



Work Zone Traffic Control Devices

Date Last Edited: July 15th, 2025. Effective with the August 2025 lettings

Category 1

Drums
42-Inch Cones
Flexible Tubular Markers
Traffic Channelizing Curb Systems
Vertical Panels

Category 2

Type I Barricades
Type II Barricades
Type III Barricades
Portable Sign Stands
 (w/ Rigid Signs)
 (w/ Roll-Up Signs)
Temporary Pedestrian Barricades

Category 3

Truck & Trailer Mounted Attenuators

Category 4

Arrow Boards
Connected Arrow Boards
Portable Changeable Message Signs
Speed Radar Trailers
Digital Speed Limit Trailers

Other

Type A Lights
Type B Lights
Type C Lights
Pedestrian Walkway Systems-
 (Temporary Curb Ramps & Pedestrian Surfaces)
Temporary Detectable Warning Fields
Temporary Audible Message Devices
Automated Flagger Assistance Devices
Temporary Portable Rumble Strips
Temporary Traffic Signals
Residential Driveway Temporary Signals
Connected Arrow Board Retro-fit Kits
Connected Work Zone Location Markers
Automated System Manager

****Please see the Temporary Traffic Control Device Application at the end of this**

Category 1					
Drums					
Manufacturer	Product	Approval Date		Bid Item #	
Lakeside Plastics	Director Drum	OCTOBER 2017		643.0300	
TrafFix Devices	18000 Series Drum	OCTOBER 2017			
PSS Innovations	LifeGuard II	OCTOBER 2017			
Plasticade	Commander Drum	OCTOBER 2017			
	Econocade II Drum	SEPTEMBER 2019			
	Lane Changer Traffic Drum - B500 LC	OCTOBER 2017			
Bent Manufacturing Company	Superdome Drum	JULY 2018			
The Cortina Companies	Cortina TrailBoss Drum	APRIL 2021			
42-Inch Cones					
Manufacturer	Product	Approval Date		Bid Item #	
Lakeside Plastics	Diverter Channelizer	OCTOBER 2017		643.1070	
PSS Innovations	Navigator, 42" Slimline Channelizer	OCTOBER 2017			
Plasticade	42" Channelizer C-42	DECEMBER 2017			
	Navigade Channelizer Cone	JANUARY 2018			
Bent Manufacturing Company	T-Top Channelizers	JULY 2018			
	Tear Drop Channleizers	JULY 2018			
TrafFix Devices	Looper Cone (42") 16 lb & 30 lb Bases	JULY 2018			
UAT	NG Gorilla Grip 42" Channelizer	JULY 2020			
The Cortina Companies	Grip N Go 42" Channelizerizer Cone	APRIL 2021			
Flexible Tubular Markers					
Manufacturer	Product	Approval Date		Bid Item #	
Pexco	FG 300 Series Posts	OCTOBER 2017		643.0500 643.0600 633.5350	
	CityPost Bolt Down	OCTOBER 2017			
	CityPost SM Surface Mount	OCTOBER 2017			
	CityPost GD Glue Down	OCTOBER 2017			
	Davidson FG 300 UR Series	OCTOBER 2017			
	Flexi-Guide FG 300 Model PE Series	OCTOBER 2017			
	Flexi-Guide FG 300 Model EFX Series	OCTOBER 2017			
DP 200 Channelizer Post	OCTOBER 2017				
FlexStake	FlexStake TM750 Series	OCTOBER 2017			
Valtir, LLC	Dura-Post	OCTOBER 2017			
	Safe-Hit	OCTOBER 2017			
Bent Manufacturing Co.	Masterflex Post-EX Series	OCTOBER 2017			
New Direction Manufacturing	350 Surface Mount	OCTOBER 2017			
Shur-Tite	Shur-Flex Surface Mount	OCTOBER 2017			
Lakeside Plastics	Divider - Surface Mount Post	OCTOBER 2017			
Impact Recovery Systems	MP2 Post	MARCH 2018			
	OMEGA POST - OP2	JULY 2020			
Safe-Hit	Dura-Post	OCTOBER 2017			
Impact Traffic	Tuff Post (SPEC-TP3)	OCTOBER 2017			
*Flexible Tubular Markers may be used for Work Zone or Permanent Application					
Traffic Channelizing Curb Systems					
Manufacturer	Product	Approval Date		Bid Item #	
Shur-Tite	Shur-Curb Traffic Separator	OCTOBER 2017		----	
Qwick Kurb, Inc.	Qwick Kurb	OCTOBER 2017			
Pexco	FG 300 Turnpike Grade Curb System	OCTOBER 2017			
	FG 300 Interstate Grade Curb System	OCTOBER 2017			
Impact Recovery Systems	Tuff Curb	MARCH 2018			
	Tuff Curb XLP	MARCH 2018			
Vertical Panels					
Manufacturer	Product	Approval Date		Bid Item #	
Impact Recovery Systems	8" x 24" Vertical Panels	OCTOBER 2017		----	
	12" x 24" Vertical Panes	OCTOBER 2017			

