

ADDENDUM

Addendum No. 4

Owner: City of Owosso
Project: 2022 Street Program – Contract 1
Engineer: City of Owosso

NOTICE TO ALL PROSPECTIVE BIDDERS

BIDS DUE December 14, 2021

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This Addendum is a part of the Contract Documents and modifies the previously issued Bidding Documents. Acknowledge receipt of this Addendum in the space provided on the *Signature Page and Legal Status* section of the Bid Proposal. Failure to do so may result in rejection of the Bid.

ITEM NO. 1:

Add “2022 Street Program – Contract 1 Specifications” to Bid Documents

I acknowledge receipt of Addendum No. 4

(PLEASE TYPE OR PRINT BELOW)

LEGAL NAME OF BIDDER: _____

MAILING ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE NUMBER _____ EMAIL I.D. _____ FAX # _____

BY: SIGNATURE: _____

OF AUTHORIZED REPRESENTATIVE

NAME (typed/printed) _____ TITLE: _____

END OF ADDENDUM NO. 4

PROGRESS CLAUSE

City of Owosso/CW

1 of 1

October, 2021

Contractor can begin no earlier than:

- April 18, 2022

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

The Contractor shall prepare and submit a complete, detailed, and signed MDOT Form 1130, Progress Schedule, according to 12SP-101A.

The progress schedule shall include, at minimum, the controlling work items for the completion of the project, as well as the planned dates or work days that these work items will be controlling operations. All contract dates including open to traffic, project completion, interim completion, and any other controlling dates in the contract, must be included in the Progress Schedule.

If the bidding Proposal specifies controlling dates, these shall also be included in the Progress Schedule.

The Project shall be completed in its entirety including final site restoration and clean-up

- Completion on or before June 10, 2022

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.

Liquidated Damages shall be assessed in accordance with Section 108.10 of the 2012 Standard Specifications for Construction.

**SPECIAL PROVISION
FOR
TECHNICAL SPECIFICATIONS**

RC/City of Owosso

1 OF 1

Dec, 2018

General Requirement

The MDOT 2012 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. 2012 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.

NOTICE TO BIDDERS**UTILITY COORDINATION****City of Owosso/CW****1 of 2****September, 2021**

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 2012 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 2012 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 2012 Standard Specifications for Construction.

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

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

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 2012 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

There are no utility replacements for the project.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC

City of Owosso/CW

1 of 4

September, 2021

a. Description. The project will consist of 0.06 mile of road reconstruction, including curb and gutter, sidewalk, and storm sewer on Maple Avenue in the City of Owosso, Shiawassee County.

b. General. Traffic shall be maintained in accordance with Sections 104.07C, 104.11. 812, and 922 of the Michigan Department of Transportation (MDOT) 2012 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 Maple Avenue Project right-of-way and extend a distance of 1 mile north and south 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 Maple Avenue 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. Maple Avenue shall be closed to traffic between Corunna Avenue (M-71) and the north end. Residents shall be allowed to access their homes on Maple Avenue at all times. When one lane in each direction cannot be maintained, at least one lane of traffic shall be maintained on Maple Avenue 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. The Contractor shall use M-71 to access Maple Avenue.

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).

Should traffic regulators be assigned to maintain local traffic through the construction area, the cost for traffic regulators will not be paid for separately but will be considered part of the pay item Minor Traffic Devices. 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 Saturday. No work is allowed outside these time periods. The Contractor must provide 24-hour notice for Saturday work. 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 Memorial Day holiday period. The Memorial Day holiday period shall begin on Friday, May 27, 2022 at 3 p.m. and continue until Tuesday, May 31, 2022 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 Mail delivery person will park their vehicle on a side street and walk to residence to make doorstep delivery. 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.

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 Typical Sign Sequence M0020a.

If required, for a single daytime closure on Maple Avenue, local traffic shall be maintained utilizing traffic regulators (flaggers). Signing and traffic control devices shall be placed in accordance with the Typical Sign Sequence M0140a, 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.

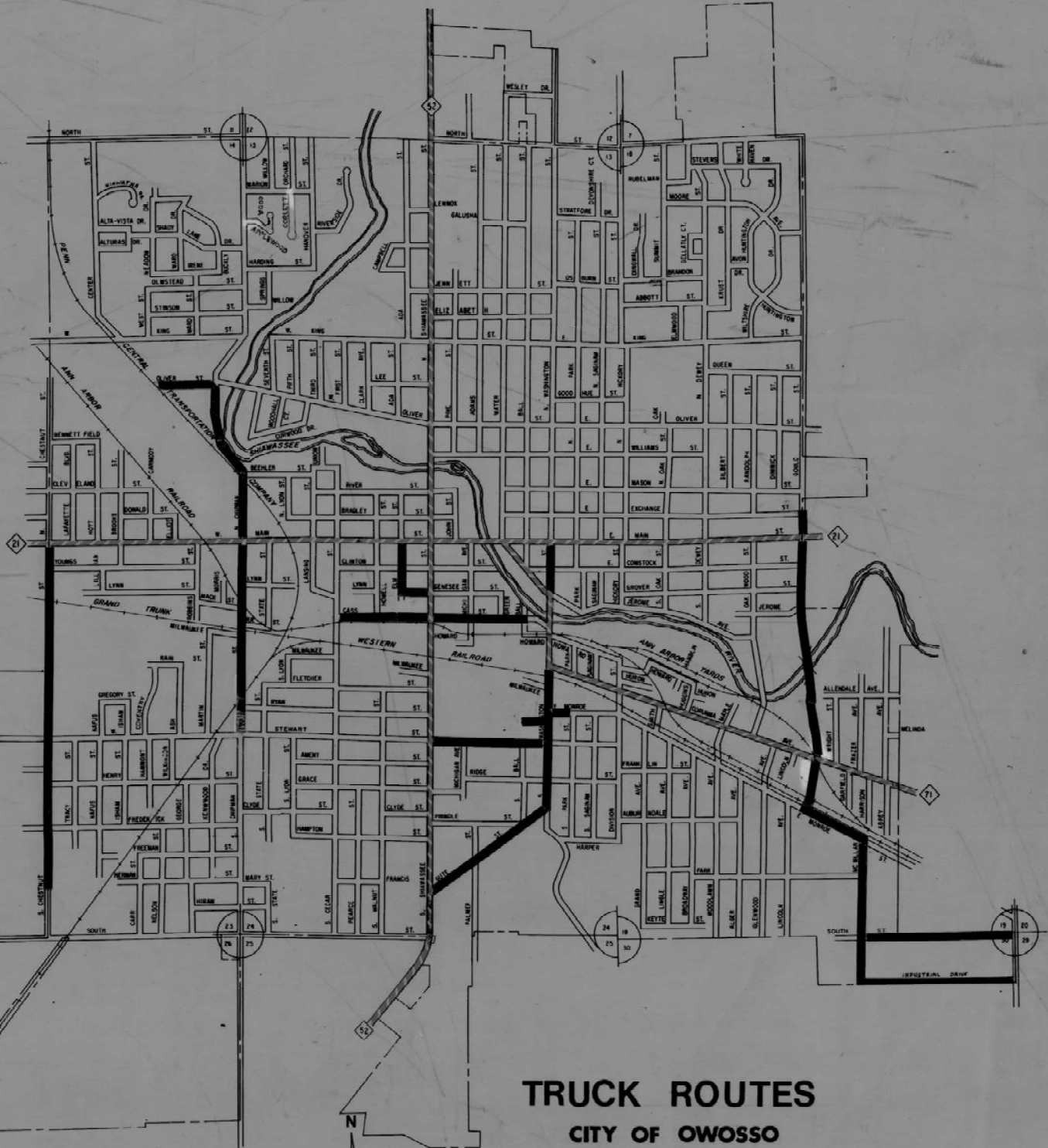
The contractor shall obtain an MDOT permit for any lane closures on M-71. The cost of the permit and required signage, drums, arrow boards, shall be included in the cost of other pay items.

g. Measurement and Payment. The Maintaining Traffic Pay Items will be paid for at the Contract Unit Price in accordance with MDOT 20121 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.


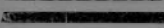
Payment for barricades, lighted arrows, and plastic drums will be made based on the maximum number in use at any one time during the project.

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

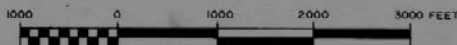


TRUCK ROUTES
CITY OF OWOSSO

TRAFFIC CONTROL ORDER
 EFFECTIVE DATE 6-15-81

STATE HIGHWAY 
 DESIGNATED TRUCK ROUTES 

SCALE



SIGN MATERIAL SELECTION TABLE

SIGN SIZE	SIGN MATERIAL TYPE		
	TYPE I	TYPE II	TYPE III
≤ 36" X 36"		X	X
>36" X 36" < 96" TO WIDE		X	
> 96" WIDE TO 144" WIDE	X	X	
> 144" WIDE	X		


TYPE I ALUMINUM EXTRUSION
 TYPE II PLYWOOD
 TYPE III ALUMINUM SHEET

ROUNDING OF CORNERS IS NOT REQUIRED FOR TYPE I OR II SIGNS.
 VERTICAL JOINTS ARE NOT PERMITTED.
 HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE NOT PERMITTED.

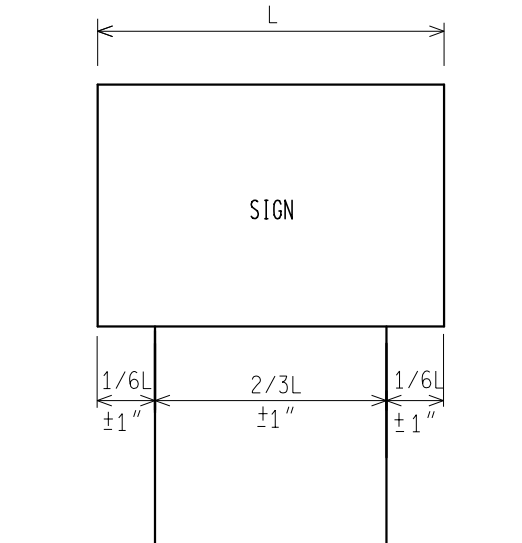
POST SIZE REQUIREMENTS TABLE

SIGN AREA (ft ²)	POST TYPE		
	U-CHANNEL STEEL	SQUARE TUBULAR STEEL	WOOD
≤9	1 - 3 lb/ft*	1 - 2" 12 or 14 GA*	N/A
9 ≤ 20	2 - 3 lb/ft	2 - 2" 12 or 14 GA	1 - 4" X 6"*
> 20 ≤ 30	N/A	N/A	2 - 4" X 6"
> 30 ≤ 60	N/A	N/A	2 - 6" X 8"
> 60 ≤ 84	N/A	N/A	3 - 6" X 8"

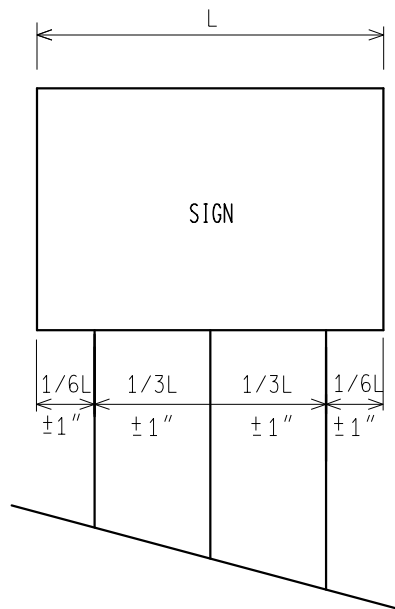
*SIGNS 4 FEET AND GREATER IN WIDTH REQUIRE 2 POSTS.
 SIGNS GREATER THAN 8 FEET IN WIDTH REQUIRE 2 OR 3 WOOD
 POSTS DEPENDING ON AREA OF SIGN.
 A MAXIMUM OF 2 POSTS WITHIN A 7' PATH IS PERMITTED.

