days after October 26, 2024, only as approved by the city of Owosso.

On behalf of _______, I hereby submit this proposal for **2024 STREET LIGHT PROJECT** for your consideration. The undersigned acknowledges that this proposal is subject to the General Conditions and the General Specifications included in the contract documents. In submitting this proposal, it is understood that the right is reserved by the CITY to reject any and all proposals, and waive any irregularities in the bidding process. The CITY may award this contract based on any combination of the total bid and/or alternates.

Bid proposal by (Name of Firm):

Please check the appropriate box and USE CORRECT LEGAL NAME. □ Corporation □ Corporation

	Partnership	List of names:	
	DBA	State full name:	
	Other	Explain:	
Signature of	Bidder:		
Title:			
Signature of	Bidder:		
Title:			
Address:			
City, Zip:			
Telephone:			
Email Addre	ss:		
Signed this		Day of	2024
	Bidder acknowledg	ges receipt of the followir	ng Addenda:
		JM NO: BIDDER'S INITIA	

GENERAL CONDITIONS

1. BID ACCEPTANCE

The city reserves the right to reject any or all proposals. Unless otherwise specified, the city reserves the right to accept any item in the proposal. In case of error in extending the total amount of the bid, the unit prices shall govern. The city objects to any additional terms stated in any documents submitted by the contractor. Performance pursuant to our Purchase Order/Equipment Agreement constitutes a course of conduct consisting of Contractor's Agreement to the terms of our Purchase Order/Equipment Agreement.

2. PAYMENT

Unless otherwise stated by the bidder, time, concerning discount offered, will be computed from date of delivery and acceptance at destination or from date correct bill or claim voucher properly certified by the contractor is received. When so stated herein, partial payments, based on a certified approved estimate by the city of materials, supplies or equipment delivered or work done, may be made upon presentation of a properly-executed claim voucher. The final payment will be made by the city when materials, supplies, equipment or the work done have been fully delivered or completed to the full satisfaction of the city.

3. BID DEFAULT

In case of default by the bidder or contractor, the city of Owosso may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

4. UNIT PRICES

Prices should be stated in units of quantity specified.

5. QUOTED PRICES

Unless otherwise stated by the bidder, prices quoted will be considered as being based on delivery to a designated destination and to include all charges for packing, crating, containers, shipping, etc., and being in strict accordance with specifications and standards as shown.

6. SUBSTITUTIONS

Wherever a reference is made in the specifications or description of the materials, supplies, equipment, or services required, to a particular trade name, manufacturer's catalog, or model number, the bidder, if awarded a contract or order, will be required to furnish the particular item referred to in strict accordance with the specifications or description unless a departure or substitution is clearly noted and described in the proposal.

7. HOLD CITY HARMLESS

The bidder, if awarded an order or contract, agrees to protect, defend, and save the city harmless against any demand for payment for the use of any patented material, process, article, or device that may enter into the manufacture, construction, or form a part of the work covered by either order or contract. Bidder further agrees to indemnify and save the city harmless from suits or action of every nature and description brought against it, for or on account of any injuries or damages received or sustained by any party or parties, by or from any of the acts of the contractor, his employees, subcontractors, or agents.

8. COMPETITIVE BIDDING STATUTES

The laws of the state of Michigan, the charter and ordinances of the city of Owosso, as far as they apply to the laws of competitive bidding, contracts and purchases, are made a part hereof.

9. SAMPLES

Samples, when requested, must be furnished free of expense to the city and, if not destroyed, will upon request be returned at the bidder' expense.

10. BONDS

A certified check or bid bond may be required, payable to the City of Owosso. If so required in the bid documents, a performance bond and labor and material bond in the amounts stated in the bid documents, shall be on file with the city before work commences. The city will determine the amount and sufficiency of the sureties.

11. PROPOSAL GUARANTEE

All checks or bid bonds, except those of the three lowest bidders, will be returned when the bids have been opened and tabulated. The certified checks or bid bonds of the three lowest bidders will be held until the contract documents have been signed, after which remaining certified checks or bid bonds will be returned to the respective bidders.

12. BIDDERS

The city may demand that the contractor file a sworn experience and financial statement setting forth the financial resources, adequacy of plant and equipment, organization, experience and other pertinent and material facts as may be desirable.

13. INSURANCE AND HOLD HARMLESS

To the fullest extent permitted by law the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Owosso, its elected and appointed officials, employees, agents and volunteers, and others working on behalf of the City of Owosso against any and all claims, demands, suits, or loss, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Owosso, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, for all actions of the Contractor.

Contractor shall not commence work under this contract until they have obtained the insurance required under this paragraph, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the City of Owosso. The requirements below should not be interpreted to limit the liability of Contractor. All deductibles and SIR's are the responsibility of Contractor. Contractor shall procure and maintain the following insurance coverage:

- a. Worker's Compensation Insurance including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- b. Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions:
 (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included.
 (E) Explosion, Collapse, and Underground (XCU) coverage, if applicable. Limits may be obtained by the use of primary and excess/umbrella liability policies.
- c. Automobile Liability including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000 per occurrence, combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

- d. Owners' and Contractor Protective Liability: The Contractor shall procure and maintain during the life of this contract, a separate Owners' and Contractor's Protective Liability Policy with limits of liability not less than \$1,000,000 per occurrence and aggregate for Personal Injury, Bodily Injury, and Property Damage. The City of Owosso shall be the "Named Insured" on said coverage.
- e. Additional Insured: Commercial General Liability and Automobile Liability as described above shall include an endorsement stating the City of Owosso shall be listed as additional insured. It is understood and agreed by naming the City of Owosso as additional insured, coverage afforded is considered to be primary and any other insurance the City of Owosso may have in effect shall be considered secondary and/or excess.
- f. Cancellation Notice: All policies, as described above, shall include an endorsement stating that is it understood and agreed Thirty (30) days, Ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, shall be sent to: (The City of Owosso, Debbie Hebert, Insurance Coordinator, 301 W. Main Street, Owosso, MI 48867).
- g. Proof of Insurance Coverage: Contractor shall provide the City of Owosso at the time that the contracts are returned by him/her for execution, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable.