Category 2				
Type II Barricades				
Manufacturer	Product	Approval Date	Expiration Date or MASH TL3 Letter	Bid Item #
Plasticade	Combocade Type II	OCTOBER 2017	WZ-406	
Type III Barricades				
Manufacturer	Product	Approval Date	Expiration Date or MASH TL3 Letter	Bid Item #
Pexco	WZ-380	SEPTEMBER 2019	WZ-380	643.0420
	WZ-381	SEPTEMBER 2019	WZ-381	
PSS Innovations	Anchor Mast Type III Barricade	OCTOBER 2017	WZ-389	
	LaneGard 3, Collapsible Barricade System	OCTOBER 2017	WZ-336	
	PowerPost Type III with Volcano Base	DECEMBER 2017	WZ-343	
	PowerPost Type III with Steel Feet	NOVEMEBER 2024	WZ-327	
Non-Proprietary	Type III Barricade	FEBRUARY 2025	Test 3-71 Test 3-72	
Portable Sign Stands(w/ Rigid Signs)				
Manufacturer	Product	Approval Date	Expiration Date or MASH TL3 Letter	Bid Item #
TrafFix Devices	Little Buster 24000 Series (WZ-108)	OCTOBER 2017	WZ-384	---
	Big Buster Part #60060 - RSB (with Rigid Sign Bracket)	MARCH 2018	WZ-385	
	50SM-2S	DECEMBER 2024	WZ-399	
	4860M	JANUARY 2025	WZ-453	
	4860M-84	JANUARY 2025	WZ-397	
Bone Safety Signs	SZ-484-2S	OCTOBER 2017	WZ-462	
	SZ-412-X	MARCH 2025	WZ-461	
	SS105 Sign Stand	JULY 2020	WZ-350	
	SS100 Sign Stand	JULY 2020	WZ-350	
Portable Sign Stands(w/ Roll-Up Signs)				
Manufacturer	Product	Approval Date	Expiration Date or MASH TL3 Letter	Bid Item #
TrafFix Devices	Little Buster 24000 Series (WZ-108)	OCTOBER 2017	WZ-383	----
	UF2000W	MARCH 2021	WZ-392	
	TF18-RUB	DECEMBER 2024	WZ-390	
	DF3003S	JUNE 2025	WZ-341	
	50SM-NS	DECEMBER 2024	WZ-364	
	T1260M	DECEMBER 2024	WZ-393	
	4860M-LT	DECEMBER 2024	WZ-357	
	4814M-DLK	DECEMBER 2024	WZ-396	
	4814M-SL	DECEMBER 2024	WZ-395	
	4818M	DECEMBER 2024	WZ-394	
	5012M-SS	DECEMBER 2024	WZ-388	
	5012M-NCAM	DECEMBER 2024	WZ-398	
Bone Safety Signs	SZ-412	MARCH 2025	WZ-452	
	SZ-412-S	MARCH 2025	WZ-449	
	SSRB800 Sign Stand	JULY 2020	WZ-342	
	SS310A Sign Stand	JULY 2020	WZ-429	
Plasticade	SS310 Sign Stand	JULY 2020	WZ-352	
	SS300A Sign Stand	JULY 2020	WZ-351	
	SS300 Sign Stand	JULY 2020	WZ-351	
The Cortina Companies	Quadraflex VI Single Spring Sign Stand (#07-816-1)	MARCH 2023	WZ-440	
Temporary Pedestrian Barricades				
Manufacturer	Product	Approval Date	Expiration Date or MASH TL3 Letter	Bid Item #
Pexco	Temporary Pedestrian Access Route (TPAR)	OCTOBER 2016	WZ-418	644.1810.S
Plasticade	ADA Pathcade Barricade System	DECEMBER 2021	WZ-428	
PSS Innovations	Safety Rail	OCTOBER 2017	WZ-359	
	SafetyWall	OCTOBER 2017	WZ-315	
TrafFix Devices	TrafFix ADA Wall - Series 57000-A	MAY 2018	WZ-340	

Category 3				
Truck & Trailer Mounted Attenuators				
Manufacturer	Product	Approval Date	Expiration Date	Bid Item #
Lindsay	U-MAD	OCTOBER 2017	1/1/2030	----
TrafFix Devices	Scorpion Towable Attenuator	OCTOBER 2017	1/1/2030	
	Scorpion Truck Mounted Attenuator	OCTOBER 2017	1/1/2030	
	Scorpion II TL-3 Truck Mounted Attenuator	DECEMBER 2021	CC-132	
	Scorpion II TL-3 Towable Attenuator	DECEMBER 2021	CC-138	
Gregory Industries	TTMA - 200	AUGUST 2019	CC-152	
	TTMA - 100	OCTOBER 2017	1/1/2030	
Valtir, LLC.	Vorteg M	OCTOBER 2023	1/1/2030	
	SST	JANUARY 2018	1/1/2030	
	SS180*	JANUARY 2018	1/1/2030	
	SS90 HD	JANUARY 2018	1/1/2030	
	SS90	JANUARY 2018	1/1/2030	
	SS180 M	OCTOBER 2020	CC-159	
	SMT	OCTOBER 2020	1/1/2030	
Verdegro USA, LLC	BLADE TMA, MASH TL-3 100K	MARCH 2018	CC-136	