 PREPARED BY OPERATIONS FIELD SERVICES	DEPARTMENT DIRECTOR Kirk T. Steudle APPROVED BY: _____ DIRECTOR, BUREAU OF FIELD SERVICES	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL FOR <h2 style="text-align: center;">GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS</h2>		
	DRAWN BY: CON/ECH CHECKED BY: AUG	APPROVED BY: _____ DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE

2 POST SIGN SUPPORT SPACING



3 POST SIGN SUPPORT SPACING

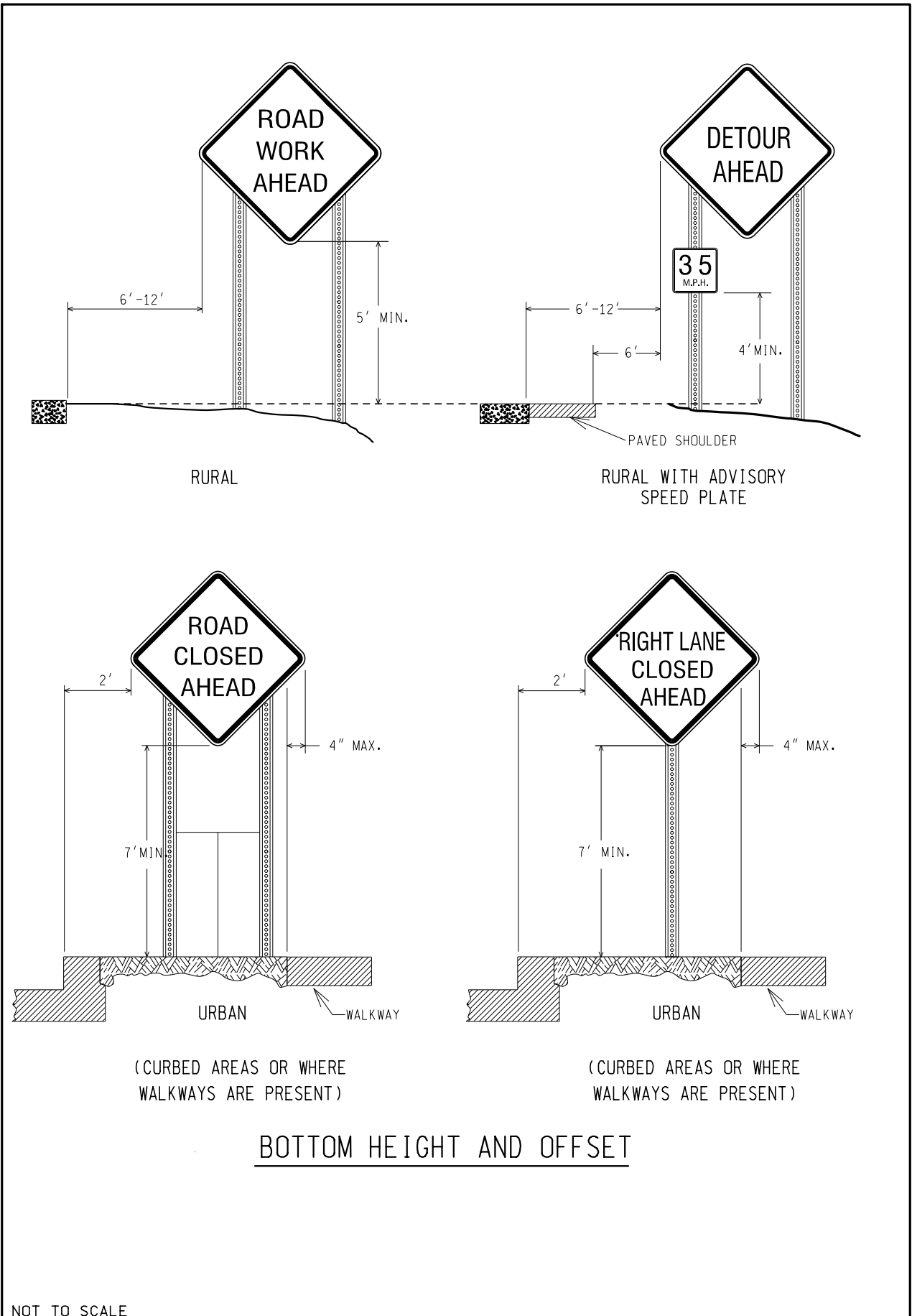


* FOR ALL 11' AND 12' LONG SIGNS ON 3 WOOD SUPPORTS, SPREAD POSTS SO AS TO HAVE A 8' MIN. TO 9' MAX. DISTANCE BETWEEN OUTSIDE POSTS.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 2 OF 11
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NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

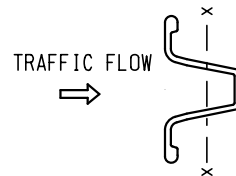
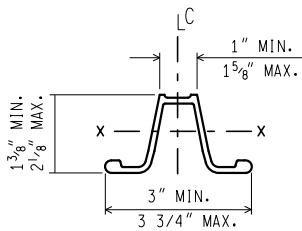
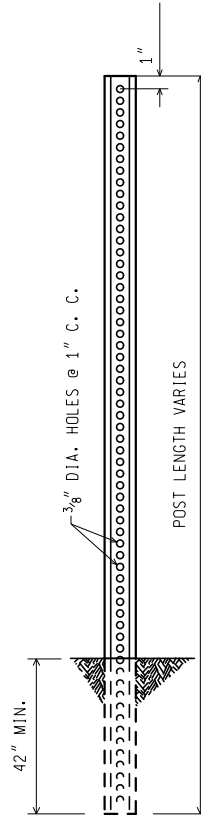


BOTTOM HEIGHT AND OFFSET

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 3 OF 11
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WEIGHT = 3 lbs/ft
 SECT. MOD. X.-X. = 0.31 CUBIC INCHES MIN.

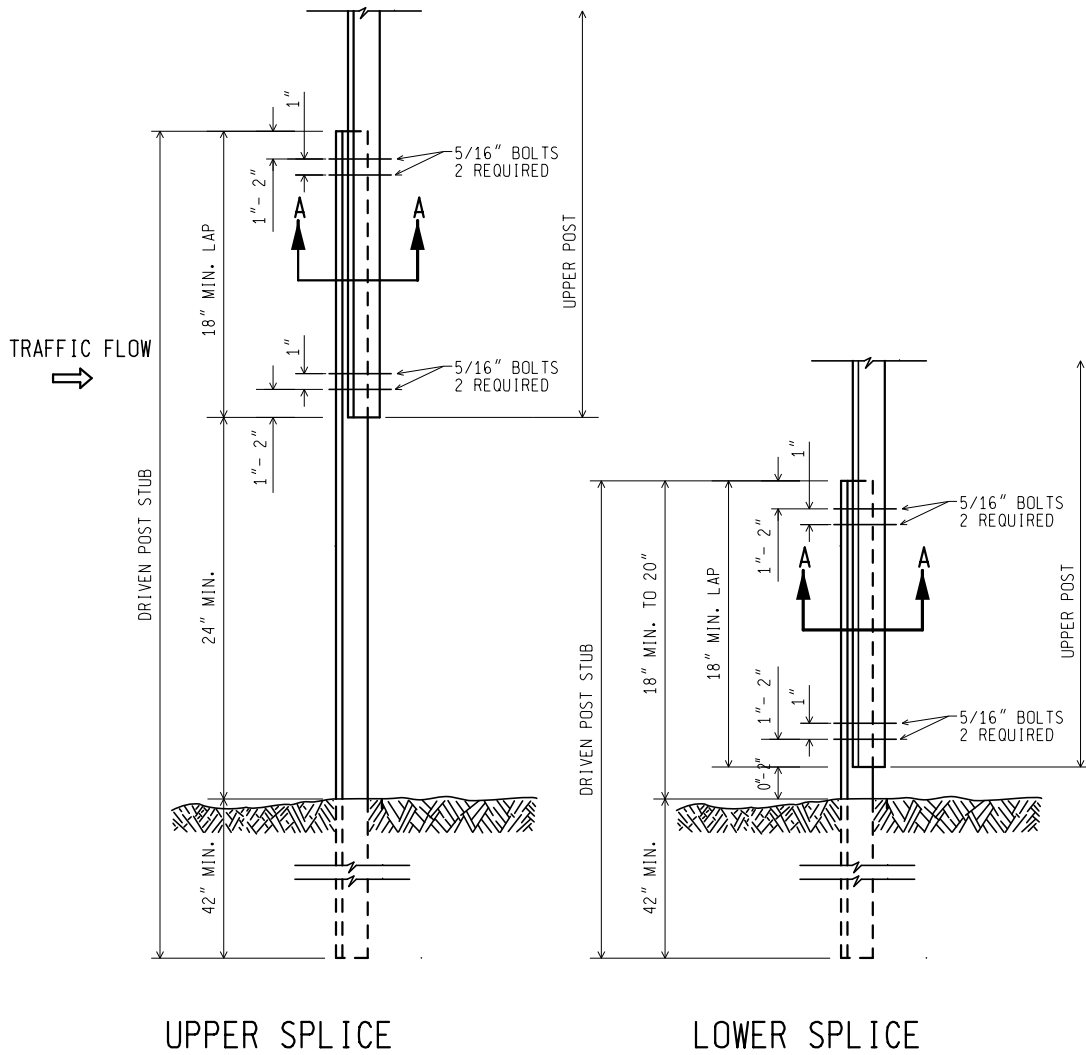
3 lb. U - CHANNEL STEEL POST
 (NO SPLICE)

MOUNT SIGN ON OPEN FACE OF
 U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 4 OF 11
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3 lb. U - CHANNEL STEEL POST
(WITH SPLICE)

MOUNT SIGN ON OPEN FACE OF
UPPER U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF FIELD SERVICES SPECIAL DETAIL

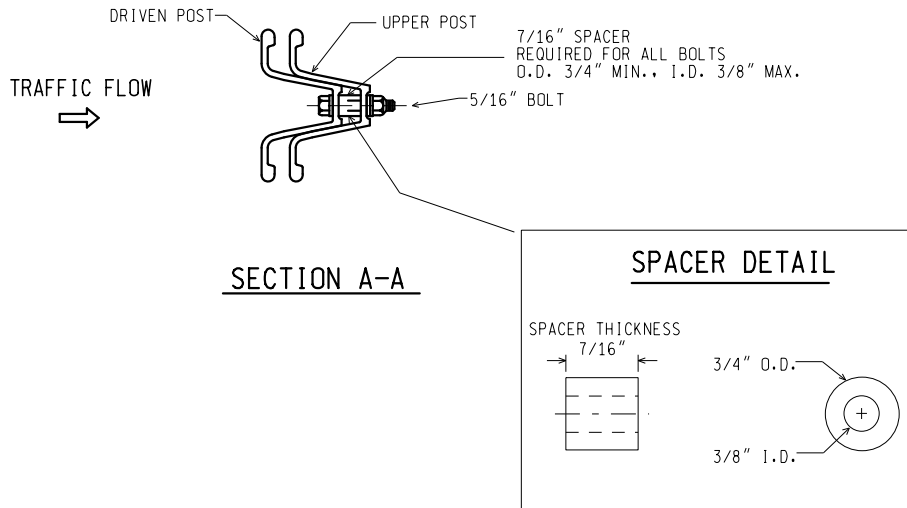
F.H.W.A. APPROVAL

7/20/2016
PLAN DATE

WZD-100-A

SHEET
5 OF 11

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NOTES:

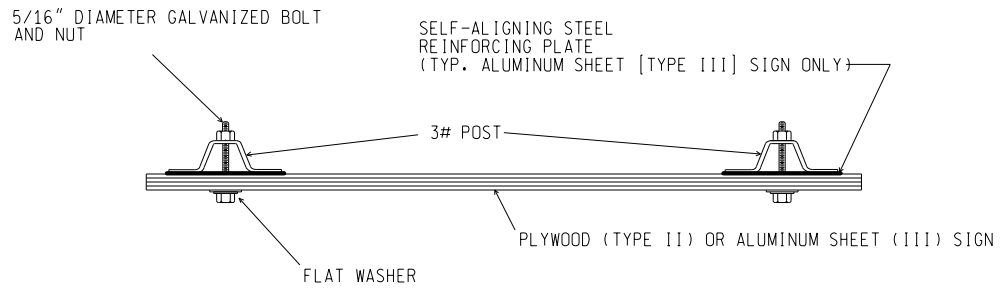
1. THE SPACER THICKNESS SHALL BE 1/16" LESS THAN THE GAP BETWEEN THE POST WHEN POSITIONED IN THE UNBOLTED CONFIGURATION.
2. THE EXTERIOR BOLT (CLOSEST TO LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN A PREPUNCHED HOLE 1" TO 2" FROM THE END OF THE LAP.
3. THE INTERIOR BOLT (FARTHEST FROM LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN THE NEXT PREPUNCHED HOLE.
4. THE DRIVEN POST SHALL ALWAYS BE MOUNTED IN FRONT OF THE UPPER POST WITH RESPECT TO THE ADJACENT ONCOMING TRAFFIC, REGARDLESS OF THE DIRECTION THE SIGN IS FACING.
5. THE SPLICE LAP SHALL BE FASTENED BY FOUR-5/16" DIA. GALVANIZED A449 BOLTS (SAE J429 GRADE 5) OR GALVANIZED A325 BOLTS.