If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and endorsements to the City of Owosso at least ten (10) days prior to the expiration date.

14. PROTECTION OF LAND MONUMENTS AND PROPERTY STAKES

Land monuments or stakes marking property corners shall not be moved or otherwise disturbed except as directed by the city. If any land monuments or lot stakes are moved or disturbed by the contractor, the cost of replacing each land monument or lot stake so moved or disturbed shall be deducted from any money due the contractor, as payment to the city for the cost of replacing said land monument or lot stakes.

15. CONTRACTOR'S RESPONSIBILITY FOR WORK

The contractor shall be responsible for any damages that the work may sustain before its acceptance, and shall rebuild, repair, restore and make good, at its own expense, all injuries and damages to any portion of the work by the action of the elements or from any cause whatsoever before its acceptance. Neither the final payment nor any provision in the contract documents shall relieve the contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by law, and, upon written notice, the contractor shall remove any defects due therefrom and pay for any damaged due to other work resulting therefrom, which shall appear within one year after the date of completion and acceptance.

16. PAYMENT

At monthly intervals commencing after construction has been started, the city will make partial payment to the contractor based on a duly-certified estimate prepared by the city of the work done by the contractor during the preceding four-week period. Each estimate will be submitted to the city council for approval on either the first or third Monday of each month. The city will retain ten percent (10%) of the amount of each such estimate until final completion and acceptance of all work covered by this contract. Before the contractor shall demand final estimates or payment, contractor will furnish to the city, supported by sworn statements, satisfactory evidence that all persons that have supplied labor, materials, or equipment for the work embraced under this contract have been fully paid for the same; and that, in case such evidence be not furnished as aforesaid, such sums as the city may deem necessary to meet the lawful claims of such persons may be retained by the city from any monies that may be due or become due to the contractor under this contract until such liabilities shall be fully discharged and the evidence thereof be furnished to the city.

17. CITY'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

Besides the payment to be retained by the city under the preceding provisions of these general conditions, the city may withhold a sufficient amount of any payment otherwise due to the contractor to cover a) payments earned or due for just claims for furnish labor or materials on the project under this contract, b) for defective work not remedied and c) for failure of the contractor to make proper payments to subcontractors. The city shall disburse and shall have the right to act as agent for the contractor in disbursing such funds as have been previously withheld pursuant to this paragraph to the party or parties who are entitled to payment from it. The city will pay to the contractor a proper accounting of all such funds disbursed for the contractor.

18. OWNER'S RIGHT TO DO WORK

If the contractor should neglect to prosecute the work properly or fail to perform any provisions of this contract, the city, after three (3) days' written notice to the contractor and contractor's surety, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost of it from the payment due the contractor.

19. DEFINITION OF NOTICE

Where in any of the contract documents there is any provision in respect to the giving of notice, such notice shall be deemed given to the owner, when written notice is delivered to the city manager, or placed in the United States mail addressed to the city clerk; as to the contractor, when a written notice shall be delivered to contractor's representative at the project site or by mailing such written notice in the United States mail addressed to the contractor at the place stated in the bid proposal as the business address; as to the surety on the performance bond, when a written notice is placed in the United States mail addressed to the surety at the surety's home office or to its agent or agents who executed such performance bond on behalf of the surety.

20. SUBCONTRACTS

The contractor shall not subcontract any work in the execution of this contract without the written consent of the city. The contractor shall be responsible for the acts or omissions of any subcontractor and of anyone employed directly or indirectly by such subcontractor.

21. ASSIGNMENT OF CONTRACT

The contractor shall not assign this contract or any part hereof without the written consent of the city. No assignment shall be valid unless it shall contain a provision that any funds to be paid to the assignee under this agreement are subject to a prior lien for services rendered or materials or supplies for the performance of the work specified in the contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

22. MAINTAINING TRAFFIC

The contractor shall provide flares, signs, barricades, traffic regulators, etc., to conform to the current *Michigan Manual of Uniform Traffic Control Devices* or as directed by the city. The contractor shall not close any road or street without the permission of the city. If any street or road is to be closed by the contractor, it shall be the responsibility of the contractor to notify the Owosso fire department when the street will be closed and again when the street is open to traffic. Traffic control devices for any detours deemed necessary by the city shall be provided by the contractor. Cost of maintaining shall be incidental to the cost of the project unless otherwise provided.

23. ORDER OF COMPLETION

The contractor shall submit, whenever requested by the city, a schedule of the work showing completion dates. The city may request that certain portions of the work be done before other portions. If so requested, the contractor shall arrange to schedule to meet the request by the owner.