Category 4				
Arrow Boards				
Manufacturer	Product	Approval Date		Bid Item #
Work Area Protection (A Hill & Smith Brand)	Arrow Master Proline	OCTOBER 2017		643.0800
	ArrowMasterV	OCTOBER 2017		
Wanco	WTSP W ECO Folding Arrow-Board Trailer	OCTOBER 2017		
	WFB8-LSA	JANUARY 2022		
Ver-Mac	ST-4815 Trailer Mounted Arrowboard	OCTOBER 2017		
	VM - 4815 TRUCK MOUNTED ARROW BOARD	JANUARY 2022		
Trafcon Industries, Inc.	TC1	OCTOBER 2017		
Allmand	Eclipse AB2400	OCTOBER 2017		
Solar Technoloy, Inc.	Silent Sentinel/ AB-0515	JANUARY 2018		
ADDCO	15-Lamp Arrow Board (AB-15)	OCTOBER 2019		
K&K Systems Inc.	AT154896	FEBRUARY 2025		
	AT154896WT	FEBRUARY 2025		
Connected Arrow Boards				
Manufacturer	Product	Approval Date		Bid Item #
Ver-Mac	ST-4815 CAB	FEBRUARY 2024		643.0810
Solar Technology, Inc.	Silent Sentinel/ AB-0515	MAY 2025		
Portable Changeable Message Signs				
Manufacturer	Product	Approval Date		Bid Item #
Work Area Protection (A Hill & Smith Brand)	SMC-1000 ST	OCTOBER 2017		643.1050 643.1051
	SMC 2000 ST	OCTOBER 2017		
	SMC 4000	OCTOBER 2017		
	SMC 5000	OCTOBER 2017		
Ver-Mac	PCMS-1500 LP	DECEMBER 2017		
	PCMS-1210 Full-Size, 3-Line Portable Changeable Message Sign	OCTOBER 2017		
ADDCO	2017 DH1000	OCTOBER 2017		
	DH1000-ALS	OCTOBER 2017		
Wanco	WTMMB (A) FULL MATRIX MESSAGE BOARD	DECEMBER 2017		
	WTLMB (A) THREE LINE MESSAGE BOARD	DECEMBER 2017		
Solar Technology, Inc.	Silent Messenger/MB-1548	JANUARY 2018		
	Silent Messenger 2/MB-1548 (fold-n-go)	JANUARY 2018		
	Silent Messenger 2 L&R / MB2-1548 (Lift and Rotate)	JANUARY 2018		
Speed Radar Trailers				
Manufacturer	Product	Approval Date		Bid Item #
Wanco	Compact Radar-speed Trailer Model WSDT3	OCTOBER 2017		----
	Folding Frame Speed Trailer DT3 F60	JULY 2020		
Ver-Mac	SP-710V Trailer Mounted Speed Feedback Sign	OCTOBER 2017		
Solar Technology, Inc.	Silent Advisor/RST-1000 (Low Speed Applications)	MARCH 2018		
	Silent Advisor/RST-2000 (High Speed Applications)	MARCH 2018		
ITI	Speed Safe 20/20 Trailer	JULY 2021		
Digital Speed Limit Trailers				
Manufacturer	Product	Approval Date		Bid Item #
Ver-Mac	710-DSL Trailer Mounted Work Zone Digital Speed Limit Sign	AUGUST 2023		----
Solar Technoloy, Inc.	SLT-2000	MARCH 2025		

Other

Type A Lights				
Manufacturer	Product	Approval Date		Bid Item #
Empco-Lite	Model 2006	OCTOBER 2017		643.0705
	Toughlite 2000	OCTOBER 2017		
	Empco Y2K Barricade Light	MARCH 2018		
	Empco 6V 400 LED	SEPTEMBER 2019		
Dicke Tool	AC4D-NL	OCTOBER 2017		
Pi-Variables, Inc	BR3.AC.D3/D4	OCTOBER 2017		
	BR6.AC.D3/D4	OCTOBER 2017		
	BC3.AC.D3/D4	OCTOBER 2017		
	BC6.AC.D3/D4	OCTOBER 2017		
	BS.AC.D1/D2	OCTOBER 2017		
	Type A Lights	JULY 2018		
Type B Lights				
Manufacturer	Product	Approval Date		Bid Item #
Checkers Industrial Safety Products	BR3.B.D3/D4	OCTOBER 2017		643.0710
	BS.B.D1/D2	OCTOBER 2017		
Empco-Lite	Toughtlite 2000	OCTOBER 2017		
	Empco Y2K Barricade Light	MARCH 2018		
	Empco 6V 400 LED	SEPTEMBER 2019		
Type C Lights				
Manufacturer	Product	Approval Date		Bid Item #
Empco-Lite	Model 2006	OCTOBER 2017		643.0715
	Toughlite 2000	AUGUST 2019		
	Empco Y2K Barricade Light	MARCH 2018		
	Empco 6V 400 LED	SEPTEMBER 2019		
Dicke Tool	AC4D-NL	OCTOBER 2017		
Checkers Industrial Safety Products	BR3.AC.D3/D4	OCTOBER 2017		
	BR6.AC.D3/D4	OCTOBER 2017		
	BC3.AC.D3/D4	OCTOBER 2017		
	BC6.AC.D3/D4	OCTOBER 2017		
	BS.AC.D1/D2	OCTOBER 2017		
C & C Lights (now owned by Checkers Industrial Safety Products)	Type C Lights	JULY 2018		
Pedestrian Walkway Systems (Temporary Pedestrian Curb Ramps & Pedestrian Surfaces)				
Manufacturer	Product	Approval Date		Bid Item #
PSS Innovations	BoardWalk Temporary Pedestrian Modular Ramp	OCTOBER 2017		----
	Boardwalk Platform 2	OCTOBER 2017		
	RapidRamp	MARCH 2023		
Diamond Discs Inter	Ped Utility Trench Cover	JULY 2020		
Central State Construction	CSC Ramp 1	JANUARY 2021		
Checkers Safety Industrial Products	Versamat Ground Protection Mat	JUNE 2021		
Greatmats	Greatmats Ground Protection Mat 1/2 Inch x 4x8	MAY 2022		
Chippewa Concrete Services	CCS-JF-WI	MAY 2022		
Blue Gator	Blue Gator Ground Protection Mats	JULY 2022		
FODS	GPM Ground Protectoin Mat, Model #1200 AM	JULY 2022		
Spartan Composites	Scout Mat	MARCH 2023		
James Peterson Sons, Inc	JPS Curb Ramp	AUGUST 2023		
Temporary Detectable Warning Fields				
Manufacturer	Product	Approval Date		Bid Item #
ADA Solutions	ADA - SA2448-1	MAY 2022		644.1605
Detectable Warning Systems	AlertTile Truncated Domes	AUGUST 2023		
Temporary Audible Message Devices				
Manufacturer	Product	Approval Date		Bid Item #
PSS Innovations	Parakeet Audible Information Device	MAY 2024		----
Empco-Lite	Model 400 ADA Audible Device	August 2024		
Automated Flagger Assistance Devices				
Manufacturer	Product	Approval Date		Bid Item #
North America Traffic Inc.	PTL2.4LD Portable Flagger Light	JUNE 2019		----
	PTL2.4LD Portable Flagger Signal	JUNE 2019		
	RCF2.4 Automated Flagger Assistance Device	JUNE 2019		
JTI	Sentinel AFAD	JULY 2021		
Wanco	WAFAD	JULY 2022		
Synergy Technology	Automated Flagger AF-100	APRIL 2022		
Ver-Mac	Flagger-Mac Automated Flagger Assistance Device	FEBRUARY 2023		
Horizon Signal Technologies	CM-AFAD	MAY 2024		
	TM-AFAD	MAY 2024		

