

NOTICE OF PROPOSED GUIDANCE DOCUMENT

Wisconsin Flaggers Handbook DTSD77

Pursuant to Wis. Stat. s. 227.112, the Wisconsin Department of Transportation is hereby seeking comment on Wisconsin Flaggers Handbook, Wis. Stat. s. 340.01(22e), 346.27 a proposed guidance document.

PUBLIC COMMENTS AND DEADLINE FOR SUBMISSION

Comments may be submitted to the Wisconsin Department of Transportation for 21 days by:

1. Department's website:

<https://trust.dot.state.wi.us/act369/?id=DTSD77&uri=file:flaggershandbookFall2019pdf&division=DTSD&tags=340>

2. Mailing written comments to:

Division of Transportation System Development
Wisconsin Department of Transportation
4822 Madison Yards Way
PO Box 7965
Madison, WI 53707-7965

WEBSITE LOCATION OF FINAL GUIDANCE DOCUMENT

The final version of this guidance document will be posted at wisconsindot.gov to allow for ongoing comment.

AGENCY CONTACT

DOTDTSDGuidanceDocs@DOT.WI.GOV

2020

WISCONSIN FLAGGERS HANDBOOK

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Compiled by the Wisconsin
Department of Transportation

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Remember, you play a vital part in keeping the public and your co-workers safe. If you are unsure of any flagging procedure, ask your supervisor for further explanation.

Lives, *including* your own depend on it!

Name _____

Wisconsin Statute

340 (22e) "Highway maintenance or construction area" means the entire section of roadway between the first advance warning sign of highway maintenance or construction work and an "END ROAD WORK" or "END CONSTRUCTION" sign.

346.27 Persons working on highway. The operator of a vehicle shall yield the right-of-way to persons engaged in maintenance or construction work on a highway whenever the operator is notified of their presence by flagmen or warning signs.

The information in this booklet is consistent with the 2009 edition of the *Wisconsin Manual on Uniform Traffic Control Devices (MUTCD)*, Part 6, and the *Standard Specifications of the Wisconsin Department of Transportation*.

INTRODUCTION

You've been chosen to be a flagger because your supervisor feels you are physically able and mentally alert to properly control traffic through construction, maintenance and utility work areas.

As a flagger, your chief duties are to:

- Guide traffic safely through work areas.
- Protect your fellow workers.
- Prevent unreasonable delays for road users.
- Answer motorists' questions politely and knowledgeably.

This handbook will help you carry out these important duties. Study it carefully to learn proper flagging procedures in Wisconsin, and keep it handy for quick reference.



BEFORE YOU BEGIN

Rules of conduct

Flagging is an important responsibility and should be carried out with authority and dignity. Courtesy and a professional attitude are vital in gaining the respect of the traveling public. The image you project as a flagger will affect the public's attitude toward the whole project and your organization. The following guidelines will make you a safer and more effective flagger.

Before beginning your flagging duties, do the following:

- Park your vehicle in a location that does not conflict with flagging operations and allows you to have an escape route.
- Make sure your apparel and equipment are clean and neat.
- Make sure proper signs are in place.
- Become familiar with the work activities so you can answer motorists' questions.
- Discuss a reasonable relief schedule with your supervisor or crew leader.

When two or more flaggers will be working together, make sure **one flagger is designated as the flagger in charge** (the other flagger[s] will coordinate their activities accordingly). The foreman may be the person in charge.

**During flagging operations,
do the following:**

- Always hold the paddle.
 - Do not leave your position for any reason until relieved.
 - Always remain standing and never turn your back on traffic.
 - Stand alone. Do not mingle with the work crew, the traveling public, or other people.
 - Stay alert. Don't be distracted by the work operation and don't perform other activities.
 - Be friendly and polite with the public, but do not engage in small talk.
 - Never argue with the occupants of a vehicle.
 - If a driver refuses to obey instructions, inform your supervisor or crew leader as soon as possible without leaving your post.
- Carry a pocket notebook for recording:
- ◇ Information to identify the driver.
 - ◇ Description of the vehicle and license plate number.
 - ◇ Circumstances involved in the incident.
- Be alert to the needs of emergency vehicles. They should be given priority, but only when safety will not be compromised.

If a crash occurs in or near the work zone:

- Do not leave your post.
- Warn other flaggers and workers.
- Advise your supervisor and/or authorities.
- Record any pertinent information.

Flagger apparel and equipment

Clothing

In addition to being dressed neatly, flaggers need to be dressed for safety. In particular, flaggers are required to be easily visible to traffic. Flaggers shall wear the following required items, even when serving as a replacement for a short period (See Figure 1). The following required items must all be ANSI 107-2015 type R compliant:

- Vest
- Pants

Any gear for inclement weather must also follow the above guidelines.

Flaggers are recommended to wear headwear meeting ANSI 107 requirements. Highly visible retroreflective wristbands or gloves are also recommended for nighttime operations.

Equipment

Flaggers shall be equipped with the following:

- STOP/SLOW paddle (See Figure 1). Retroreflective sheeting shall comply with applicable specifications.
- Hand-held radio for communication when two or more flaggers are needed.

At night flaggers shall be equipped additionally with:

- Flashlight with red glow cone, lantern, or other lighted signal that will display a red warning light.
- Lighted flagger station.

Recommended equipment:

- Pad and pencil
- Air horn or whistle



Figure 1: Apparel and equipment for flagging operations

Flagger's position

In rural areas, flagger stations should generally be located (See Figure 2):

- A minimum of 200–300 feet in advance of the work area.
- Where the flagger is visible to approaching traffic appropriate for speed of facility.