3 lb. U - CHANNEL STEEL POST
(WITH SPLICE)

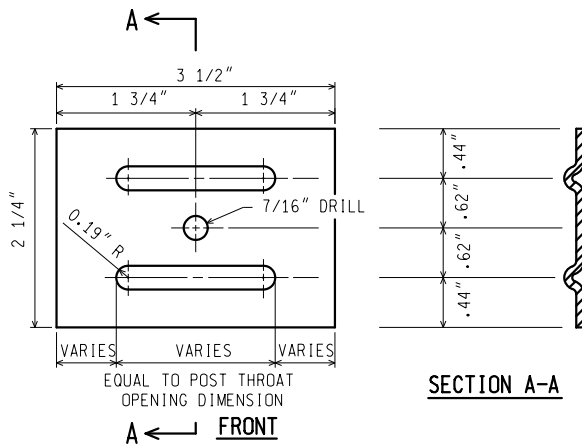
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 6 OF 11
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SIGN TO 3 lb. POST CONNECTION



NOTES: (FOR STEEL SIGN REINF' PLATE)

1. MATERIAL: 12 GAUGE CARBON STEEL.
2. TOLERANCE ON ALL DIMENSIONS ± 0.0625 "
3. FINISH-AFTER STAMPING AND PUNCHING, GALVANIZE ACCORDING TO CURRENT SPECIFICATIONS FOR ZINC (HOT GALVANIZE) COATINGS ON PRODUCTS FABRICATED FROM PLATES OR STRIPS

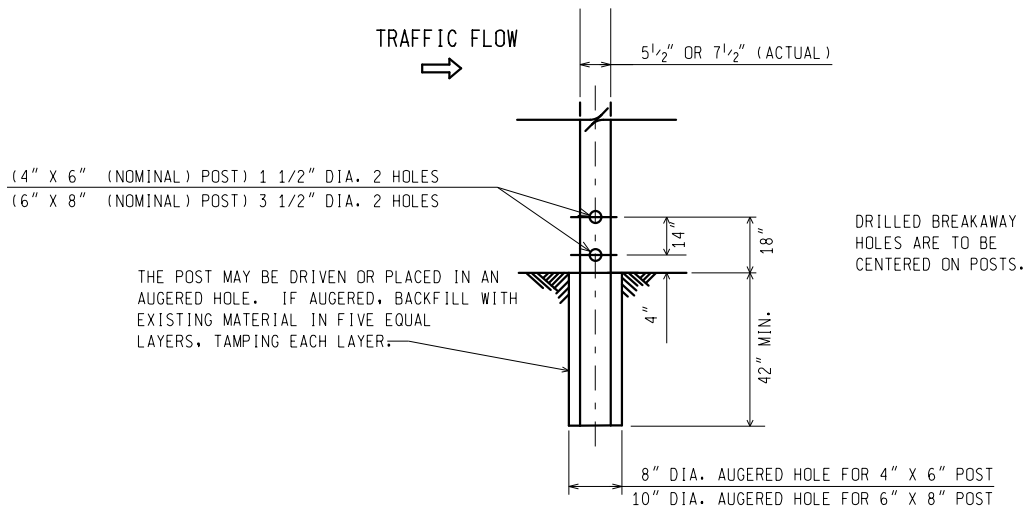
STEEL SIGN REINFORCING PLATE
REQUIRED FOR TYPE III SIGNS ONLY

3 lb. U - CHANNEL STEEL POST SIGN CONNECTION

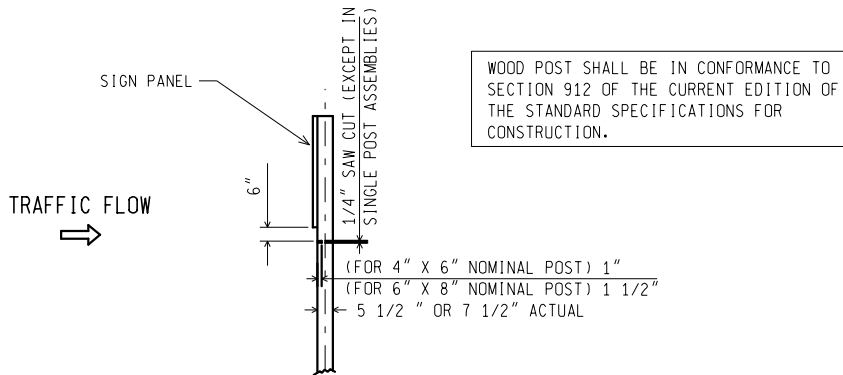
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 7 OF 11
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WOOD POST BREAKAWAY HOLES/
 DIRECT EMBEDMENT DETAILS



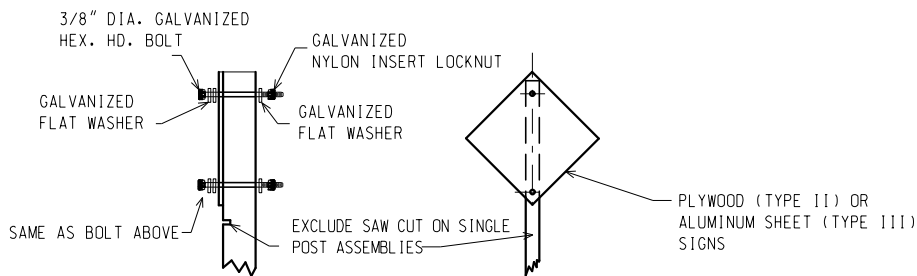
SAW CUT DETAIL
 (MULTIPLE POST INSTALLATIONS)

WOOD POST DETAILS

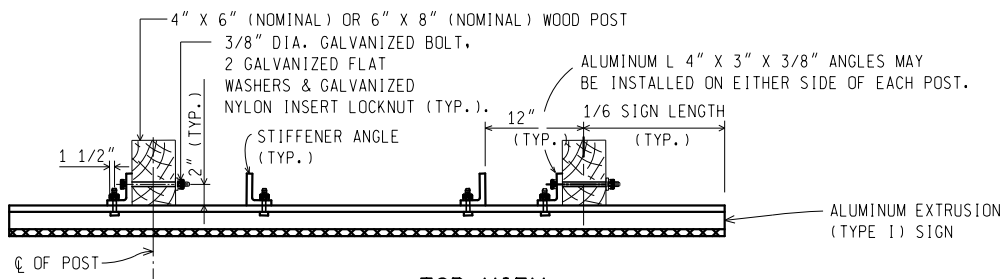
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 8 OF 11
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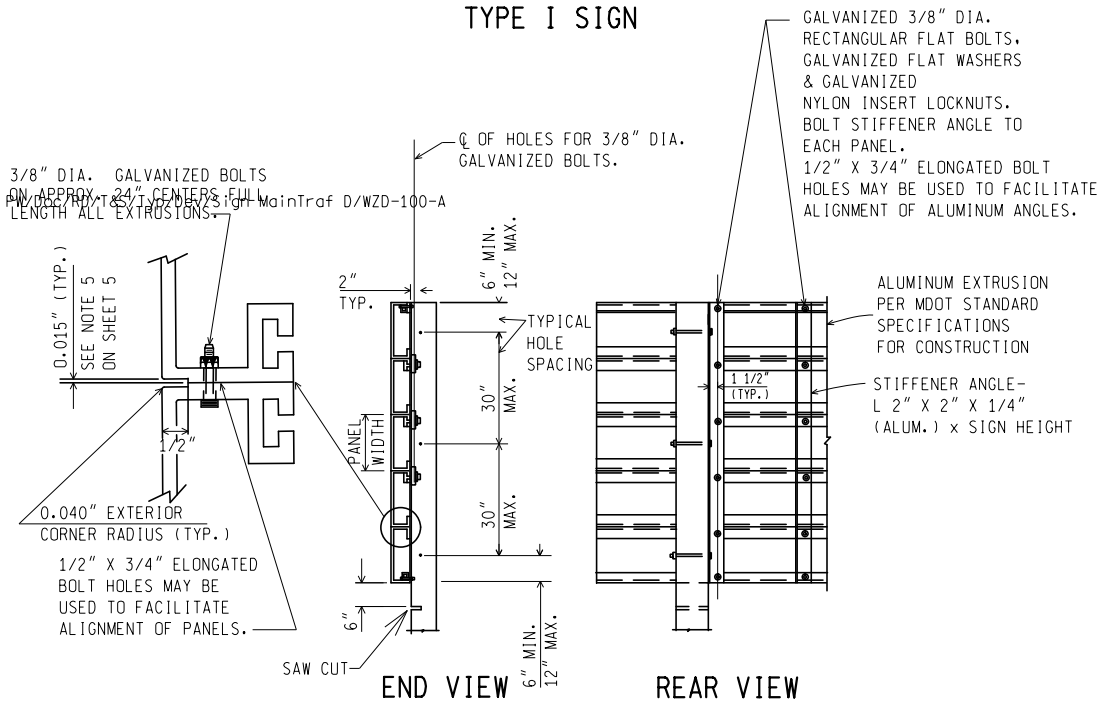
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TYPE II AND TYPE III SIGNS



**TOP VIEW
TYPE I SIGN**



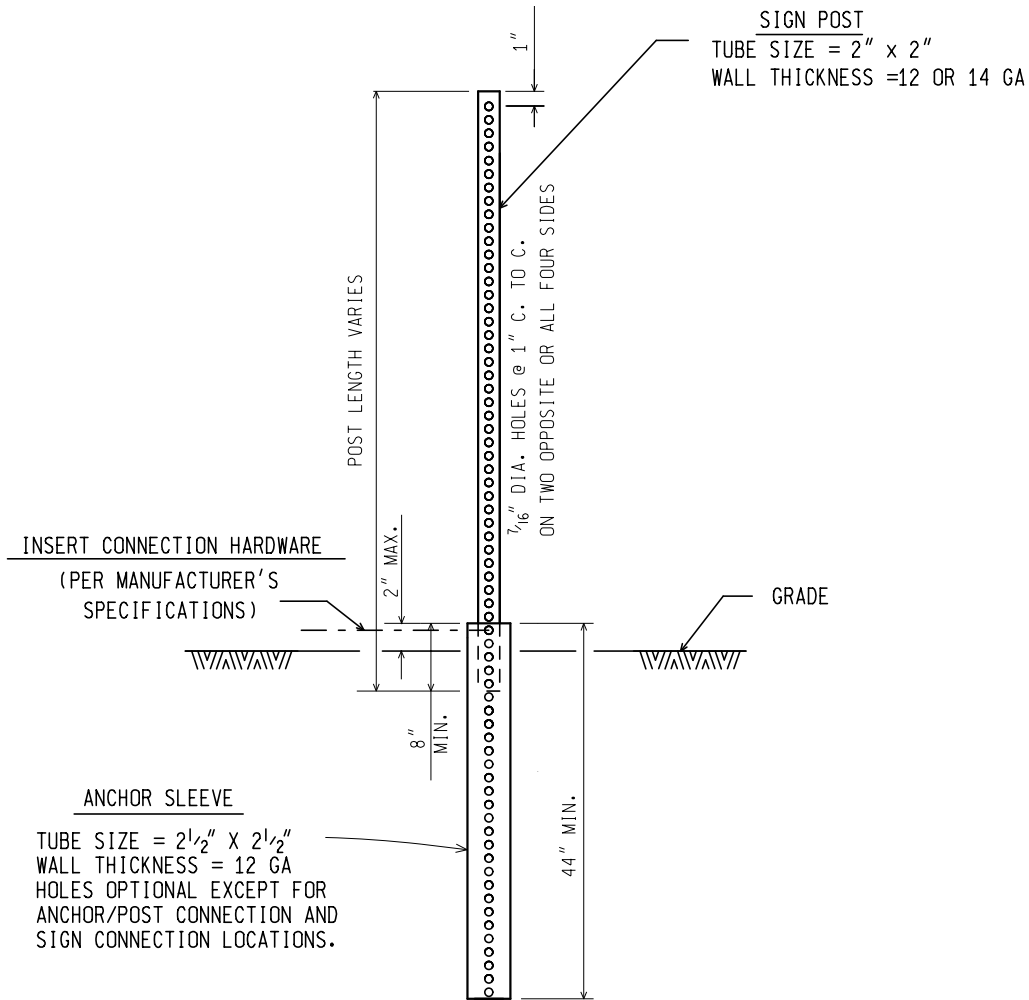
TYPE I SIGN - ERECTION DETAILS

WOOD POST CONNECTIONS

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 9 OF 11
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SQUARE TUBULAR STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 10 OF 11
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GENERAL NOTES:

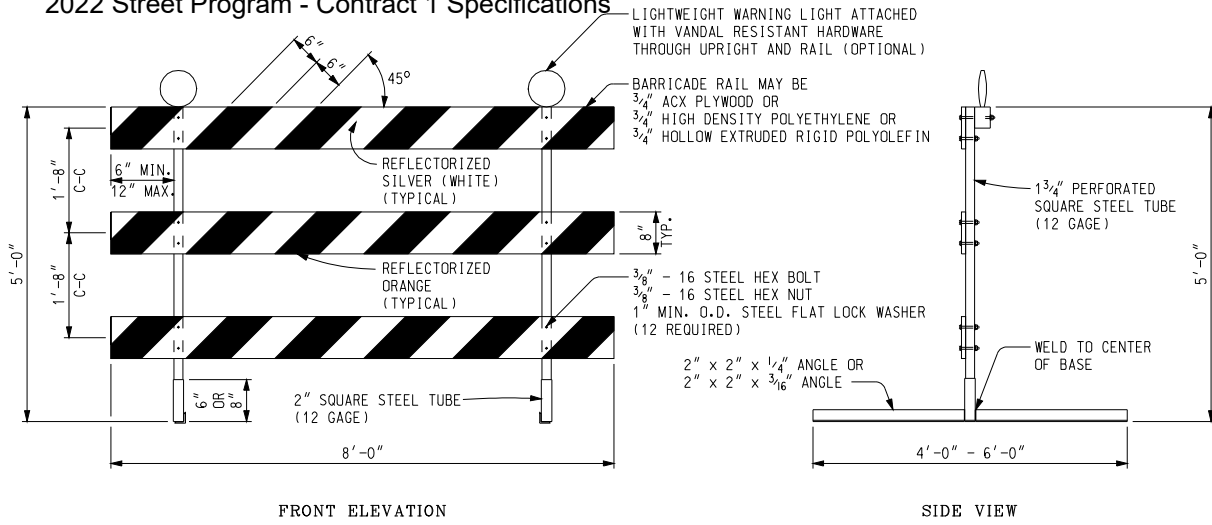
1. A MAXIMUM OF TWO POSTS WITHIN A 7 FOOT PATH IS PERMITTED.
2. ALL SIGN POSTS SHALL COMPLY WITH NCHRP 350.
3. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 42".
4. BRACING OF POST IS NOT PERMITTED.
5. SIGN SHALL BE LEVEL, AND UPRIGHT FOR THE DURATION OF INSTALLATION.
6. ERECT POSTS SO THE SIGN FACE AND SUPPORTS DO NOT VARY FROM PLUMB BY MORE THAN 3/16" IN 3'. PROVIDE A CENTER-TO-CENTER DISTANCE BETWEEN POSTS WITHIN 2 PERCENT OF PLAN DISTANCE.
7. NO MORE THAN ONE SPLICE PER POST, AS SHOWN, WILL BE PERMITTED.
8. POST TYPES SHALL NOT BE MIXED WITHIN A SIGN SUPPORT INSTALLATION.
9. NO VERTICAL JOINTS ARE PERMITTED IN SIGN. NO HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE PERMITTED IN SIGN
10. REMOVE SIGN POSTS AND/OR POST STUBS IN THEIR ENTIRETY WHEN NO LONGER REQUIRED.
11. ALL LABOR, MATERIALS, AND EQUIPMENT, INCLUDING TEMPORARY SUPPORTS REQUIRED TO INSTALL, MAINTAIN, RELOCATE, AND/OR REMOVE THE TEMPORARY SIGN, INCLUDING SUPPORTS, ARE CONSIDERED TO BE INCLUDED IN THE COST OF THE TEMPORARY SIGN.
12. SAW CUTS IN WOOD POSTS ARE TO BE PARALLEL TO THE BOTTOM OF THE SIGN.
13. POSTS SHALL NOT EXTEND MORE THAN 4" ABOVE TOP OF SIGN.
14. TEMPORARY WOOD SUPPORTS DO NOT REQUIRE PRESERVATIVE TREATMENT.

NOT TO SCALE

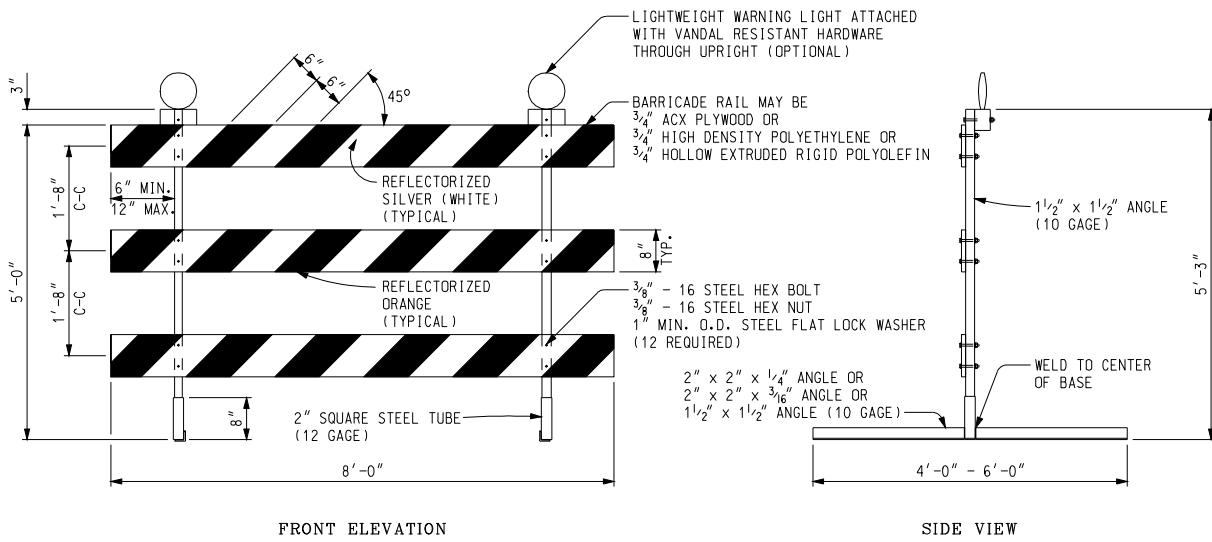
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF FIELD SERVICES SPECIAL DETAIL	F.H.W.A. APPROVAL	7/20/2016 PLAN DATE	WZD-100-A	SHEET 11 OF 11
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NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

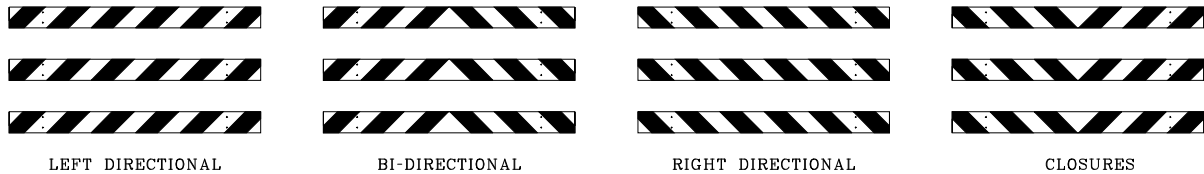
2022 Street Program - Contract 1 Specifications



PERFORATED SQUARE STEEL TUBE OPTION



ANGLE IRON OPTION



BARRICADE RAIL SHEETING OPTIONS
TYPE III BARRICADES

Other Type III Barricades meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

File: T&S/Typ/Signs/WorkZones/wzd 125 d

Rev. 09/22/09 PJ

MDOT
Michigan Department of Transportation

PREPARED BY
TRAFFIC AND SAFETY

DRAWN BY: ECH

CHECKED BY: MWB

ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT
(SPECIAL DETAIL)

FHWA APPROVAL DATE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR

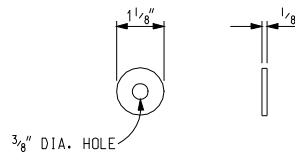
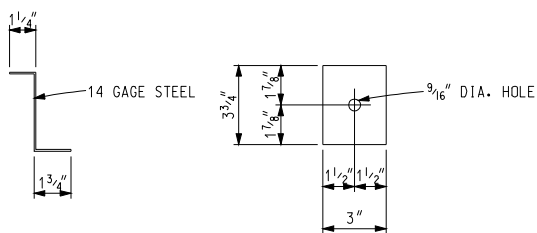
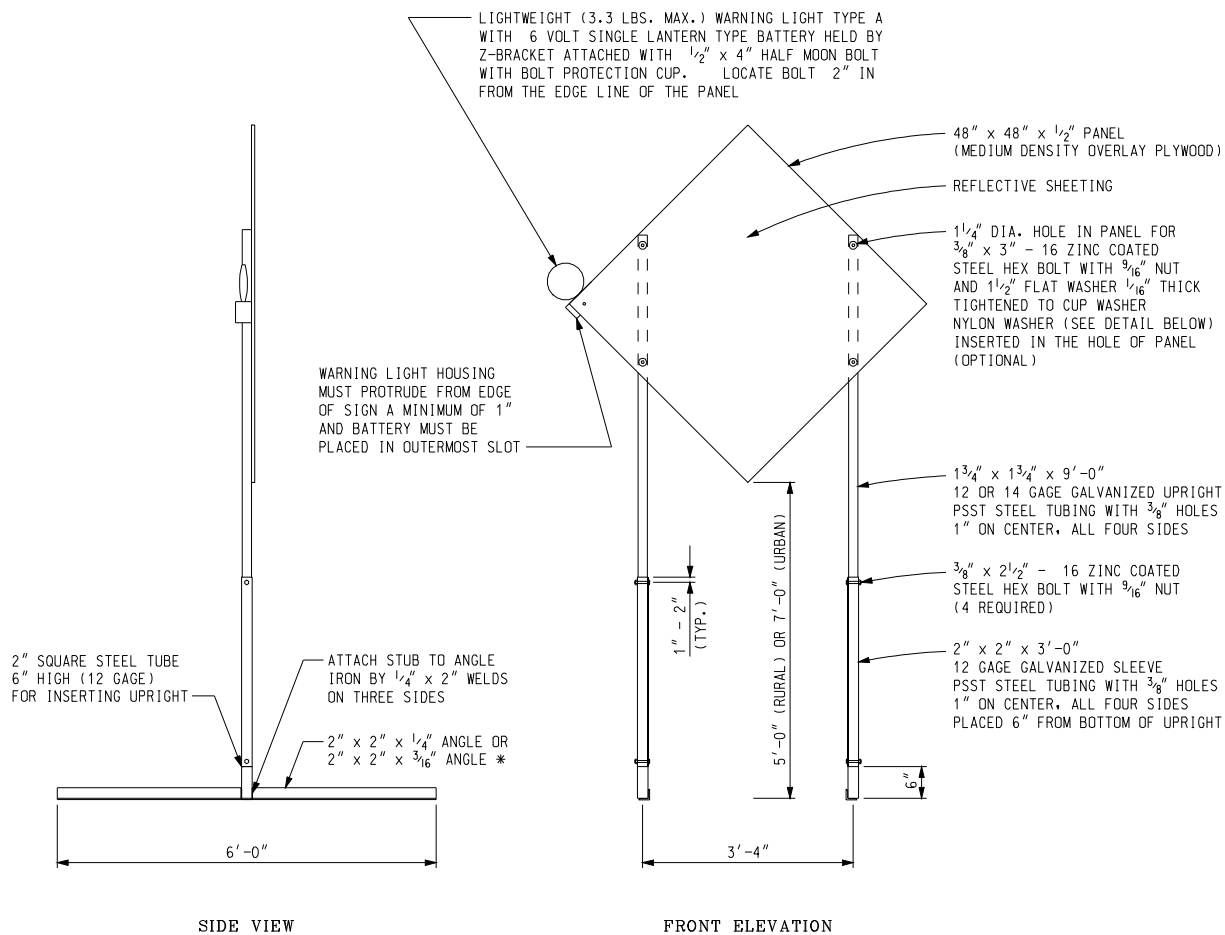
Temporary
Traffic Control Devices

9/22/09
PLAN DATE

WZD-125-E

SHEET
1 of 3

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



Other temporary sign supports meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

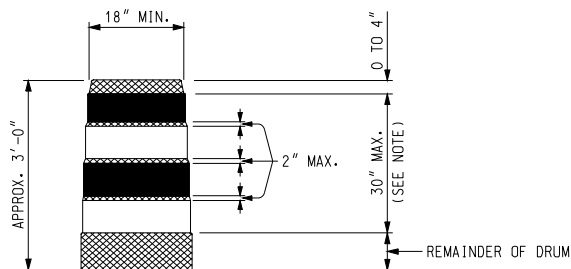
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	(SPECIAL DETAIL) FHWA APPROVAL DATE	9/22/09	WZD-125-E	SHEET 2 of 3
File: T&S/Typ/Signs/WorkZones/wzd 125 d	Rev. 09/22/09 PJ	PLAN DATE		

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2022 Street Program - Contract 1 Specifications

- PLASTIC DRUM
- ▲▲▲ PROPOSED TYPE III BARRICADE
- △△△ EXISTING TYPE III BARRICADE

SYMBOLS TO BE USED ON PLANS



- REFLECTORIZED ORANGE
- REFLECTORIZED WHITE
- NON REFLECTORIZED ORANGE

NOTE:
 DRUMS SHALL HAVE AT LEAST 4 HORIZONTAL REFLECTORIZED STRIPES (2 ORANGE AND 2 WHITE) OF 6" UNIFORM WIDTH, ALTERNATING IN COLOR WITH THE TOPMOST REFLECTORIZED STRIPE BEING ORANGE. NON REFLECTORIZED SPACES BETWEEN THE HORIZONTAL REFLECTORIZED ORANGE AND WHITE STRIPES SHALL BE ORANGE IN COLOR AND EQUAL IN WIDTH.