24. USE OF COMPLETED PORTIONS

The city shall have the right to take possession and use any completed or partially completed portions of the work; but such taking possession and use shall not be deemed acceptance. Pending final completion and acceptance of the work, all necessary repairs and adjustments on any section of the work due to defective material, workmanship, natural causes, or other operations of the contractor, other than normal wear and tear, shall be done by and at the expense of the contractor.

25. WATER SUPPLY

The contractor shall secure an adequate water supply for use in construction and for drinking water for his employees. If the city's water is used on the work, the contractor shall make the necessary application and shall pay all costs involved. Connections, piping and fittings for conveying water shall be furnished and maintained by the contractor. Contractor shall pay for water according to the city's established rates. Hydrant meters are available at Owosso DPW. \$1,000 prepayment is required. This covers usage of the water meter/RPZ and bulk water prepayment per the following charges: bulk water rate is \$12 per 1,000 gallons with a \$60 minimum charge which includes the first 5,000 gallons. When water meter and RPZ are returned in good condition, \$450 will be returned less any water use over the minimum charge for 5,000 gallons.

26. CLEANUP

The contractor shall keep the project free from waste materials or rubbish caused by its employees or work. This includes as a minimum excess excavation or backfill material, broken or rejected materials, empty containers or general debris. The owner may require complete cleanup of certain areas as construction is completed.

27. SUPERVISION

The contractor shall have a superintendent on the job site to coordinate and expedite the various construction activities for the duration of this contract.

28. EQUAL EMPLOYMENT OPPORTUNITY AND OTHER CLAUSES

The contractor shall agree not to discriminate against any employee or applicant for employment because of age, race, religion, color, handicap, sex, physical condition, developmental disability as defined by Michigan Complied Statutes, or national origin. This provision shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training including apprenticeship. The contractor further agrees to take affirmative action to ensure equal employment opportunities for persons with disabilities. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of the non-discrimination clause.

W-9 INFORMATION FOR LEGAL STATUS

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

Please see attached W-9 Request for Taxpayer Identification Number and Certification form for a detailed explanation on filling out the W-9 form.

► Go to www.irs.gov/FormW9 for instructions and the latest information.

	2 Business name/disregarded entity name, if different from above		
type. ctions on page 3.	following seven boxes. Individual/sole proprietor or C Corporation S Corporation Partnership Trust/estate	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)	
Print or type. fic Instructions			
P Specific	Other (see instructions) ►	Applies to accounts maintained outside the U.S.)	
See Sp	5 Address (number, street, and apt. or suite no.) See instructions. Requester's name and	d address (optional)	
0,	6 City, state, and ZIP code		
	7 List account number(s) here (optional)		
Par	Taxpayer Identification Number (TIN)		
Enter	your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid Social secu	rity number	
reside	p withholding. For individuals, this is generally your social security number (SSN). However, for a nt alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other s, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a</i>		

Note: If the account is in more than one name, see the instructions for lir	ne 1.	Also see	What I	Name and
Number To Give the Requester for guidelines on whose number to enter				

Certification Part II

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign	Signature of
Here	U.S. person >

TIN. later.

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)

or

Employer identification number

- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

Date 🕨

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

 In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1 - An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

 $7\!-\!\text{A}$ futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

 $12\!-\!A$ middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
 Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A)) 	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

PROGRESS CLAUSE

City of Owosso/CW

1 of 1

February 2024

The Engineer anticipates the construction can begin no earlier than:

• August 5, 2024

In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a complete, detailed, and signed Progress Schedule to the Engineer.

The entire project must be completed by the final completion date of October 26, 2024.

Unless specific pay items are provided in the contract any extra costs incurred by the Contractor due to coldweather protection and winter grading will not be paid for separately but will be included in the payment of other pay items in the contract.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project.

The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

Failure by the Contractor to meet interim completion, open to traffic, and/or final completion dates will result in the assessment of liquidated damages in accordance with subsections 108.10.C.1 and 108.10.C.2 of the Standard Specifications for Construction.

NOTICE TO BIDDERS

UTILITY COORDINATION

City of Owosso/CW

1 of 2

January 2024

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the Michigan Department of Transportation Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the Michigan Department of Transportation Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 108.09 of the Michigan Department of Transportation Standard Specifications for Construction.

The following Public Utilities have facilities located in the road right-of-way or project area:

UTILITY	OWNER	CONTACT
Cable	Charter Communication	Mark Kelly
Television	1480 S. Valley Center Dr	(989) 233-9404
	Bay City, Michigan 48706	mark.kelly@charter.com
Fiber Optic	Frontier	Harold Roth
	1943 W. M-21	(989) 723-0373
	Owosso, Michigan 48867	harold.roth@ftr.com
Gas	Consumers Energy	Adam Bertram
	530 West Willow Street	(517) 614-8570
	PO Box 30162	adam.bertram@cmsenergy.com
	Lansing, Michigan 48909	
Electric	Consumers Energy	Tracy Mahar
	530 West Willow Street	(989) 729-3250
	PO Box 30162	tracy.mahar@cmsenergy.com
	Lansing, Michigan 48906	
Water	City of Owosso	Ryan Suchanek
Sanitary Sewer	301 W. Main Street	(989) 725-0555
	Owosso, Michigan 48867	ryan.suchanek@ci.owosso.mi.us
Road	City of Owosso	Clayton Wehner, P.E.
Storm Sewer	301 W. Main Street	(989) 725-0551
	Owosso, Michigan 48867	clayton.wehner@ci.owosso.mi.us
Fiber Optic	DayStarr Communications	Brent Klein
	307 N. Ball Street	(989) 720-6023
	Owosso, Michigan 48867	brent.klein@daystarrfiber.net
Soil Erosion	Shiawassee County Health	Steve Alworden
Control	Department	(989) 743-2289
	Environmental Health Division	salworden@shiawaseechd.net
	201 N. Shiawassee Street	
	Corunna, Michigan 48817	

For protection of underground utilities and in conformance with Public Act 53, the Contractor shall dial 1-800-482-7171 (or 811) a minimum of three full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be a part of the "Miss Dig" alert system.