Temporary Portable Rumble Strips				
Manufacturer	Product	Approval Date		Bid Item #
PSS Innovations	RoadQuake 2	JANUARY 2020		----
	RoadQuake 2F	JANUARY 2020		
Traffix Devices	Alert High Speed Rumble Strip	JANUARY 2020		
Temporary Traffic Signals				
Manufacturer	Product	Approval Date		Bid Item #
See Electrical QPL Section 661: Temporary Traffic Signals for approved devices.				661.0100
Horizon Signal Technologies	SQ2***	JANUARY 2022		See asterisk*** below.
Ver-Mac	TLD-2312 Trailer Mounted Traffic Signals with Advanced Technology***	AUGUST 2022		
Connected Arrow Board Retro-Fit Kits				
Manufacturer	Product	Approval Date		Bid Item #
iCone	ConnectedTech Arrow Board Kit (CTD-AB)	FEBRUARY 2024		----
Ver-Mac	Connected Arrow Board Retro-Fit Kit	FEBRUARY 2024		
Connected Work Zone Location Markers				
Manufacturer	Product	Approval Date		Bid Item #
iCone	iPin (CTD-IP)	FEBRUARY 2024		643.1220
Ver-Mac	Work Zone Location Marker	MARCH 2024		
Solar Technoloy, Inc.	Silent Navigator NAB-5000	MAY 2025		
Automated System Manager				
Manufacturer	Product	Approval Date		Bid Item #
Ver-Mac	JamLogic	NOVEMBER 2024		----
Solar Technology, Inc.	WebSuite	MARCH 2025		
Street Smart Rental	Salander Vision SaaS	MARCH 2025		
Qlynx Technologies	Smart Work Zone System Manager	JULY 2025		

***May not be used on WisDOT improvement projects. Can be used for durations of 3 days or less.

Temporary Traffic Control Device Approval Process

1. INTRODUCTION

The temporary traffic control devices are covered by this approval process.

QUALIFICATION METHODS

The Wisconsin Department of Transportation provides manufacturers, vendors, traffic control contractors and county forces two options to apply for addition to the approved products list in Wisconsin. To be considered, the manufacturers, vendors, traffic control contractors and county forces must initiate the evaluation of their temporary traffic control device.

Qualification Option A – Immediate Approval

The Wisconsin Department of Transportation provides manufacturers, vendors, traffic control contractors and county forces with the process to apply for addition to the approved products list in Wisconsin. To be considered, the traffic control contractor and county forces must initiate the evaluation of their temporary traffic control device.

1. The subject device will require a letter of self-certification or FHWA eligibility letter. Refer to Appendices for requirements. Devices that do not meet MASH requirements but meet NCHRP 350 may be considered for addition to the list.
2. Submit the required Application Form, Self-Certification Letter or FHWA Eligibility Letter, Installation Specifications, Product Specifications and Report as follows:
 - **Application Form**
 - **Self-Certification Letter or FHWA Eligibility Letter:**
 - Self-Certification Letter should contain at a minimum:
 - *A title, e.g., "Certificate of Crashworthiness";*
 - *Name and address of vendor making the certification.*
 - *Unique identification of the certificate (such as serial number) and of each page and the total number of pages;*
 - *(iv) Description and unambiguous identification of the item tested;*
 - *Identification of the basis for the self-certification process used and to what Test Level of NCHRP Report 350. This basis as listed in the July 25, 1997-memo as crash test experience with similar devices or years of demonstrably safe operational performance. (Simplified crash testing showing that a device poses no risk to vehicle occupants may be used to support the manufacturer's certification. This simplified testing must, as a minimum, be documented by a written report, observed by an independent, impartial observer, recorded on videotape, and include a means, other than the test vehicle's speedometer, for determining the vehicle speed at time of impact.)*

- *A signature and title, or an equivalent identification of the person(s) accepting responsibility for the content of the certificate (however produced), and date of issue;*
 - *A statement that the certificate shall not be reproduced except in full.*
- **Installation Specifications:** Submit proper product installation instructions along with a website address where the installation specifications can be located.
- **Report:** Submit a written report containing all the following information and a statement agreeing to the provisions of the application and review process.
 - Technical Assistance: The name(s), telephone number(s) and email addresses for the vendor or manufacturer representatives.
 - Manufacturer Quality Control Program: A written submission of a quality control program that monitors the manufacturer's production for WisDOT approval.

Bureau of Traffic Operations: Work Zone Program
Department of Transportation
3609 Pierstorff St.
Madison, WI 53704
Email: DOTSignMarkWZMaterials@dot.wi.gov

3. After all required applicable documents have been received, the Work Zone Products Evaluation Team will meet and review all submitted items. The team meets every 30 days. After the evaluation process is completed, WisDOT will notify the manufacturer or vendor of the results of the evaluation via letter. If the product is accepted, it will be included on the Temporary Traffic Control Device Approved Products List, which is updated quarterly.
4. It is the responsibility of the traffic control contractor or county force to submit all changes to WisDOT BTO to remain in good standing on the approved products list once the product has been added to the approved products list. If the product begins to show signs of failure before the end of its lifecycle, the traffic control contractor or country force will be notified and will have 1 month to correct the problem or provide a resolution plan. If the problem is corrected, the product will remain on the approved products list. If the problem is not corrected, the product will be removed from the approved products list.