PLASTIC DRUM

NOTES:

2" PERFORATED SQUARE STEEL TUBES MAY BE USED TO FABRICATE THE HORIZONTAL BASE OF THE TYPE III BARRICADE.

WARNING LIGHTS SHALL BE PLACED ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ALL OTHER PROVISIONS IN THE CONTRACT WHEN THEY ARE USED ON TYPE III BARRICADES.

SEE ROAD STANDARD PLANS R-113-SERIES FOR TEMPORARY CROSSOVERS FOR DIVIDED ROADWAY, AND R-126-SERIES FOR TYPICAL LOCATION AND SPACING OF PLASTIC DRUMS FOR PLACEMENT OF TEMPORARY CONCRETE BARRIER.

SIGNS, BARRICADES, AND PLASTIC DRUMS SHALL BE FACED WITH PRESSURE-SENSITIVE REFLECTIVE SHEETING ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SANDBAGS SHALL BE USED WHEN SUPPLEMENTAL WEIGHTS ARE REQUIRED TO ACHIEVE STABILITY OF THE BARRICADE. THE SANDBAGS SHALL BE PLACED SO THEY WILL NOT COVER OR OBSTRUCT ANY REFLECTIVE PORTION OF THE TRAFFIC CONTROL DEVICE.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	(SPECIAL DETAIL) FHWA APPROVAL DATE	9/22/09	WZD-125-E	SHEET 3 of 3
File: T&S/Typ/Signs/WorkZones/wzd 125 d	Rev. 09/22/09 PJ	PLAN DATE		

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
ABANDONED GAS MAIN, CONFLICT

City of Owosso/CW

1 OF 1

August, 2020

The work of Abandoned Gas Main, Conflict shall be performed in accordance with Sections 402 and 702 of the MDOT 2012 Standard Specifications for Construction.

a. Description. The work of Abandoned Gas Main, Conflict consists of removing abandoned gas main, of various size and material, that directly conflicts with proposed storm sewer installation and bulk heading the two exposed ends, as shown on the plans or as directed by the Engineer. The Engineer will determine whether a conflict exists and advise the Contractor in advance of any work.

b. Materials. The materials for bulk heading shall include mortar, geotextile wrap, and tape for attachment. Mortar mix shall be Type H-1 non-shrinking mortar and grout mixture.

c. Construction. The Contractor shall expose the existing pipe crossing in advance of proposed construction and confirm with the utility that the pipe is abandoned. The Contractor shall inform the Engineer of the conflict in advance of any work. After agreement is reached, then the Contractor shall remove that portion of conflicting abandoned pipe across the trench influence area and seal each exposed remaining ends with bulk heads. The bulk heads shall be constructed such that prepared mortar mix shall be extended at least one foot into the pipe, then wrapped with geotextile material same as used for the road, and secured in place with tape.

d. Measurement and Payment. The completed as measured for Abandoned Gas Main, Conflict will be paid for at the Contract Unit Price for the following Pay Item:

Pay Item	Pay Unit
Abandoned Gas Main, Conflict.....	Each

Abandoned Gas Main, Conflict will be measured in place by the unit Each; and will be paid for at the contract unit price per Each, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

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

City of Owosso/RC

1 of 1

April, 2020

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) 2012 Standard Specifications for Construction, Section 902, for 21AA aggregate, except all material shall be 100% crushed limestone.

c. Construction Methods. The material shall be placed and compacted in accordance with the MDOT 2012 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, Modified	Square Yard
Aggregate Base, LM, Modified	Cubic Yard

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

Aggregate Base, LM, Modified will be measured in place by the cubic yard.

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

CITY OF OWOSSO
SPECIAL PROVISION
FOR
CONCRETE PAY ITEMS

City of Owosso/RC/CW

1 OF 1

September, 2021

a. Description. This work shall be done in accordance with sections 601 and 701 of the MDOT 2012 Standard Specifications for Construction, except as modified herein. This special provision indicates the type of concrete mixture to be used for pay items related to curb and gutter, drive approaches, and sidewalks.

b. Materials. Cement content for Concrete, Grades S2 and P1, shall be 564 pounds per cubic yard (6 Sack) for all concrete items, in accordance with Sections 601 and 701 of the MDOT 2012 Standard Specifications for Construction. Concrete mix shall not include fly ash. Water reducing agents may be used with Engineer's approval.

c. Construction. Construction of concrete related items including but not limited to curb and gutter, driveways, sidewalks, ADA ramps shall be done in accordance with the MDOT 2012 Standard Specifications for Construction, or as directed by the Engineer.

d. Measurement and Payment. Payment for the completed work for the various concrete pay items in this contract using a six full sack mix shall be included as part of their individual unit prices.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
DETECTABLE WARNING SURFACE, MODIFIED

City of Owosso/RC/CW

1 OF 1

August, 2020

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) 2012 Standard Specifications for Construction, Section 803, for concrete sidewalk except detectable warning systems shall be Duralast™ as manufactured by East Jordan Group, Inc. The detectable warning systems shall be 2.5 feet in length and black asphalt dipped.

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. Payment includes all labor, materials, and equipment to install detectable warning surface.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
DRAINAGE STRUCTURE COVER, EJ ____

City of Owosso/CW

1 OF 1

February, 2021

a. Description. Drainage Structure Cover EJ ____, shall consist of materials and work meeting requirements of Section 403 of the MDOT 2012 Standard Specifications for Construction, and as modified herein.

b. Materials. All covers will be manufactured and supplied by East Jordan Iron Works. Cover types shall match with the pay item cover number.

d. Measurement and Payment. The completed work as measured for Drainage Structure Cover EJ ____ will be paid for at the Contract Unit Price for the following Pay Item:

Pay Item	Pay Unit
Drainage Structure Cover, EJ 1040 w/ Solid Gasket Sealed Cover.....	Each
Drainage Structure Cover, EJ 1040 w/ Vented Cover.....	Each
Drainage Structure Cover, EJ 1040 w/ Type O2 Beehive Grate.....	Each
Drainage Structure Cover, EJ 7000.....	Each

Drainage Structure Cover, EJ ____ will be measured in place by count of Each; and will be paid for at the contract unit price per Each, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
DR STRUCTURE, MODIFIED

City of Owosso/CW

1 of 2

March, 2020

a. Description. The Contractor shall construct **Dr Structure, __ inch dia, Modified** of the size and at the locations as shown on the plans or as directed by the Engineer. Work shall be in accordance with Section 403 & 913 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, or as modified herein.

b. Materials. Drainage Structures shall be precast reinforced concrete units manufactured to American Society for Testing Materials (ASTM) C-478 specifications and Section 913 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, with either a cast in place bottom or precast concrete base as detailed on the plans.

The Contractor shall place the drainage structure cover as shown on the plans or as directed by the Engineer.

Provide 4"-12" adjustment area (chimney) above the structure's cone.

Masonry structures will not be allowed to be used on this project, unless approved by the Engineer for special circumstances, or where specifically called for on the Plans.

Thirty-six inch diameter drainage structures (catch basins or inlets) will be allowed to be used on this project, where called for on the plans or where directed by the Engineer.

The Contractor shall provide flexible connectors meeting ASTM C-923 requirements and 'as manufactured' by:

1. Trelleborg - Kor-N-Seal 106-406 and 206 series or approved equal.
2. Press-Seal Corporation's – Direct Drive
3. A-Lok Products, INC. – A-LOK or Z-LOK Connector

c. Measurement and Payment. The completed work as measured for **Dr Structure, __ inch dia, Modified** will be paid for at the contract unit price for the following contract item (pay item).

Contract Item (Pay Item)	Pay Unit
Dr Structure, __ inch dia, Modified.....	Each

The work of **Dr Structure, __ inch dia, Modified** includes the concrete footing, and up to 8' of drainage structure depth. The unit price for **Dr Structure, __ inch dia, Modified** includes the cost of temporary or final grade adjustments of the structure. **Dr Structure, __ inch dia, Modified** will be measured by the unit each and will be paid for at the contract unit price per each, which price shall be payment in full for all labor, material, and equipment necessary to accomplish this work.

If during construction, due to utility conflicts or plan revisions, modifications are required to the piping connection holes or additional taps are required to precast concrete sections, this work will be paid for separately, in the Pay Item for the **Dr Structure, Tap, inch**.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
GEOTEXTILE, SEPARATOR, MODIFIED

City of Owosso/CW

1 of 1

August, 2019

a. Description. The work of **Geotextile, Separator, Modified** shall consist of furnishing and placing geotextile on prepared subgrade. Work shall be in accordance with Section 308 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, or as modified herein.

b. Materials. Geotextile, Separator, Modified shall meet or exceed products as manufactured by Mirafi 550X, US Fabrics US 270, ADS 315W, or approved equal.

d. Measurement and Payment. The completed work as measured for **Geotextile, Seperator, Modified** will be paid for at the contract unit price for the following contract item (pay item).

Contract Item (Pay Item)

Pay Unit

Geotextile, Separator, ModifiedSquare Yard

The work of **Geotextile, Separator, Modified** will be measured in place by area in square yards and will be paid for at the contract unit price per square yard which price shall be payment in full for all labor, material, and equipment necessary to accomplish this work. Overlaps, cutting, and fitting of Geotextile, Separator, Modified will not be measured and paid for separately, but are considered included as part of the in-place area measure of the Geotextile, Separator, Modified.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TEMPORARY PEDESTRIAN TYPE II BARRICADE

OFS:RAL

1 of 2

APPR:CAL:CT:08-02-16

a. Description. This work consists of furnishing, installing, maintaining, relocating, and removing a temporary pedestrian Type II barricade section as identified in the proposal or on the plans. Use temporary pedestrian Type II barricades to close non-motorized facilities including sidewalks, bicycle paths, pedestrian paths, and shared use paths that are not part of the roadway. One pedestrian Type II barricade is defined as a barricade section at least 43 inches wide, including all supports, ballast, and hardware.

b. Materials. Provide a temporary pedestrian Type II barricade that meets the requirements of *National Cooperative Highway Research Program Report 350 (NCHRP 350)* or *Manual for Assessing Safety Hardware (MASH)*, in addition to meeting the following requirements:

1. Provide barricade sections at least 43 inches wide, designed to interconnect to ensure a continuous *Americans with Disabilities Act (ADA)* compliant tactile barrier. Ensure the connection includes provisions to accommodate non-linear alignment as well as variations in elevation at the installation area.

2. Ensure the top surface of the barricade is designed to function as a hand-trailing edge, and has a height between 32 and 38 inches. Ensure the lower edge of the barricade is no more than 2 inches above the surface of the non-motorized facility. Ensure the top edge of the bottom rail of the barricade is a minimum of 8 inches above the surface of the non-motorized facility. The barricade may have a solid continuous face. Finally, all features on the front face of the barricade (the face in contact with pedestrians) must share a common vertical plane.