The existing utilities shown on the plans represent the best information available as obtained from survey and existing records. This information does not relieve the Contractor of the responsibility of protecting all existing utilities, in case utilities have been constructed or removed since the survey date or if utilities are encountered in different locations or if any utilities are not shown on the plans.

All existing utilities shall be located as to both horizontal and vertical position prior to starting any utility construction or other excavation. Cost shall be included in the new utility or excavation pay item.

The Contractor's attention is directed to the requirements for cooperation with others, as covered in Section 104.08 of the MDOT 2020 Standard Specification for Construction.

UTILITY DAMAGE

The Contractor shall be responsible for the protection of all existing utilities during construction of this project. Any utilities damaged by the Contractor shall be repaired in accordance with the related utilities specifications at the Contractor's expense.

UTILITY REPLACEMENTS

None.

CITY OF OWOSSO SPECIAL PROVISION FOR TECHNICAL SPECIFICATIONS

City of Owosso/CW

1 OF 1

June, 2022

General Requirement

The MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION shall govern all technical specifications for this project. The following parts of the Contract will prevail over all other parts in the following order:

- 1. Special Provisions.
- 2. Supplemental Specifications.
- 3. Project Plans and Drawings.
- 4. MDOT Standard Plans.
- 5. 2020 Standard Specifications
- 6. City of Owosso Standard Specifications.

The Contractor shall not take advantage of any apparent error or omission in the contract documents. If any uncertainty, inconsistency, omission, or conflict is discovered within the contract documents, the Engineer will solely decide as to the true intent of the language.

CITY OF OWOSSO SPECIAL PROVISION FOR Pavt, Rem, Modified

City of Owosso/CW

Page 1 of 1

January 2024

a. Description

This work shall consist of pavement removal in accordance with Section 204 of the MDOT Standard Specifications for Construction, except as specified herein.

The contractor shall remove existing pavement and subgrade of whatever thickness or multiple layers that may be encountered. Subgrade shall be removed to allow for 8 inches of aggregate to be placed beneath proposed asphalt pavement or 4" of sand to be placed beneath proposed concrete pavement.

Pavement removal shall be to an existing joint or to a sawed joint as shown on plans or as directed by the Engineer.

b. Materials

The material shall meet the requirements of Section 204 of the MDOT Standard Specifications for Construction.

c. Construction Methods

The construction methods shall meet the requirement of Section 204 of the MDOT Standard Specifications for Construction.

d. Measurement and Payment

The completed work, Pavt, Rem, Modified including all materials, labor, and equipment shall be paid for at the contract unit prices for the following pay item:

Pay Item	Pay Unit
Pavt, Rem, Modified	Square Yard

Payment for saw cutting, if required, will be included in the related removal pay item and will not be paid for separately.

The contract unit price will be compensation for removing pavement of whatever material and thicknesses are encountered.

CITY OF OWOSSO SPECIAL PROVISION FOR Sidewalk, Rem, Modified

City of Owosso/CW

Page 1 of 1

January 2024

a. Description

This work shall consist of sidewalk removal in accordance with Section 204 of the MDOT Standard Specifications for Construction, except as specified herein.

The contractor shall remove existing sidewalk, brick pavers, concrete trough, and subgrade, as shown on the plans, of whatever thickness or multiple layers that may be encountered.

The brick pavers shall be salvaged and stacked next to curb for pick up by city of Owosso Department of Public Works.

Sidewalk and brick removal shall be to an existing joint or to a sawed joint as shown on plans or as directed by the Engineer.

b. Materials

The material shall meet the requirements of Section 204 of the MDOT Standard Specifications for Construction.

c. Construction Methods

The construction methods shall meet the requirement of Section 204 of the MDOT Standard Specifications for Construction.

d. Measurement and Payment

The completed work, Sidewalk, Rem, Modified including all materials, labor, and equipment shall be paid for at the contract unit prices for the following pay item:

<u>Pay Item</u>	<u>Pay Unit</u>
Sidewalk, Rem, Modified	.Square Yard

Payment for saw cutting, if required, will be included in the related removal pay item and will not be paid for separately.

The contract unit price will be compensation for removing sidewalk of whatever material and thicknesses are encountered.

CITY OF OWOSSO SPECIAL PROVISION FOR AGGREGATE BASE, _ INCH, MODIFIED

City of Owosso/CW

1 of 1

May, 2022

a. Description. This work shall consist of placing and compacting an aggregate base course on a prepared subbase.

b. Materials. The material shall meet the gradation requirements of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, Section 902, for Dense-Graded Aggregate, 21AA, except all material shall be 100% crushed limestone.

c. Construction Methods. The material shall be placed and compacted in accordance with the MDOT 2020 Standard Specifications for Construction, Section 302.03.

d. Measurement and Payment. The completed work, Aggregate Base, _ inch, Modified including all materials, labor, and equipment, as measured will be paid for at the Contract Unit Price for the following Pay Item.