Qualification Option B – Provisional Approval

In the instance of Connected Devices, WisDOT Bureau of Traffic Operations (BTO) will evaluate the submitted product for one construction season to determine if the product performs and meets the needs required by BTO.

1. Submit the required Application Form and Self-Certification Letter or FHWA Eligibility Letter (as applicable), Installation Specifications, Product Specifications and Report as follows:
 - a. **Application Form**
 - b. **Self-Certification Letter or FHWA Eligibility Letter (if applicable):**
 - i. Self-Certification Letter should contain at a minimum:
 1. *A title, e.g., "Certificate of Crashworthiness";*
 2. *Name and address of vendor making the certification.*
 3. *Unique identification of the certificate (such as serial number) and of each page and the total number of pages;*
 4. *Description and unambiguous identification of the item tested;*
 5. *Identification of the basis for the self-certification process used and to what Test Level of NCHRP Report 350. This basis as listed in the July 25, 1997-memo as crash test experience with similar devices or years of demonstrably safe operational performance. (Simplified crash testing showing that a device poses no risk to vehicle occupants may be used to support the manufacturer's certification. This simplified testing must, as a minimum, be documented by a written report, observed by an independent, impartial observer, recorded on videotape, and include a means, other than the test vehicle's speedometer, for determining the vehicle speed at time of impact.)*
 6. *A signature and title, or an equivalent identification of the person(s) accepting responsibility for the content of the certificate (however produced), and date of issue;*
 7. *A statement that the certificate shall not be reproduced except in full.*
 - c. **Installation Specifications:** Submit proper product installation instructions along with a website address where the installation specifications can be located.
 - d. **Report:** Submit a written report containing all the following information and a statement agreeing to the provisions of the application and review process.
 - i. **Technical Assistance:** The name(s), telephone number(s) and email addresses for the vendor or manufacturer representatives.
 - ii. **Manufacturer Quality Control Program:** A written submission of a quality control program that monitors the manufacturer's production for WisDOT approval.
 - iii. **Performance Report:** Written report providing all data relating directly to the capabilities, performance and other applicable characteristics of the

device being submitted to the Department and how the device will meet the needs of the Department.

2. After all required applicable documents have been received, the Work Zone Products Evaluation Team will meet and review all submitted items and notify the submitter of provisional approval or if the product has been denied. If the product is denied for provisional approval, then the qualification process is concluded. WisDOT will notify the submitter the results of the evaluation via letter. If the product is accepted, it will be included on the Temporary Traffic Control Device Approved Products List listed as “Provisionally Approved”.
3. Upon completion of the product provisional status evaluation, WisDOT will notify the submitter of the results in writing. If the product is accepted for permanent placement on the APL, the submitter will be notified in writing. If the product is rejected, then the qualification process is concluded. Once the product is on the Approved Products List, it is the responsibility of the manufacturers, vendors, traffic control contractors and county forces to submit any and all changes to WisDOT BTO in order to remain in good standing on the approved products list.

ON-GOING APPROVAL

To recertify products to be included on the approved products list, the traffic control contractor or county force is required to resubmit all the documents listed above in the instances of name change, device change or any other applicable change. Failure to recertify products will result in removal from the Approved Products List.

Wisconsin Department of Transportation
Temporary Traffic Control Device: Approved Products Application

Traffic Control Contractor or County Information

Company or County Name: _____ Phone Number: _____
Physical Address: _____
Email Address: _____

Vendor Information

Vendor Name: _____ Phone Number: _____
Address: _____
Website: _____

Product Information

Category 1

- ☐ Drums
- ☐ 42" Cones
- ☐ Flexible Tubular Markers
- ☐ Traffic Channelizing Curb Systems
- ☐ Vertical Panels

Category 2

- ☐ Type I Barricades
- ☐ Type II Barricades
- ☐ Type III Barricades
- ☐ Portable Sign Stands (w/ Rigid Signs)
- ☐ Portable Sign Stands (w/ Roll-Up Signs)
- ☐ Pedestrian Barricade

Category 3

- ☐ Truck & Trailer Mounter Attenuators

Category 4

- ☐ Arrow Boards
- ☐ Connected Arrow Boards (provisional approval only)
- ☐ Portable Changeable Message Signs
- ☐ Speed Radar Trailers
- ☐ Digital Speed Limit Trailers

Other

- ☐ Type A Lights
- ☐ Type B Lights
- ☐ Type C Lights
- ☐ Pedestrian Walkway Systems (Temporary Curb Ramps & Pedestrian Surfaces)
- ☐ Temporary Detectable Warning Fields
- ☐ Audible Pedestrian Devices
- ☐ Automated Flagger Assistance Devices
- ☐ Temporary Portable Rumble Strips
- ☐ Connected Arrow Board Retro-fit Kits (provisional approval only)
- ☐ Connected Work Zone Location Markers (provisional approval only)
- ☐ Automated System Manager

Product Name and Model: _____

Has this product, or similar products been used previously by WisDOT? ☐ Yes ☐ No

If yes, please explain: _____

Documents to Submit:

- ☐ Self-Certification Letter or FHWA Eligibility Letter
- ☐ Installation Specifications
- ☐ Product Specifications
- ☐ Report
- ☐ MASH Compliance Letter

Signature

Signed: _____ Title: _____

Printed Name: _____ Date: _____

Submit this application and supporting documents to:
Bureau of Traffic Operations: Work Zone Program
Department of Transportation
DOTSignMarkWZMaterials@dot.wi.gov