3. Equip both sides of the barricade with bands of alternating 6-inch wide orange and white vertical stripes of reflective sheeting. Two bands of sheeting 6 inches tall and a minimum of 36 inches long containing at least two orange and two white stripes each are required. One band placed near the top and one near the bottom if the barricade section has a solid face. If the barricade consists of two rails, affix one band of sheeting to each rail. Ensure the stripes of reflective sheeting are aligned vertically. Ensure this sheeting meets or exceeds the requirements of *ASTM D 4956* Type IV sheeting.

c. Construction. Construct the temporary pedestrian Type II barricade in accordance with the manufacturer's recommendations, Michigan Manual on Uniform Traffic Control Devices (MMUTCD), the plans, and the following requirements:

1. Install the barricade as shown on the plans and as directed by the Engineer. Interconnect all barricade sections using hinge components if necessary to ensure a continuous detectable edge for the entire installation. Ensure the barricade is ballasted according to the manufacturer's recommendations to ensure stability during wind events and contact with pedestrians.

2. When the barricade is installed near motor vehicle traffic, ensure reflective sheeting is visible to motorists.

3. When pedestrian Type II barricades are used to close a non-motorized facility, ensure a sufficient number of barricade sections are used to block the entire width of the facility. The barricade may extend outside the edge of the non-motorized facility but must not be less than the full width of the facility.

4. If sections of multiple colored barriers are used (i.e. safety orange and white) install the sections such that the colors alternate to increase conspicuity.

5. Ensure pedestrian Type II barricades are not used to close a motor vehicle facility. Ensure these barricades are not used to guide pedestrian traffic on a motor vehicle facility in the presence of active traffic. This prohibition includes bicycle/shared use lanes or shoulders in the presence of active traffic.

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
Pedestrian Type II Barricade, Temp	Each

Pedestrian Type II Barricade, Temp, includes all labor, equipment, and materials to furnish, install, maintain, relocate, and remove one barricade section that is at least 43 inches wide. Additional payment will not be made if wider sections are provided. This includes all rails, supports, ballast, hinge points, reflective sheeting, and miscellaneous hardware needed to install and maintain a barricade section.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
SANITARY SERVICE, CONFLICT

City of Owosso/RC

1 OF 1

August, 2020

a. Description. The work of Sanitary Service, Conflict consists of relocating (lowering) existing sanitary service connections that conflict with proposed storm sewer installation as shown on the plans or as directed by the Engineer. The work must be coordinated with City of Owosso DPW officials.

b. Materials. The materials for relocating existing sanitary sewer service connections shall consist of new material meeting the requirements of the City of Owosso. City DPW officials will review with the Contractor the type of material found, then determine suitable new material and adaptors required to reconnect the sanitary service.

c. Construction. The City of Owosso will be responsible for temporarily shutting off the wastewater system. The Contractor shall cooperate with City of Owosso DPW officials in establishing service relocation, material selection, and work method in order to reroute the sanitary service under the proposed storm sewer. The entire crossing area shall be filled with 6A compacted crushed stone, from bottom of pipe to one foot above top of pipe. A geotextile separator shall be laid on top the stone backfill. Granular Material, Class II shall be placed and compacted from the geotextile separator to plan grade.

d. Measurement and Payment. The completed as measured for Sanitary Service, Conflict will be paid for at the Contract Unit Price for the following Pay Item:

Pay Item	Pay Unit
Sanitary Service, Conflict.....	Each

Sanitary Service, Conflict will be measured in place by the unit Each; and will be paid for at the contract unit price per Each, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

CITY OF OWOSSO
SPECIAL
PROVISION FOR
SEWER SDR-26

City of Owosso/RC

1 of 1

April, 2020

a. Description. The work of Sewer, SDR-26, _ inch, Tr Det __, Modified, shall consist of excavation, furnishing and placing plastic sewer pipe, and trench backfill, in accordance with section 402 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, Michigan Department of Transportation Standard Plan R-83 series and the details within the construction plans, except as modified herein.

b. Materials. Materials for sewer pipe shall meet or exceed ASTM D-3034 SDR-26 or ASTM D-2241 SDR-26 specifications for PVC integral gasket sewer pipe, depending on pipe diameter. Material for backfill shall be in accordance with the details within the standard plan R-83 series.

c. Construction. The extensions/connections to existing culverts/sewers on this project will require a FERNCO coupler to obtain a tight seal at the joint connecting new pipe to existing pipe. The joint between the existing and new pipes shall be constructed according to the 2012 MDOT Standard Specifications for Construction and as directed by the Engineer. Any extra work required to obtain tight joints will not be paid for separately but will be included in compensation for new pipe. Sewer trench shall meet requirements of Trench Detail B, Modified, as shown on the plans.

d. Measurement and Payment. The completed work as measured for Sewer, SDR-26, _ inch, Tr Det __, Modified will be paid for at the contract unit price for the following contract item (pay item).

Contract Item (Pay Item)	Pay Unit
Sewer, SDR-26, _ inch, Tr Det __, Modified	Foot

Sewer, SDR-26, _ inch, Tr Det __, Modified will be measured in place by length in feet and will be paid for at the contract unit price per foot which price shall be payment in full for any Fernco fittings, connecting to existing sewers, neoprene gaskets, couplers, sheeting or shoring trench walls, backfill as required and all labor, material and equipment needed to accomplish this work.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TURF ESTABLISHMENT, PERFORMANCE

RSD:JLB

1 of 6

APPR:DMG:KJS:05-13-20

a. Description. For the work specified in this special provision paid for by the pay item Turf Establishment, Performance only, delete section 816 of the Standard Specifications for Construction and replace it with this special provision. The Contractor is responsible for the performance and quality of turf growth in the areas shown on the plans and as identified by the Engineer. Comply with all local, state and federal laws when completing this work.

Establish a durable, permanent, mature, perennial turf. The work consists of fundamental turf work, including but not limited to topsoiling, seeding, mulching, erosion control, maintenance, watering and repair of turf as described herein during the life of the contract and during the life of any supplemental performance bond which may ensue.

Choose and implement proven turf establishment industry practices; provide all necessary labor and equipment; select and provide all turf establishment materials; and control erosion and any subsequent sedimentation at all times.

Perform a site analysis, interpret the results and implement a turf establishment program to ensure compliance with this specification. The site analysis must take into consideration topsoil needs, fertilizer and pH requirements, seed mix, existing and future soil moisture levels, slopes and grades, required erosion control measures, maintenance requirements, local highway snow removal and deicing practices, and any other characteristics that influence and affect turf establishment.

Subsection 107.11 of the Standard Specifications for Construction is revised relative to the Contractor's responsibility for the repair of turf establishment work as follows. The Contractor is responsible, at no additional cost to the contract, for the repair of turf establishment work occasioned by storm events up to 3 inches of rain in a 24 hour period as documented by local meteorological data submitted to the Engineer for review and approval. All other portions of subsection 107.11 remain unchanged.

1. Contractor Turf Establishment Experience Requirements. Ensure weed control is done by a commercial herbicide applicator, licensed by the State of Michigan and certified by the Michigan Department of Agriculture & Rural Development (MDARD) in the appropriate category to apply herbicides. Use application procedures and materials in accordance with federal, state and local regulations. Use of restricted use chemicals is prohibited. Provide appropriate documentation and secure approval from the Engineer before application of herbicides.

At least 10 work days prior to the start of turf establishment, provide documentation to the Engineer, from the Contractor performing the turf establishment work, that they meet one or both of the following requirements.

A. At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has a degree or certificate in Turf Management, Horticulture or related field.

B. At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has at least 5 years of experience in roadside turf establishment.

b. Materials. Provide topsoil, seed, mulch, pesticide, herbicide, mulch blanket and any other unique erosion control materials as necessary to fulfill this specification, as shown on the plans. Use additional materials, as necessary, to meet the standards set forth for turf establishment in this special provision. The use of sod on the project requires the prior approval of the Engineer and if approved, may be used at limited site locations only.

Selection of all materials is the responsibility of the Contractor with the following minimum conditions.

1. Soil. Provide furnished or salvaged topsoil, which may be blended compost, that will support vigorous growth. Ensure topsoil is humus bearing and placed at least 4 inches deep. Ensure it is free of stones larger than 1/2 inch (2 inches on freeway projects) in diameter and other debris. Trim and grade the finished slope in accordance with subsection 205.03.N of the Standard Specifications for Construction.

2. Seed. Use a seeding mixture that is composed of four or more species of perennial grass. Use only species and their cultivars or varieties which are guaranteed hardy for Michigan.

Recommended species of perennial grasses include Kentucky Bluegrass, Perennial Ryegrass, Hard Fescue, Creeping Red Fescue, Chewings Fescue, Turf-type Tall Fescue, Buffalo grass, and Alkaligrass-Fulfs Puccinellia distans. Select cultivars or varieties of grasses that are disease and insect resistant and of good color. Ensure that no one species in the mix is less than 5 percent, or more than 25 percent, of the mixture by weight. Do not select grass species considered noxious or objectionable, such as Quack Grass, Smooth Brome, Orchard Grass, Reed Canary Grass and others.

A. Ensure the seed is legally saleable in Michigan. Ensure the seed product does not contain more than 10 percent inert materials. Ensure the seed source is an MDOT approved certified vender.

B. Adapt the species and varieties of seed to the site conditions, to the site use, and to the soils, moisture and local climate. Site use may include, but is not limited to, detention pond, wildlife habitat, playground, wetlands, forested wetland, rural roadside, urban roadside and highly maintained front yard.

C. Ensure at least two of the species in the mixture proposed to be planted within 15 feet behind the curb or the shoulder are salt tolerant.

3. Mulch. Mulch seeded areas with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation.

4. Herbicides. Comply with all federal, state and local laws. As part of the MDARD weed

control application, the Contractor is required to make proper notifications and postings in accordance with the label and MDARD requirements for all locations that will be sprayed. Notify the Engineer at least 48 hours prior to any applications being made. Furnish and apply herbicide(s) as needed. It is the Contractor's responsibility to select the herbicide(s) and the rate at which it is used. Obtain the Engineer's approval of work methods and herbicide(s) selected prior to the application of the herbicide(s). Complete a spray log and submit to the Engineer each day an application is made.

Do not draw water from any waterway (i.e. river, ditch, creek, lake etc.) located on state, county or municipal right-of-way, for mixing with herbicides.

5. Fertilizers. Furnish and apply fertilizer(s) as needed. It is the Contractor's responsibility to select the fertilizer(s) and the rate at which it is used. Phosphorus is allowed for use only at the time of planting and when required by soil conditions. Obtain the Engineer's approval of work methods and fertilizer(s) prior to the application of the fertilizer(s).

6. Water. Furnish and apply water from an approved source at a rate to promote healthy growth.

c. Construction. The Contractor is responsible for all work and all construction methods used in completing this work. Implementation of any part of the standard specifications or standard plans by the Contractor does not relieve the Contractor of responsibility for acceptability of the construction methods or for the quality of the work.

1. Inspection of the Work. The Contractor is responsible for all inspection of turf establishment work.

Use a Contractor's Daily Report, approved by the Engineer, to report inspections made and to document turf establishment work performed on this project. Complete and submit a Contractor's Daily Report to the Engineer when any work performed under this special provision is in progress.

Include all necessary materials documentation including tests slips, certifications, etc. with the associated Contractor's Daily Report.

The Engineer will determine the acceptability of the Contractor's Daily Report in terms of the completeness and accuracy. The Engineer reserves the right to verify all submitted measurements and computations. Failure by the Contractor to submit acceptable and timely reports to the Engineer may result in withholding of progress pay estimates on turf-related items until such time as reports are submitted and deemed acceptable.

The Engineer reserves the right to inspect the project for any reason in accordance with subsection 104.01 of the Standard Specifications for Construction, including the fulfillment of other inspection requirements such as Soil Erosion and Sedimentation Control, NPDES, etc. Inspections made by the Engineer do not relieve the Contractor of the responsibility for inspections required by this special provision or the Contractor's responsibilities for erosion control and turf establishment.

2. Erosion Control. Control erosion at all times in accordance with section 208 of the Standard Specifications for Construction. Control of soil erosion is the responsibility of the Contractor. However, ensure sedimentation controls are placed as shown on the plans or as

directed by the Engineer. Continuously monitor the site for needed erosion repair from any cause as addressed in the contract. Return all eroded areas to original grade as detailed in the contract.

Take immediate corrective action if sedimentation occurs in drainage structures or any watercourse or water containment area and stabilize all disturbed areas contributing to this sedimentation within 24 hours after the erosion occurrence. Remove sediment deposited as a result of the Contractor's inability to control the soil erosion at the Contractor's expense.

Reimburse the Department for any costs levied against the Department, such as fines, environmental costs, costs for remedies required, or any other costs as a result of the Contractor's failure to comply with this special provision and with federal, state and local laws.