Pay Item Pay Unit

Aggregate Base, _ inch, ModifiedSquare Yard

Aggregate Base, _ inch, Modified will be measured in place by the square yard.

The maximum pay width will be as shown on the plans.

CITY OF OWOSSO

SPECIAL PROVISION FOR DECORATIVE CONCRETE SIDEWALK

City of Owosso/CW

1 of 3

January 2024

a. Description. This work consists of constructing decorative PCC sidewalk at the locations specified on the plans. Use a Red Barn (P1840) Integral Color with Birck Red (Brickform 550) Color Hardener and Brick Red Release Agent using the Running Bond Used Brick (FM-5100) stamp pattern, as shown on the plans. Complete this work in accordance with the standard specifications, except as modified herein.

b. Submittals. Submit a plan showing the types and locations of joints, reinforcement, and sequence of construction. Submit a report detailing the concrete mix designs to be used, including manufacturers and/or suppliers of mixture components. Submit technical data sheets for a single manufacturer's complete system for products and/or materials including admixtures, colorants, curing compounds, decorative concrete sealer, dry-shake finish materials, imprinting tools, and any other products requested by the Engineer. Submit Test Data Certification with test results conducted by an independent testing laboratory within the past 24 months reporting that the coloring pigment conforms to the general requirements of *ASTM C979/C979M*. Obtain approval from the Engineer prior to beginning work.

c. Certification. Furnish proof of Michigan Concrete Association (MCA) Decorative Concrete Certification, or proven equivalent manufacturer training and certification for placing decorative concrete, to the Engineer.

d. Materials. Use a single manufacturer's complete system for products and/or materials.

1. Concrete Colorant. Use complete pigment system including integral colorants, dry shake colorants, and/or release hardeners from one of the following manufacturers, or other sources as approved by the Engineer.

Brickform	
Decorative Concrete Resources	
Increte Systems	
L.M. Scofield Co.	
Prism Pigments	
Proline Concrete Tools	

A. Concrete Integral Color. Use Red Barn (P1840) for the main pattern. Use preweighed and packaged coloring pigments in either powder, granular, or liquid form. Ensure that materials comply with *ASTM C979/C979M* standards for integrally colored concrete.

B. Release Agent. Use a Brick Red dry-shake powder to facilitate release of imprinting tools as manufactured by Brickform, Prism Pigments, or approved equal.

2. Curing Compound. Do not use standard curing compounds on decorative concrete.

Instead use a surface sealer as listed in subsection d.3 of this special provision.

3. Surface Sealer. Use a Type I, Class A solvent acrylic sealer in accordance with the requirements of *ASTM C1315* from the approved list below, or other as approved by the Engineer.

A. Brickform.

- Safety-Seal MS-5.
- B. ChemMasters.
 - Certi-Vex AC 1315 solvent base sealer.

4. Slip resistant additive. Mix slip resistant additive with the sealer in accordance with the manufacturer's recommendations.

A. Increte.

- Shur-Grip.
- B. ChemMasters.
 - Slip Stop.

C. H & C.

• SharkGrip.

e. Equipment. To impart desired texture, use high-quality resilient mats reproduced from castings of natural materials and furnishing uniform control of joint depth. Use tools capable of producing the pattern(s) shown on the plans and/or as required by the Engineer. Use imprinting tool(s) from the approved manufacturer and pattern list below, or present a substitute mat design, manufacturer, or pattern to the Engineer for approval:

Running Bond Used Brick (FM-5100) stamp pattern.

f. Field-Constructed Mock-up. Prior to installation of colored concrete and/or stamped concrete work, construct mock-up panels in place to verify color and texture selections and processes for qualities of appearance, materials, and construction. Build mock-ups to comply with the following requirements:

1. Size. Cast a minimum 8 foot by 8 foot mock-up to demonstrate typical joints, surface finish, texture, color, and standard of workmanship.

2. Acceptance. If Engineer determines that mock-up does not meet requirements, demolish, and remove it from the site, and cast another until the mock-up is accepted. All costs associated with mock-ups in addition to the first will be borne by the Contractor.

3. Use. Keep accepted mock-up undisturbed during construction as a standard for comparison to completed work. Undamaged mock-up may be incorporated into the work or

demolished and removed from the site when directed by the Engineer.

g. Construction. Construct sidewalk in accordance with section 803 of the Standard Specifications for Construction.

1. Preparation. Carefully lay out the locations of forms and joints, taking into consideration the orientation of the pattern as shown on the plans, intended aesthetics, and construction sequence.

2. Integral Color. Comply with the color manufacturer's published recommendations and instructions for mix designs, admixtures, concrete temperature, mixing, installing, finishing, and curing. Coordinate stamped colored concrete to ensure consistency in color, texture, and quality.

3. Release Agent. Apply powder release agent per manufacturer guidelines at the minimum rate required to cover the previously colored surface. "Liquid Antique" agent can be used as a substitute for the dry release agent. If clear liquid release agent is to be used, apply per manufacturer guidelines. Colored powder release agent can be mixed with clear liquid and sprayed on the surface only after the imprinting has been completed, to create an accent coloring.

4. Imprint Pattern. Comply with tool manufacturer's standards and MCA practices. Lay out to proper alignment and imprint to a consistent depth while concrete is plastic. Do not allow the surface to crust over or harden before stamping. Hand-tool in areas where using imprinting tools is not practical.