APPENDIX A

CATEGORY 1

- *Category 1 devices are “self-certified” by each Manufacturer and no testing of these devices is required to meet MASH-16 requirements. These devices may be allowed for use based on the developer’s self-certification subject to approval by the individual highway agencies.*
- DRUMS
 - Weighted Rubber Base
 - Tire ring or molded base
 - Weight of base should follow manufacturer recommendations
 - Orange
 - Dimensions and Sheeting requirements meet SDD 15C11-b
 - MASH Compliant
- 42” CONES
 - Weighted Rubber Base
 - Molded
 - Weight of base should follow manufacturer recommendations
 - Orange
 - Dimensions and Sheeting requirements meet SDD 15C11-b
 - Written submission of certification from manufacturer or distributor for compliance to MASH
- FLEXIBLE TUBULAR MARKERS
 - Plastic bases that hold tube with locking pin
 - Locking pin mechanism for securing device
 - Orange (work zone application)
 - White (permanent application)
 - Yellow (permanent application)
 - Work Zone Application
 - Dimensions and sheeting requirements meet SDD 15C11-a
 - Permanent Application
 - Dimensions and sheeting requirements meet SDD 15A04-a
 - MASH Compliant
- TRAFFIC CHANNELIZING CURB SYSTEMS
 - Submit FHWA federal-aid reimbursement eligibility letters
 - Requirements meet WMUTCD Section 3H.01 and 6F.72
- VERTICAL PANELS
 - Submitted FHWA federal-aid reimbursement eligibility letter
 - Dimensions and sheeting requirements meet SDD 15C11-b and WMUTCD Section 6F.66

APPENDIX B

CATEGORY 2

- *Category 2 Temporary traffic control devices manufactured on or after January 1, 2020 must meet MASH-16 crash standards.*
- *Category 2 devices manufactured before January 1, 2020 may be used through July 1, 2025 lettings provided they meet the requirements of the Standard Specifications and are approved and accepted for use by the Engineer.*
- TYPE I, II & III BARRICADES
 - Corrugated Plastic Panels
 - Perforated Channel Supports or Angle Iron
 - Submitted FHWA federal-aid reimbursement eligibility letter
 - Dimensions and sheeting requirements meet SDD 15C11-b and WMUTCD Section 6F.68
- PORTABLE SIGN STANDS
 - The sign face must be perpendicular to the ground
 - One Foot Mounting Height (collapsible & rigid)
 - Five Foot Mounting Height (collapsible & rigid)
 - Seven Foot Mounting Height (collapsible & rigid)
 - Submit FHWA federal-aid reimbursement eligibility letter
- TEMPORARY PEDESTRIAN BARRICADES
 - Submit FHWA federal-aid reimbursement eligibility letter
 - Dimensions and sheeting requirements meet SDD 15D30-c and conform to the recommendations of WMUTCD Section 6F.63.04, 6F.63.05 and 6F.74

APPENDIX C

CATEGORY 3

- *Category 3 Temporary traffic control devices manufactured on or after January 1, 2020 must meet MASH-16 crash standards.*
- *Category 3 devices manufactured before January 1, 2020 may be used through July 1, 2030 provided they meet the requirements of the Standard Specifications and are approved and accepted for use by the Engineer.*
- TRUCK & TRAILER MOUNTED ATTENUATORS
 - Conform to the Wisconsin WMUTCD requirements
 - MASH Crash Test Level 3
 - May or may not be equipped with arrow board or PCMS
 - Must be crash tested with the device
 - PCMS or arrow board must be on APL

APPENDIX D

CATEGORY 4

- *See WisDOT MASH Implementation Plan*
- *FHWA previously exempted these devices from crash-testing under NCHRP Report 350 as the benefit of the use of these devices outweighs the risk exposure; however, the FHWA required that they should be shielded, when possible, should be removed when not needed, and must be delineated when deployed.*
- ARROW BOARDS
 - Conform to the Wisconsin WMUTCD requirement for type C arrow panel
 - 96 x 48 inches
 - Minimum of 15 elements
 - Visible from minimum of 1 mile
 - Capable of operating towed or stationary
 - SAE PAR 46 lamps
 - Hood surrounds not less than 180 degrees of each individual lamps
 - Capable of these mode selections: left or right flashing shaft with arrow point, flashing shaft with double arrow points, or caution. The engineer will not allow sequential operation of arrow or chevrons.
 - Control System
 - Capable of at least 50 percent dimming from rated voltage
 - Flashing rate 25 to 40 flashes per minute
 - 50 percent lamp “on” time
 - Automatic dimming of lamps by reducing the voltage to 50 percent minimum for nighttime use and for the fail mode default setting.
 - Manual override backup switch
 - Is controlled by an onboard computer programmable via an onboard input device and, if the special provisions require, programmable remotely.
 - Has a secure cabinet and requires a username and password to access the computer interface.
 - Battery or Solar Powered
- CONNECTED ARROW BOARDS (provisional only)
 - Meet requirements listed above for ‘Arrow Board’
 - The connected arrow board shall be connected to the cloud and provide a data feed compliant with latest the U.S Department of Transportation Work Zone Data Exchange (WZDx) Device Feed specification 4.2.
 - The property ‘id’ shall stay the same for the duration of the project. See picture below from WZDx Device Feed specification.

Properties

Name	Type	Description	Conformance	Notes
<code>id</code>	String	A unique identifier issued by the data feed provider to identify the field device. It is recommended that this identifier is a Universally Unique Identifier (UUID) as defined in RFC 4122 to guarantee uniqueness between feeds and over time.	Required	This is a GeoJSON property.