3. Erosion Repair. The Contractor is responsible for all repairs and liable for all consequences (legal, monetary or other) associated with erosion or sedimentation damage to finished or unfinished work.

Report all erosion occurrences and the repairs made by the Contractor to the Engineer in the format and at the frequency required by the Engineer. Repair any erosion, displacement or disturbance to ongoing or completed work by any cause at no additional cost to the contract unless otherwise noted herein.

The Contractor is responsible and liable for all traffic control and safety measures required to repair and protect damaged turf areas. Repair any eroded area that may affect the support of the roadbed or safety of the public within 24 hours of the erosion occurrence.

Place protective devices such as barriers, directional signs/signals, temporary fence, or any other safety measures immediately after any erosion damage occurs that has the potential of endangering the public. In these instances, provide the Engineer with a written summary of the immediate action taken describing the repairs made and the safety measures taken, within 24 hours of the occurrence of the damage.

4. Mowing and Weeding. Maintain turf to a visually appealing level, and not more than 8 inches in height at any time, prior to acceptance. Weeds must be controlled to less than 10 percent of the turf establishment area at all times during construction.

5. Final Acceptance and Supplemental Performance Bond.

A. Final Acceptance Parameters. Ensure before final acceptance of the turf establishment work, all of the following minimum parameters are met throughout all exposed areas of the project designated on the plans or identified by the Engineer as turf establishment areas: there must be no exposed bare soil and the turf must be fully germinated, erosion free, weeds less than 10 percent, disease free, dark green in color and in a vigorous growing condition.

The Engineer will notify the Contractor of the dates and times of all acceptance inspections. The Contractor may accompany the Engineer during these inspections. If the Contractor does not agree with the decision made by the Engineer, the Contractor may request an inspection by a mutually agreed upon third party (Michigan State University Extension service or other). A joint inspection, to include the Engineer, the Contractor, and the third party, will be scheduled by the Engineer. Pay all expert fees and

expenses charged by the third party.

B. Supplemental Performance Bond. In the event that all contract items of work are completed, including the placement of all turf establishment items of work, and the final acceptance of the project is delayed because the final acceptance parameters for the turf establishment work have not been fully met; the Contractor may propose to the Engineer the use of a supplemental performance bond.

The bond serves to secure the successful completion of turf establishment work and fulfillment of all final acceptance parameters for the turf establishment work. Ensure the supplemental performance bond, in all respects, is satisfactory and acceptable to the Department and executed by a surety company authorized to do business with the State of Michigan.

Ensure the bond is in an amount equal to 50 percent of the turf establishment work items covered by this special provision. Ensure the bond remains in place for two growing seasons. At the discretion of the Engineer, the bond may be reduced on a prorated basis as portions of the areas designated for turf establishment on the project meet the final acceptance parameters.

Prior to commencement of any work necessary to meet the acceptance parameters during the bonded period, the Contractor must apply for a permit to work within the right-of-way through the [MDOT Permit Gateway](#). The permit fee and an individual permit performance bond will not be required. The permit insurance requirements, however, will be required.

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
Turf Establishment, Performance	Square Yard

Turf Establishment, Performance includes installing, maintaining, inspecting, repairing and meeting the acceptance parameters for turf establishment specified in this special provision, including preparation, updating and submittal of the Contractor's Daily Reports.

Repairs made to damaged turf establishment areas as a result of a documented storm by local meteorological data resulting in rainfall amounts of more than 3 inches in a 24 hour period will be paid for as an increase to original quantities in accordance with subsection 109.05 of the Standard Specifications for Construction.

The following schedule of payment applies to work performed in accordance with this special provision. Upon completion of topsoil surfacing stage, 50 percent of the authorized amount for **Turf Establishment, Performance** will be paid to the Contractor. The remaining 50 percent of the authorized amount will be paid upon completion of all other work necessary to comply with this special provision and to meet all final acceptance parameters for **Turf Establishment, Performance** or at such time as the supplemental performance bond is accepted by the Department.

The supplemental performance bond and all costs associated with turf establishment work performed during the duration of the performance bond will not be paid for separately. These

costs which may include, but are not limited to, mobilization, traffic control devices, and the required permit insurance are included in the unit price bid for **Turf Establishment, Performance.**



INDIVIDUAL CONSTRUCTION PERMIT
For Operations within State Highway Right-of-Way

Issued To:
 City of Owosso

301 W MAIN ST
 OWOSSO MI 48867-2915

Contact:
 Clayton Wehner
 989-725-0551(O) 989-666-8203(Cell)
 clayton.wehner@ci.owosso.mi.us

Secondary Contact:
 randy chesney
 989-725-0550(O) 989-494-2545(Cell)
 randy.chesney@ci.owosso.mi.us

Permit Number: 76041-081220-21-102021
Permit Type: Individual Application
Permit Fee:
Effective Date: Oct 20, 2021 to Oct 20, 2022
Bond Numbers:
Liability Insurance Expiration Date:

THIS PERMIT IS VALID ONLY FOR THE FOLLOWING PROPOSED OPERATIONS:

PURPOSE:

Street reconstruction on Maple Avenue. Advance warning signs will be placed in the M-71 right-of-way. Storm sewer connection to the existing catch basin in the northwest quadrant of the Maple Avenue & M-71 intersection in the M-71 right-of-way. Sidewalk removal and replacement within the M-71 right-of-way.

STATE ROUTE: M-71 **CITY OF:** Owosso **COUNTY:** Shiawassee County

NEAREST INTERSECTION:	SIDE OF ROAD:	DISTANCE TO NEAREST INTERSECTION:	(in feet)	DIRECTION TO NEAREST INTERSECTION:
Maple Avenue	N	0.00		South

CONTROL SECTION:	MILE POINT FROM:	MILE POINT TO:	LOCATION:			
			LEFT	MEDIAN	RIGHT	TRANSVERSE
76041	9.720	9.720	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REQUISITION NUMBER: **WORK ORDER NUMBER:** **MDOT JOB NUMBER:** **ORG JOB NUMBER:**

This permit is incomplete without "General Conditions and Supplemental Specifications"

I certify that I accept the following:

1. I am the legal owner of this property or facility, the owner's authorized representative, or have statutory authority to work within state highway Right-of-Way.
2. Commencement of work set forth in the permit application constitutes acceptance of the permit as issued.
3. Failure to object, ***within ten (10) days*** to the permit as issued constitutes acceptance of the permit as issued.
4. If this permit is accepted by either of the above methods, I will comply with the provisions of the permit.
5. I agree that Advance Notice for Permitted Activities for shall be submitted **5 days prior** to the commencement of the proposed work.
I agree that Advance Notice for Permitted Utility Tree Trimming and Tree Removal Activities shall be submitted **15 days prior** to the commencement of the proposed work for an annual permit.

CAUTION

**Work shall NOT begin until the Advance Notice has been approved.
Failure to submit the advance notice may result in a Stop Work Order.**

City of Owosso

Alina Sokolowski
MDOT

October 20, 2021
Approved Date

TSC Contact Info

Davison TSC

(810) 653-7470

THE STANDARD ATTACHMENTS, ATTACHMENTS AND SPECIAL CONDITIONS MARKED BELOW ARE A PART OF THIS PERMIT.

STANDARD ATTACHMENTS:

- 1 Special Conditions For Underground Construction (2205C)
- 2 General Conditions (General Conditions)

ADDITIONAL ATTACHMENTS:

- 1 2022 Street Program - Contract 1 10-13-2021.pdf

AMENDMENT ATTACHMENTS:

SPECIAL CONDITIONS:

- 1 All disturbed areas within the right of way shall be top-soiled, seeded and mulched to match existing areas per current MDOT standards and specifications.
- 2 Proposed 12" tap into existing structure at existing elevation is approved if sewer is replaced in kind as shown with no additional flow added to the system on M-71. Sidewalk ADA ramps shall be constructed per Standard Plan R-28 as shown. Utility coordination is the responsibility of the City.

GENERAL CONDITIONS

This permit is issued subject to the following General Conditions:

1. This permit grants to the permittee only those rights specifically stated and no other. Maintenance work within the trunkline right of way may require a separate permit unless authorized within the scope of the annual permit.
 2. Issuance of this permit does not relieve permittee from meeting any and all requirements of law, or of other public bodies or agencies. The permittee shall be responsible for securing including but not limited to any other permissions including or required by law including but not limited to cities, villages, townships, corporations, or individuals for the activities hereby permitted.
 3. The permittee agrees as a General Condition of this permit to:
 - a. Have in the permittee's or the permittee's representative's possession on the job site at all times the approved permit, advanced notice and any necessary plans or sketches.
 - b. Submit Advance Notice through the online Construction Permit System (CPS) at least five (5) working days prior to commencement of any operations covered by this permit. No work shall start until an approved Advance Notice is e-mailed to the permittee.
 - c. Perform no work except emergency work, unless authorized by the Department (Michigan Department of Transportation [MDOT]), on Saturdays, Sundays, or from 3:00 p.m. on the day proceeding until the normal starting time the day after the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
 - d. Perform no work except emergency work during periods of inclement weather when reduced visibility or slippery conditions impair trunkline traffic.
 - e. Provide and maintain all necessary precautions to prevent injury or damage to persons and property from operations covered by this permit.
 - f. Furnish, install and maintain all necessary traffic controls and protection during permittee's operations in accordance with the Michigan Manual of Uniform Traffic Control Devices and any supplemental specifications set forth herein.
 - g. Once work is initiated that includes any lane restrictions, that work must be continued daily until completed. A lack of work activity for more than 3 days will require the removal of lane closures at no expense to the Department.
 - h. Notify the Department of completion of work authorized by this permit through CPS, so that final inspection may be made and surety deposit released (where applicable). Surety deposit will not be released until the work authorized by the permit has been completed and inspected, and all inspection charges billable to the permittee are paid.
 4. Nothing in this permit shall be construed to grant any rights whatsoever to any public utilities, except as to the consent herein specifically given, nor to impair any existing rights granted in accordance with the constitution or laws of this state.
 5. Any operations in the trunkline right of way not covered by permit and the appropriate Department specifications are in violation of the jurisdictional authority of the Department, with respect to the control of the trunkline right of way, unless approved by the Department. Any change or alteration in the permit activities requires prior approval of the Department and may require a new permit.
 6. Performance of the requirements of this permit is the responsibility of the permittee. The permittee shall complete all operations for which this permit is issued in accordance with the General Conditions and conditions of this permit, by the specified completion date. The permittee shall meet all requirements of the current Department Standard Specifications for Construction, and the Supplemental Specifications set forth on/or incorporated as a part of this permit.
 7. The construction, operation and maintenance of the facility covered by this permit shall be performed without cost to the Department unless specified herein. The permittee shall be responsible for the cost of restoration of the state trunkline and right of way determined by the Department to be damaged as a result of the activities of the permittee.
 8. Facilities allowed on state trunkline right of way shall be placed and maintained in a manner which will not impair the state trunkline or interfere with the reasonable safe and free flow of traffic. Failure of the permittee to maintain the facilities located within the State trunkline right of way so as not to interfere with the operation, maintenance or use of the state trunkline by the traveling public may result in revocation of the permit.
 9. The permittee is solely and fully responsible for all activities undertaken pursuant to the permit. Any and all actions by the Department and those governmental bodies performing permit activities for the Department pursuant to a maintenance contract, including but not limited to any approved reviews and inspections of any nature, permit issuing, and final acceptance or rejection of the work or activity authorized by the permit shall not be construed as a warranty or assumption of liability on the part of the Department or those governmental bodies. It is expressly understood and agreed that any such actions are for the sole and exclusive purposes of the Department and the governmental bodies acting in a governmental capacity. Any such actions by the Department and governmental bodies will not relieve the permittee of its obligations hereunder, nor are such actions by the Department and the governmental bodies to be construed as a warranty as to the propriety of the permittee's performance.
- Note: The following General Condition does not apply to municipalities with executed resolutions on file with MDOT.
- The permittee shall indemnify, defend, and save harmless the State of Michigan, Michigan Transportation Commission, the Department and all officers, agents and employees thereof, and those governmental bodies performing permit activities for the Department and all officers, agents and employees thereof, pursuant to a maintenance contract, against any and all claims for damages arising from operations covered by this permit except claims resulting from the sole negligence or willful acts or omissions of said indemnities, its agent, or employees. In addition, permittee upon request shall furnish proof of insurance coverage for the term of this permit in an amount pre-specified.
10. The permittee or representative must ensure that all insurance policies and binders include an endorsement by which the insurer

agrees to notify the Department in writing at least 30 days before there is a cancellation or material change in coverage. The permittee or representative must stop operations if any insurance is cancelled or reduced and must not resume operations until new insurance is in force. The State of Michigan, Michigan Transportation Commission, Department of Transportation, and governmental bodies performing permit activities under a maintenance contract, and all officers, agents, and employees of all the above, for claims arising out of, under, or by reason of operations covered by the permits issued to the permittee.