5. Removal of Excess Release Agent. Wash off excess release agent with normal water pressure prior to joints being cut. Remove a minimum of 80 percent of the release agent. Temperature conditions will dictate the timing of release agent removal. Dispose of any excess release agent in compliance with local regulations.

Acid washing of decorative surface may be required to achieve the desired finish as directed by the Engineer. A minimum of 36 hours after placement, apply a solution of 1 part muriatic acid to 30 parts potable water to the surface of the sidewalk and lightly scrub with a straw broom. Wash the surface until proper color has been achieved and then flush thoroughly.

6. Sealing Decorative Surface. Seal the surface with approved sealer in accordance with the manufacturer's recommendations. Refer to subsection d.3. of this special provision for approved products and to the manufacturer's technical data sheets for proper installation procedures, including moisture content restrictions at time of application.

h. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item

Pay Unit

Sidewalk, Conc, Decorative, <u>inch</u> includes coloring, mixing, hauling, placement, strike-off, finishing, texturing, stamping, curing and jointing. **Sidewalk, Conc, Decorative,** <u>inch</u> will be measured and paid for by area in square yards based on plan quantities.

CITY OF OWOSSO SPECIAL PROVISION FOR DETECTABLE WARNING SURFACE, MODIFIED

City of Owosso/CW

1 OF 1

January, 2022

a. Description. This work shall consist of constructing sidewalk ramps and detectable warning surfaces. Complete this work according to the standard specifications, Standard Plan R-28 Series and this special provision.

b. Materials. The materials shall meet the requirements of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, Section 803, for concrete sidewalk except detectable warning systems shall be DuralastTM as manufactured by East Jordan Group, Inc. The detectable warning systems shall be 2.5 feet in length and red in color.

c. Construction. Construct sidewalk ramp according to Section 803 of the MDOT Standard Specifications for Construction and Standard Plan R-28 Series. Depth shall be 7 inches from curb to landing square.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following Pay Item:

Pay Item	Pay Unit
Detectable Warning Surface, Modified	Foot

Detectable Warning Surface, Modified will be measured in place by length per foot along the center of the 24 inch wide detectable warning material at specified locations and paid for per foot.

CITY OF OWOSSO SPECIAL PROVISION FOR MAINTAINING TRAFFIC

City of Owosso/CW

1 of 4

January 2024

a. Description. The project will consist of street light installation on the following streets in the City of Owosso, Shiawassee County: Washington Street, Comstock Street, Main Street, and Park Street.

b. General. Traffic shall be maintained in accordance with Sections 104.07C, 104.11. 812, and 922 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction, including any typicals or supplemental specifications and as specified herein.

The Contractor shall coordinate their operations with other Contractors, City of Owosso forces, and private utilities within the CIA to eliminate conflicts in traffic control. No additional payment will be made to the Contractor for the joint use of traffic control items.

The Contractor shall notify the Engineer, City of Owosso (989-725-0550), Shiawassee County Central Dispatch (989-743-9111), and Local Fire Department(s) (989-725-0580) that service the area a minimum of three full working days prior to the implementation of any detours or road closures.

c. Construction Influence Area (CIA). The Construction Influence Area shall include the street right-of-way and extend a distance of 1 mile north and south or east and west from the project limits and include the right-of-way of all intersecting streets within the project limits for a distance of 1,000 feet laterally from the street centerline.

The CIA shall also include the rights-of-way of any designed detour routes within the limits of the construction and detour signing.

d. Traffic Restrictions. The streets shall remain open. Parking areas may be closed to stage equipment and materials. Sidewalks closures and partial closures shall be in accordance with the plans. Parking area and sidewalk closures shall be limited to one side of the street at a time. Residents and businesses shall be allowed to access their homes/buildings at all times. When one lane in each direction cannot be maintained, at least one lane of traffic shall be maintained by using traffic regulators during day light hours and one lane of traffic in each direction shall be available at night.

The Contractor shall use the City of Owosso Truck Route System.

Reasonable access to intersecting roads/streets and residential/commercial drives shall be maintained at all times. The Contractor may temporarily close alternate drives if a business or residence has multiple drives on the same roadway, except for drives that operate directionally (i.e. one way drives). City of Owosso/CW

The Contractor shall notify the Engineer a minimum of one week prior to changing traffic patterns on any street.

All traffic regulators assigned to traffic control must receive all necessary instruction and training prior to starting operations.

The Contractor shall work between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. No work is allowed outside these time periods. No work shall be allowed on Saturday. The Contractor shall coordinate work so that any necessary preliminary or closing operations are also done within these time periods.

No work shall be allowed during the Labor Day holiday period. The Labor Day holiday period shall begin on Friday, August 30, 2024 at 3:00 p.m. and continue until Tuesday, September 3, 2023 at the normal starting time.

The Contractor shall place maintenance gravel the same workday that the pavement is removed in all locations of the project to maintain access to adjacent properties. Any damage occurring to the subgrade from exposure to the elements will be undercut and replaced in accordance with Subgrade Undercutting, Type II, at the Contractor's expense.

The Contractor shall place aggregate base the same workday that the earth is excavated in all locations of the project. Any damage occurring to the subgrade from exposure to the elements will be undercut and replaced in accordance with Subgrade Undercutting, Type II, at the Contractor's expense.