- The connected arrow board shall distinguish whether it is active, displaying a pattern or blank/transport mode, symbolizing it is not active.
- Submit Work Zone Data Exchange Device feed link to DOTBTOWorkzone@dot.wi.gov.
- **PORTABLE CHANGEABLE MESSAGE SIGNS**
 - Conform to the Wisconsin WMUTCD requirements
 - Trailer mounted
 - 4 leveling jacks
 - Battery power supply, solar powered charging system
 - Control System
 - Has a screen for reviewing messages before being displayed on sign.
 - Is controlled by an onboard computer programmable via an onboard input device and, if the special provisions require, programmable remotely.
 - Ensure that the computer can store and recalling at least 150 programmed messages.
 - Has a secure cabinet and requires a username and password to access the computer interface.
 - Automatically adjusts the sign's intensity to maintain legibility under varying light conditions.
 - Provide a line matrix, character matrix, or full matrix sign message display no greater than 11-1/2 feet wide and capable of displaying 3 lines sequentially with 8 or more 18-inch high by 11-inch wide characters per line
 - LED Display Only.
 - Must display amber or yellow message.
 - NO hybrid or flip disc
- **SPEED RADAR TRAILERS**
 - The legend shall read “YOUR SPEED” as a static message centered on the sign.
 - Legend and background colors of this static sign shall match the regulatory or advisory speed sign it is paired with.
 - The changeable portion of the sign shall have a black background with an amber (yellow) illuminated legend.
 - Display shall be two digits displayed in miles per hour.

- Legibility, must be able to determine numbers from 1/4 mile.
 - Visibility, must be able to determine if the sign is on from 1/2 mile.
 - Display shall have the ability to:
 - Continuously show the speed of an approaching vehicle and not flash regardless of speed limit or preset thresholds.
 - System shall use an LCD display, keyboard, Rotary switches or other means to set and view operating modes, matrix displayed speed, error codes and other system information.
 - LED indicators (or similar) signify power is on, the solar charging system is active, activated alarms need for checking, battery charge is low, and power failure.
 - System shall include a regulatory speed limit sign
- **DIGITAL SPEED LIMIT TRAILERS**
 - Trailer Mounted
 - R2-1 Regulatory Speed Limit Sign
 - Conform to Wisconsin WMUTCD Requirements and standard spec 643
 - 48 x 60 inches
 - Mounting Height: 7 feet
 - Speed Display Panel
 - The changeable portion of the sign shall have a black background with a white LED illuminated legend
 - Display shall be two digits displayed in miles per hour in multiples of 5 mph
 - Automatically adjusts the sign's intensity to maintain legibility under varying light conditions
 - Shall be programmable remotely
 - Flashing Beacons shall conform to the Wisconsin WMUTCD Section 4L and standard spec 658.2(2).
 - A minimum of one flashing beacon shall be used. If only one flashing beacon is used, flashing beacon should be mounted above the sign, and centered horizontally.
 - The flashing yellow circular yellow signal indication shall have a nominal diameter of 12-inches.

APPENDIX E

OTHER

- **TYPE A, B & C WARNING LIGHTS**
 - Conform to WMUTCD Section 6F.83 and Standard Specification
 - ITE “Purchase Specification for Flashing and Steady-Burn Warning Lights”
- **PEDESTRIAN WALKWAY SYSTEMS (TEMPORARY CURB RAMPS & PEDESTRIAN SURFACES)**
 - **TEMPORARY CURB RAMPS**
 - Requirements meet SDD 15D30-b & 15D30-c and conform to the recommendations of WMUTCD Section 6F.74
 - **TEMPORARY PEDESTRIAN SURFACES**
 - Requirements meet SDD 15D30-b & 15D30-c and conform to the recommendations of WMUTCD Section 6F.74
- **TEMPORARY DETECTABLE WARNING FIELDS**
 - Requirements meet SDD 15D30-b & 15D30-c and conform to the recommendations of WMUTCD Section 6F.74
- **TEMPORARY AUDIBLE MESSAGE DEVICES**
 - Motion sensor actuated
 - Ability to record messages
 - Tamper proof hardware
 - Battery or solar operated
 - Automatic adjustment of sound based on surrounding ambient noise
- **AUTOMATED FLAGGER ASSISTANCE DEVICES**
 - Requirements meet WMUTCD Section 6E.06.04
 - Shall have gate arm and use amber and red indicators
- **TEMPORARY PORTABLE RUMBLE STRIPS**
 - Conform to WMUTCD Section 6F.87
 - Rated for 70 mph or greater
 - Color of rumble strip shall be black
- **CONNECTED ARROW BOARD RETRO-FIT KITS (provisional only)**
 - The connected arrow board shall be connected to the cloud and provide a data feed compliant with latest the U.S Department of Transportation Work Zone Data Exchange (WZDx) Device Feed specification 4.2.
 - The property ‘id’ shall stay the same for the duration of the project. See picture below from WZDx Device Feed specification.

Properties

Name	Type	Description	Conformance	Notes
<code>id</code>	String	A unique identifier issued by the data feed provider to identify the field device. It is recommended that this identifier is a Universally Unique Identifier (UUID) as defined in RFC 4122 to guarantee uniqueness between feeds and over time.	Required	This is a GeoJSON property.