1. This permit is not assignable and not transferable unless specifically agreed to by the Department.
2. The permittee, upon request of the Department, shall immediately remove, cease operations, and surrender this permit, or alter or relocate, at the permittee's own expense, the facility for which this permit is granted. Upon failure to do so, the Department may take any necessary action to protect the trunkline interest and the permittee shall reimburse the Department for its costs in doing same. The permittee expressly waives any right to claim damages or compensation in the event this permit is revoked.
3. The permittee shall, upon request by the Department, furnish a performance surety deposit in the form of a bond, cash, certified check, or (when authorized by the Department) an irrevocable letter of credit in such amount as deemed necessary by the Department to guarantee restoration of the trunkline highway or performance under the General Conditions and conditions of the permit.
4. The permittee hereby acknowledges and agrees that the Department has the right to demand completion by the permittee, or the performance surety, or to complete any uncompleted activity authorized by this permit which adversely affects the operation and/or maintenance of the state trunkline highway, or which is not completed by the expiration date of the permit, including:
 - a. Completion of construction of driveway and/or approach (not authorized by annual permit).
 - b. Removal of materials.
 - c. Restoration of the trunkline facilities and right of way as necessary for the reasonably safe and efficient operations of the trunkline highway.

The permittee further agrees to immediately reimburse the Department in full for all such costs incurred by the Department upon receipt of billing, and that upon failure to pay, the Department may affect payment with the performance surety deposit. Should the surety deposit be insufficient to cover expenses incurred by the Department, the permittee shall pay such deficiency upon billing by the Department. If the surety deposit exceeds the expense incurred by the Department, any excess will be returned or released to the depositor upon completion of the work to the satisfaction of the Department.

5. The Department reserves the right during the time any or all of the work is being performed to assign an inspector to protect the trunkline interest, and to charge the permittee all such costs incurred. In addition, the permittee may be billed any engineering and review fees incurred by the Department or its agent in connection with the work covered by this permit.
6. Emergency Operations: In time of disaster or emergency, or when utility lines or facilities are so damaged as to constitute a danger to life and/or property of the public, access to the same may be had by the most expeditious route. Work is to be completed in a manner which will provide the traveling public with maximum possible safety and minimize traffic distribution. Notice of such situations shall be given to the nearest police authority and the department as soon as can reasonably be done under the

circumstances. During normal Department work hours, the facility owner shall advise the Department of any operations within right of way which affect traffic operations or the highway structure or facilities prior to performance of the work. After normal Department work hours, the permittee, at the beginning of the first working day after the emergency operation, shall advise the Department of any operations which affect traffic operations or the highway structures and facilities. If determined necessary by the Department, the permittee shall secure an individual permit for such work after notification.

7. Upon the Department's request, as built drawings of work performed will be furnished to the Department within 30 days after completion of the work.
18. The permittee shall give notice to public utilities in accordance with Act 174 of 2013, as amended, and comply with all applicable requirements of this act. The permittee shall also comply with requirements of Act 451, P.A. of 1994, as amended.
19. The permittee acknowledges that the Department is without liability for the presence of the permittee's facility which is located within the trunkline right of way. Acceptance by the Department of work performed, and/or notice of termination of performance obligations for the surety and/or the permittee do not relieve the permittee of full responsibility for the permittee's work or for the presence of the permittee's facility in the trunkline right of way.
20. Where the Department has accepted an Indemnification Commitment in lieu of bond and/or insurance policies, such commitment is incorporated into this permit by reference.
21. It is illegal to discharge substances other than storm water into the Department's storm sewer system unless permission has been obtained in writing for other discharges.
22. The permittee shall be responsible for obtaining information on permitted environmental site closures within MDOT right of way. MDOT has implemented a program that allows environmental contamination to remain within the right of way by use of a permit. Issued permit information can be obtained from the Region/TSC in which the permit is issued. If the permittee will encounter a site area identified as a site closure permit area, the permittee shall follow instructions and conditions set forth in Supplemental Specifications #3 and specifications found in form 2205-C, "Special Conditions for Underground Construction".
23. Other than for normal daily vehicle and equipment usage requirements, the permittee shall not use or store unattended equipment, or the following types of hazardous materials on, over, under, or immediately adjacent to Department or Local Agency owned buildings, bridges and structures, unless expressly approved by the Department in writing:

Explosive, flammable gas, non-flammable gas, inhalation hazard, oxygen, flammable liquids, fuel oil, combustible, gasoline, flammable solids, spontaneously combustible, dangerous-when-wet, oxidizer organic peroxide, toxic, poisonous, inhalation hazard, infectious, radioactive, corrosive, or any other potentially hazardous material.

Furthermore, the permittee shall not allow hazardous or unreasonably objectionable smoke, fumes, vapor, or odors to emit from any permitted operation. No junk, garbage, refuse or unused construction materials shall be stored or accumulated within the MDOT Right-of-Way.
24. It is the responsibility of the utility owner to provide the depth and location of their facilities within MDOT ROW upon the department's request.

SUPPLEMENTAL SPECIFICATIONS

1. Construction and Maintenance of Facilities – To construct and maintain utility crossings of limited access highways, access for the utility's service vehicles may be from county roads, service roads, and openings authorized in limited access right of way fences. The construction of utilities across limited access highways should be for the purpose of serving a general area rather than providing individual services, unless extenuating circumstances necessitate such crossings.

Equipment, vehicles or personnel will not operate within a distance of 30 feet from the edge of the pavement of roadways or ramps on limited access highways. At locations where utilities have been constructed in medians having a width greater than 80 feet or have otherwise been allowed to remain or to be constructed in limited access right of way, ingress and egress shall be by such routes as specified by the Department, which may also specify additional safety provisions.

2. Restoration- Restoration of the trunkline highway and right of way will be such that it will provide a condition equal to or better than the original condition, in accordance with Michigan Department of Transportation Standard Specifications.
3. Excavation and Disposal of Excavated Material – The permittee shall provide and place the necessary sheeting, shoring and bracing required to prevent caving, loss or settlement of foundation material supporting the pavement, or any other highway installation such as sewers, culverts, etc. The permittee shall assume the full responsibility for this protection and shall not proceed in these areas before approval of the methods by the Department.

Construction equipment and excavating material shall not be stocked in such locations that it creates a traffic hazard or interferes with the flow of traffic; and on limited access highways, shall be a minimum of 30 feet from the traveled way. Sod and topsoil shall be stacked separately from other excavated material. The permittee shall dispose of all surplus and unsuitable material outside of the limits of the highway, unless the permit provides for disposal at approved locations within right of way. In the latter case, the material shall be leveled and trimmed in an approved manner.

When the permittee is excavating within trunkline right of way and discovers existing contaminated soil and/or an abandoned underground storage tank, special permit specifications entitled "Special Conditions for Underground Construction" (Form 2205-C) shall apply.

4. Utility Cuts, Trenches and Pavement Replacement – Utility crossing by pavement cutting and removal are generally prohibited. If extenuating circumstances make tunneling, boring and jacking impractical pavement cutting may be used with approval of the Department. All utility cuts, trenching and pavement replacement shall comply with the requirements of the Standard Specifications and the Standard Plan "Utility Cuts, Trenches and Pavement Replacement". Unless otherwise specified, cuts in concrete residential and commercial drives shall be as above; except that the patch width shall be a minimum of 3 feet and the remaining slab from patch to existing joint shall be a minimum of 3 feet. Backfill shall be made with sand-gravel as specified in the Standard Specifications, unless otherwise directed. After the backfill has been placed and compacted by controlled density method, the pavement shall be replaced with new pavement of the original type and quality, unless at the season of the year when it is not feasible to replace

pavement in kind. In this case, a temporary surface of bituminous material shall be placed with Department approval and later replaced with pavement of the original type at the applicant's expense. Other pavement types may be allowed with prior approval of the Department.

5. Crossing Roadbed by Tunneling or Boring and Jacking – All crossing of roadbed operations involving tunneling, boring and jacking shall comply with the Department's special provisions for such work.
6. Backfilling and Compacting Backfill – Unless otherwise specified, all trenches, holes and pits shall be filled with sound earth or with sand-gravel if so provided, placed in successive layers not more than 9 inches in depth, loose measure, and each layer shall be thoroughly compacted by tamping. All backfill compaction will be subject to check by the controlled density method.
7. Depth of Cover Method- Unless otherwise authorized, pipes shall be placed to a depth that will provide not less than 6 feet of cover between the top of the roadway surface and the pipe, 3 feet cover below the ditch line. All bores across MDOT highways that are 12" or larger will require a geotechnical report that complies with the General Conditions and conditions of the permit.
8. Trees:
 - a. The permittee is responsible for obtaining permission from abutting owners when trimming or removing trees on easement right of way.
 - b. Tree removal or trimming may be undertaken only after submission of an "Advance Notice" through CPS, a field review by the Region Resource Specialist and an approved copy of the advanced notice is e-mailed to the permittee.
 - c. Limbs, logs, stumps and litter shall be disposed of in a manner acceptable to the Department.
 - d. Tree roots shall be bored a distance of one foot for each one inch of trunk diameter for underground utility installations
9. Aerial Wire Crossings – Vertical clearance of wires, conductors and cables over state trunkline shall not be less than required by Section 232 of the National Electrical Safety Code, except in no case shall the under-clearance below any wire, conductor, or cable, under any temperature or loading condition, be less than eighteen feet (18').

SPECIAL CONDITIONS FOR UNDERGROUND CONSTRUCTION

The following special permit specifications shall apply when the permittee is excavating or performing any underground activity within trunkline right of way and discovers existing contaminated soil and/or an abandoned underground storage tank:

1. In the event the permittee encounters environmental contamination and/or an underground storage tank in the right of way, the Michigan Department of Transportation (MDOT) shall be immediately notified. All Michigan Department of Natural Resources and Environment (MDNRE) and Federal Environmental Protection Agency (EPA) environmental requirements shall be complied with by the permittee. Unless the Department agrees in writing the following steps are to be taken:
 - a. The contaminated material that has been removed shall be temporarily stockpiled per MDNRE requirements. If stockpiled on the right of way, the site shall not interfere with MDOT operations or create a traffic safety problem. Also, the contaminated material shall be placed on plastic sheeting or tarp having a minimum thickness of 6 mils or in trucks, roll off boxes, or other containers, such that no liquid may escape from the containment. At the end of each work day, the contaminated material shall be covered securely with plastic sheeting of 6 mil thickness or greater.
 - b. Upon completion of any testing deemed necessary by the Department or the MDNRE, the material shall be disposed of in an approved waste disposal site unless otherwise directed by the MDNRE.
 - c. In no case shall the contaminated material be stockpiled for longer than 45 days prior to disposal.
2. The permittee shall cooperate with MDOT personnel and pertinent regulatory agencies in resolving the contamination problem as required by law.
 - a. The manner in which the permittee manages and secures the site shall not interfere with the MDOT's interests.
 - b. The permittee shall not excavate as part of any site management operation within the one-on-one slope from the edge of shoulder without the permission of MDOT.
3. MDOT shall not indemnify or compensate the permittee for any costs or damages of any kind that the permittee incurs as the result of contamination encountered within the right of way. It is understood that the possibility of encountering contamination and the damages which might be incurred by the permittee because of the contamination are business risks the permittee assumes in choosing to locate and maintain facilities within the Right-of-Way.

The permittee is responsible for any costs that it incurs to secure the contaminated site in such a manner as to meet the requirements of the MDNRE and/or EPA and the requirements of MDOT.

4. The permittee, upon approval of MDOT, may continue to place its facility through the contaminated area providing remedial actions that meet the approval of MDOT and other enforcement agencies involved are followed.
 - a. All additional costs the permittee incurs, as a result of continuing to place its facilities within the contaminated area, are the responsibility of the permittee.
 - b. All contaminated material must be removed and properly disposed of as directed by MDOT and/or the MDNRE. All backfill material must be clean material, unless otherwise directed by the MDNRE. Excavation must be backfilled in a manner to prevent the creation of a pathway for migration of contamination off site.
5. The permittee is solely responsible to develop an alternate route for its facility in the event approval cannot be given to continue to place the facility within the contaminated area of the Right-of-Way. The permittee shall restore the original site as directed by MDOT.