Rubbish collection is done by private contractors between the hours of 7:00 a.m. and 7:00 p.m. according to the following schedule: All residential customers north of Main Street are serviced on Thursdays. All residential customers south of Main Street are serviced on Tuesdays. Rubbish collected at commercial properties is collected any time/date. The Contractor shall schedule work to allow and provide for rubbish collectors to provide their service to residential and commercial properties. If the rubbish collectors are unable to collect materials due to construction operations, then the Contractor shall coordinate with the rubbish collectors the moving of containers to the collection site and returning same containers to the property owners.

Current mail delivery is via doorstep. The Contractor shall conduct work so that the mail person may walk unimpeded around construction work to make their delivery.

e. Traffic Control Devices. All signs, barricades, warning lights, and other traffic control devices shall be in accordance with the 2011 Edition of the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) and conform to MDOT Special Detail WZD-125-E.

City of Owosso/CW

All diamond shaped warning signs shall be 48" x 48". All temporary signs shall be mounted at a minimum seven-foot bottom height. All temporary signs used for detour, except those at Type III Barricades, shall be installed on driven posts.

Temporary signs that are to remain in place for fourteen (14) days or more shall be installed on driven posts as directed by the Engineer. All other temporary signs (excluding detour signs) may be installed on portable supports.

Ground driven sign supports for temporary signs shall be installed in accordance with MDOT Special Detail WZD-100-A.

Advance work zone signing is revised to include R5-18c (Work Zone Begins) signs. Install signs at locations shown in the plans or as directed by the Engineer.

For construction signing, layout as shown on MDOT typicals minimum Merging Taper Length "L", distances between Traffic Control Devices "D", and length of Longitudinal Buffer Length "B" shall be in accordance with MDOT Maintaining Traffic Typical 101-GEN-SPACING-CHARTS

If required, for a single daytime closure, local traffic shall be maintained utilizing traffic regulators (flaggers). Signing and traffic control devices shall be placed in accordance with the MDOT Maintaining Traffic Typical 110-TR-NFW-TL, or as directed by the Engineer.

During paving operations, traffic regulators (flaggers) shall be utilized, and intermediate traffic regulators (flaggers) shall be established at intersecting roads, streets, and at other traffic generators as directed by the Engineer.

W20-1 "Road Work Ahead" signs shall be placed on all intersecting roads at a minimum distance shown on the plans, or as directed by the Engineer.

Signs placed at Type III barricades shall be placed above and behind the barricade on their own supports.

A quantity of plastic drums with fluorescent sheeting has been established for lane closures and to be used adjacent to work areas.

f. Measurement and Payment. The Maintaining Traffic Pay Items will be paid for at the Contract Unit Price in accordance with MDOT 2020 Standard Specifications for Construction, with the exception by other Special Provisions, which shall be payment in full for all labor, material, and equipment needed to accomplish this work.

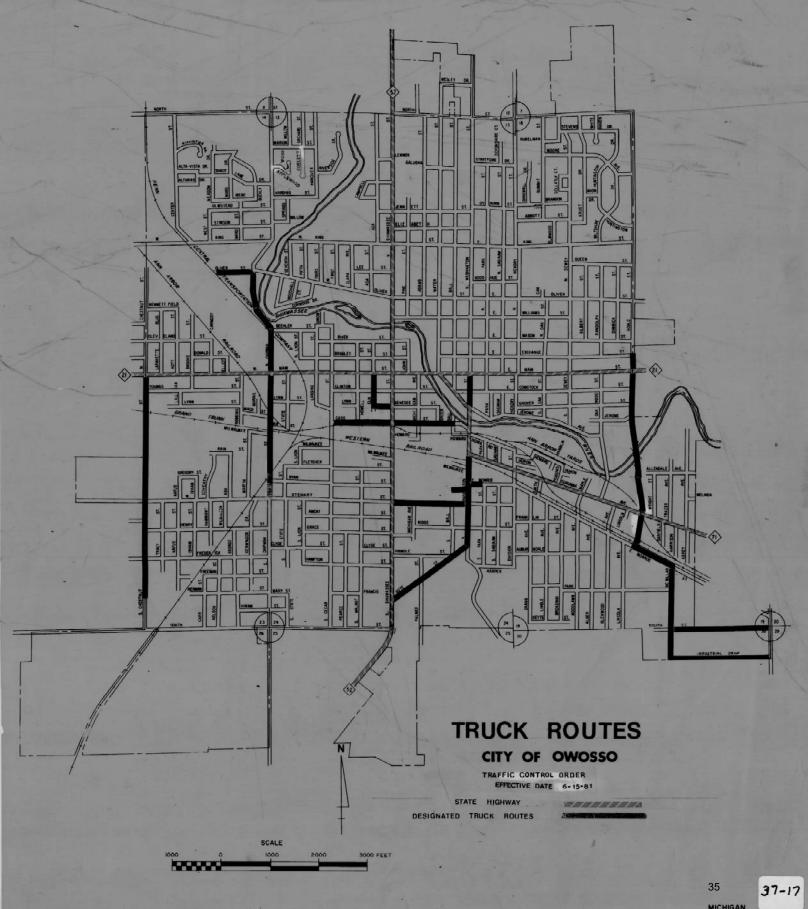
Payment for temporary signs will be made based on the maximum square feet of dissimilar sign legends in use at any one time during the project.

Payment for barricades, lighted arrows, and plastic drums will be made based on the maximum number in use at any one time during the project.