- Device should distinguish whether it is active, displaying a pattern or off, in transport mode or blank.
- Submit Work Zone Data Exchange Device feed link to DOTBTOWorkzone@dot.wi.gov.
- CONNECTED WORK ZONE LOCATION MARKERS (provisional only)
 - The location marker shall be connected to the cloud and provide a data feed compliant with latest the U.S Department of Transportation Work Zone Data Exchange (WZDx) Device Feed specification 4.2.
 - Battery should hold single charge for duration of project
 - Accomplished through battery swapping or charging in the field to keep the 'id' the same for each location marker.
 - Clear distinguishability of the start location marker and set as 'work zone start'
 - Clear distinguishability of the end location marker and set as 'work zone end'
 - Ease of association in the WZDx Feed for 'work zone start' and 'work zone end'
 - Submit Work Zone Data Exchange Device feed link to DOTBTOWorkzone@dot.wi.gov.
- Automated System Manager
 - References from 5 different Project Managers on 5 prior projects in Wisconsin with use of the smart work zone software.
 - References from 3 different states with use of the smart work zone software.
 - The smart work zone software shall have one unique user id and password for all smart work zones in Wisconsin.
 - The smart work zone software shall have both a desktop version and mobile version.
 - The smart work zone software shall have automatic reporting and alerting on the status of the smart work zone which includes:
 - Any disruption between any devices
 - Device malfunctioning
 - Loss of power
 - Low battery
 - Loss of connection
 - Access to real-time and historical data



June 4, 2025

Updated WisDOT MASH Implementation Plan

WisDOT supports ongoing efforts to increase the safety of roadside devices by installing and upgrading highway safety hardware that meets national standards. WisDOT participates in the Midwest Roadside Safety Facility (MwRSF) and TTI Roadside Safety Pooled Funds. The following details how WisDOT will meet the intent of the AASHTO/FHWA Joint Implementation Agreement for the AASHTO Manual for Assessing Safety Hardware (MASH) and corresponding supplemental information provided by the *Clarifications on Implementing MASH 2016 (aka MASH Q&A), Updated Nov 19, 2019*. WisDOT will continue to review the performance of existing roadside safety hardware and monitor current research, crash test results and new product development. WisDOT will install or replace devices damaged beyond repair with highway safety hardware that meets national standards and WisDOT's needs given project or regional conditions.

The following devices meet NCHRP 350 test criteria and will remain in service based on ongoing in field performance evaluations until a MASH 2016 compliant device becomes available that meets WisDOT's needs given project or regional considerations:

- Wood Sign Posts
- Channel Steel Delineator Posts
- Tube Steel Sign Posts
- Temporary Traffic Control Sign Posts
- Work Zone Traffic Control Devices with Type A/Type C warning lights attached to them.
- Ramp Gates
- Traffic Signal Poles
- Light Poles

WisDOT is awaiting completion of MASH-2016 testing for channel and tube steel, the results of which may impact future use of these materials.

The type one sign design has been modified based on a MASH 2016 compliant design from Texas DOT. The Department has implemented this design for new installations or signs damaged beyond repair.

WisDOT is a member of the Midwest Work Zone Round Table which developed requirements to create consistency among Midwest states. Appendix A consists of the technical memo referencing these items.

Questions on the traffic operations MASH implementation plan or specific devices should be directed to Matt Rauch matt.rauch@dot.wi.gov in the Bureau of Traffic Operations in DTSD.

Midwest Work Zone Round Table Representatives from Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, Wisconsin.

Subject: Recommended MASH-16 implementation procedures/timeframes for Temporary Traffic Control Work Zone Devices

The installation of temporary traffic control devices used in work zones on state highways and roadways on the National Highway System shall be in accordance with the AASHTO MASH-16 requirements.

The development of this implementation plan is in response to the AASHTO/FHWA Joint Implementation Agreement for Manual for Assessing Safety Hardware (MASH). This implementation procedure is concurrent with the one governing the use of the permanent hardware devices on the National Highway System as well as the state-owned highways. As such, the Midwest Work Zone Round Table developed the below recommendations for the implementation of MASH-16 requirements for Temporary Traffic Control Work Zone Devices to be included in the Member States DOT MASH implementation plan.

Temporary Traffic Control Work Zone Devices

It is recommended that the State DOT recognizes and adopts the categorization of temporary traffic control work zone devices as established in NCHRP 350, as follows:

Category 1: Includes small and lightweight channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These devices include but are not limited to: cones, tubular markers, flexible delineator posts, vertical panels and plastic drums without attachments.

Category 2: Includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. (i.e. Category 1 devices with attachments, Barricades, Portable Sign Supports, **Post Mounted Type 2 Sign Supports**)

Category 3: Includes hardware that is expected to cause significant velocity change or other potentially harmful reactions to impacting vehicles. (i.e. Barriers, **Type 1** fixed sign supports, crash cushions, and other work-zone devices not meeting the definitions of Category 1 or 2 are examples from this category)

Category 4: Includes portable or trailer-mounted devices such as flashing arrow panels, temporary traffic signals, area lighting supports, temporary data collection devices, smart work zone devices and portable changeable message signs.

Category 1 Temporary Traffic Control Work Zone Devices

The Midwest Work Zone Roundtable recommends that:

- Category 1 devices are “self-certified” by each Manufacturer and no testing of these devices is required to meet MASH-16 requirements. These devices may be allowed for use based on the developer’s self-certification subject to approval by the individual highway agencies.

Category 2 Temporary Traffic Control Work Zone Devices

The Midwest Work Zone Roundtable recommends that:

- Category 2 Temporary traffic control devices manufactured on or after January 1, 2020 must meet MASH-16 crash standards.
- Category 2 devices manufactured before January 1, 2020 may be used through July 1, 2025 provided they meet the requirements of the Standard Specifications and are approved and accepted for use by the Engineer.

Category 3 Temporary Traffic Control Work Zone Devices

The Midwest Work Zone Roundtable recommends that:

- Category 3 temporary traffic control devices manufactured on or after January 1, 2020 must meet MASH-16 standards.
- Category 3 devices manufactured before this date may be used through January 1, 2030 provided they meet the requirements of the Standard Specifications and are approved and accepted for use by the Engineer.

Category 4 Temporary Traffic Control Work Zone Devices

The FHWA previously exempted these devices from crash-testing under NCHRP Report 350 as the benefit of the use of these devices outweighs the risk exposure; however, the FHWA required that they should be shielded when possible, should be removed when not needed, and must be delineated when deployed. In the event further crash testing criteria for these devices is developed, the Midwest Work Zone Round Table recommends the implementation of such standards.