City of Owosso/CW

4 of 4

CITY OF OWOSSO SHIAWASSEE COUNTY T. 7 N.-R.2 & 3 E. POR. 17, 179 - 1970 CENSUS



MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

DISTANCE BETWEEN TRAFFIC SIGNS, "D"

"D"			POST	ed spee	D LIMIT,	MPH (P	RIOR TO	WORK A	(REA)		
DISTANCES	25	30	35	40	45	50	55	60	65	70	75
D (FEET)	250	300	350	400	450	500	550	600	650	700	750

GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE, "B"

"B"		SPEED, MPH (PRIOR TO WORK AREA)										
LENGTHS	20	25	30	35	40	45	50	55	60	65	70	75
B (FEET)	33	50	83	1 3 2	181	230	279	329	411	476	542	625

* POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.

MINIMUM MERGING TAPER LENGTH, "L" (FEET)

OFFSET	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
(FEET)	25	30	35	40	45	50	55	60	65	70	75
1	11	15	21	27	45	50	55	60	65	70	75
2	21	30	41	54	90	100	110	120	130	140	150
3	32	45	62	80	135	150	165	180	195	210	225
4	42	60	82	107	180	200	220	240	260	280	300
5	53	75	103	134	225	250	275	300	325	350	375
6	63	90	123	160	270	300	330	360	390	420	450
7	73	105	143	187	315	350	385	420	455	490	525
8	84	120	164	214	360	400	440	480	520	560	600
9	94	135	184	240	405	450	495	540	585	630	675
10	105	150	205	267	450	500	550	600	650	700	750
11	115	165	225	294	495	550	605	660	715	770	825
12	125	180	245	320	540	600	660	720	780	840	900
13	136	195	266	347	585	650	715	780	845	910	975
14	146	210	286	374	630	700	770	840	910	980	1050
15	157	225	307	400	675	750	825	900	975	1050	1125

NOT TO SCALE

		MAINTAINING TRAFFIC TYPICAL		DATE: MAY 2021					
	Michigan Department of Transportation	101-GEN-	"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING,	SHEET:					
	FILE: 101-GEN-SPACING-CHARTS.dgn	SPACING-CHARTS	SIGN BORDER KEY, AND ROLL-AHEAD SPACING	1 OF 3					

THE FORMULAS FOR THE <u>MINIMUM LENGTH</u> OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

$"L" = \underline{W X S^2}$	WHERE POSTED SPEED PRIOR TO
60	THE WORK AREA IS 40 MPH OR LESS

- "L" = W X S WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER
- L = MINIMUM LENGTH OF MERGING TAPER
- S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA
- W = WIDTH OF OFFSET

TYPES OF TAPERS	<u>taper length</u>
UPSTREAM TAPERS	
MERGING TAPER	L – MINIMUM
SHIFTING TAPER	1/2 L - MINIMUM
SHOULDER TAPER	1/3 L - MINIMUM
2 TO 1 LANE ROAD TAPER	100' - MAXIMUM

DOWNSTREAM TAPERS (USE IS RECOMMENDED)

100' (PER LANE)

MAXIMUM SPACING FOR CHANNELIZING DEVICES

WOR	WORK ZONE	DRUM AND 42" DEV	/ICE SPACING (FT)	NIGHTTIME 42" DEVICE SPACING (FT)			
	SPEED LIMIT	TAPER	TANGENT	TAPER	TANGENT		
	< 45 MPH	1 × SPEED LIMIT	2 x SPEED LIMIT	25 FEET	50 FEET		
	≥ 45 MPH	50 FEET	100 FEET	25 FEET	50 FEET		

SIGN OUTLINE KEY

DASHED OUTLINES INDICATE A SIGN THAT SOLID OUTLINES INDICATE A SIGN THAT SOLID OUTLINES INDICATE A SIGN THE IS TO BE PLACED ON THE PROJECT EXISTS ON SITE, AND NEEDS TO BE COVERED. 17 Т EXIT EXIT 1 1_ NOT TO SCALE DATE: MAY 2021 MAINTAINING TRAFFIC TYPICAL NOT TO SCALE "B", "D" AND "L" TABLES N0: SHEET: 101-GEN-CHANNELIZING DEVICE SPACING SPACING-CHARTS SIGN BORDER KEY AND ROLL-AHEAD SPACING 2 OF 3 FILE: 101-GEN-SPACING-CHARTS.dgn 37

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES - TEST LEVEL 2

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5.5 TONS (STATIONARY)	40 MPH OR LESS	25 FT

* ROLL-AHEAD DISTANCES ARE CALCULATED USING A 4,410 POUND IMPACT VEHICLE WEIGHT.

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES - TEST LEVEL 3

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5 TONS (MOBILE)	45 MPH	100 FT
	50-55 MPH	150 FT
	60-75 MPH	175 FT
12 TONS (STATIONARY)	45 MPH	25 FT
	50-55 MPH	25 FT
	60-75 MPH	50 FT

* ROLL-AHEAD DISTANCES ARE CALCULATED USING A 10,000 POUND IMPACT VEHICLE WEIGHT.

NOT TO SCAT	MAINTAINING TRAFFIC TYPICAL	"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING SIGN BORDER KEY AND ROLL AHEAD SPACING	DATE: MAY 2021 SHEET:
FILE: 101-GEN-SPACING-CHARTS.dgn	SPACING-CHARTS		3 OF 3