Sign spacing and temporary portable rumble strip placement	
Speed limit	Spacing "A"
25–30 mph	200'
35–40 mph	350'
45–55 mph	500'

Factors such as visibility, traffic speeds and volume, road conditions, road alignment, topography and the work being done should be considered in determining your proper location.

Positioning yourself carefully, according to the following suggestions, will help keep you safe during flagging and will assist you in skillfully controlling traffic through the work area.

- Always stand and face oncoming traffic.
- Do not stand in the path of an approaching vehicle.
- Stand where you will be highly visible at all times and:
 - ◇ Do not stand in shadows.
 - ◇ Do not stand near parked vehicles or equipment that might hide you from approaching drivers.
 - ◇ Do not sit.
- Always have an escape route in mind.

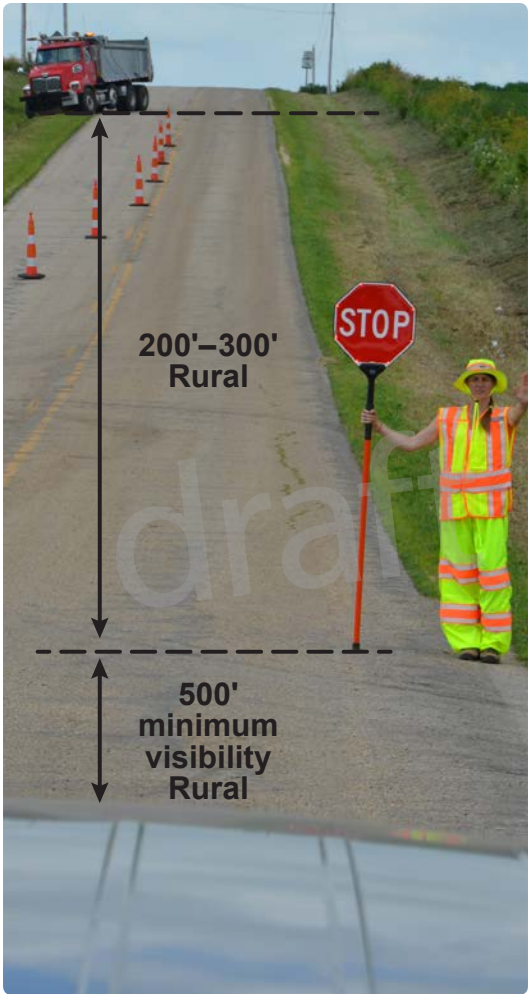


Figure 2: Flagger's position

TWO-FLAGGER OPERATIONS

Stopping traffic

To stop traffic, follow these steps (See Figure 3):

1. Stand on the shoulder of the road holding the STOP/SLOW paddle in your right hand, erect and away from your body with the STOP side facing approaching traffic.
2. Look directly at the approaching driver. Try to establish eye contact.
3. Raise your free arm with the palm of your hand toward oncoming drivers.
4. Bring the first vehicle to a full stop.
5. Stop other vehicles from this position using the STOP sign, hand signal, and eye contact as described in steps 1–4. (Optional: During daytime operations, flagger may move to centerline to improve their visibility carrying the STOP/SLOW paddle.)
6. Remain in this position until you can safely permit travel through the work area.
7. Communicate by radio with the other flagger(s) a description of the last vehicle passing through and that you are holding traffic.



Figure 3: Stopping first vehicle from shoulder

Releasing traffic

To release traffic, follow these steps (See Figures 4 and 5):

1. If on centerline, return to shoulder.
2. Hold paddle in your right hand, turn SLOW side toward stopped vehicles.
3. With your free arm signal drivers to proceed. **Never wave the paddle.**
4. Use your radio to notify the other flagger(s) that traffic is being released.



Figure 4: Releasing traffic into the open lane; opposite drive lane

Nighttime

- Using a flashlight with red glow cone, show drivers where to proceed.
Do not wave the flashlight.
- When flagging at night illuminate the flaggers station with auxillary lighting such as floodlights or balloon lighting.
- Auxiliary lighting shall not produce a disabling glare condition for approaching road users, flaggers or workers.



Figure 5: Releasing traffic into the open lane; standard drive lane

Slowing traffic

To slow approaching traffic, follow these steps:

1. Stand on the shoulder of the road holding the paddle in your right hand with the SLOW side toward traffic.
2. Extend your left arm and with the palm facing downward, motion up and down slowly to gain driver attention (See Figure 6). If needed for emphasis, this motion can be more forceful.

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Figure 6: Slowing traffic

SINGLE-FLAGGER OPERATIONS

A single flagger can be used when sight distance is adequate, traffic volume low (less than 1500 ADT), and work zone length 500 feet or less. A second flagger shall be added when these conditions change or when traffic conflicts and delays become excessive.

Single-flagger operations usually involve temporary traffic stoppage temporarily stopping traffic in only one lane (for example, for loading or unloading operations). The other lane is allowed to flow freely at all times.

Single-flagger operations may also be used on low volume roads.

Releasing traffic for single-flagger operations

In single-flagger operations, follow the flagging procedures for slowing and stopping traffic, as described on pages 8–12. **To release traffic as a single flagger, follow these steps:**

1. Return to the shoulder of the road with the STOP side toward stopped vehicles.
2. Turn the paddle so neither STOP nor SLOW can be read by drivers approaching from either direction. Take care not to confuse continuous traffic traveling in the other lane in the opposite direction.
3. Motion for traffic to proceed.

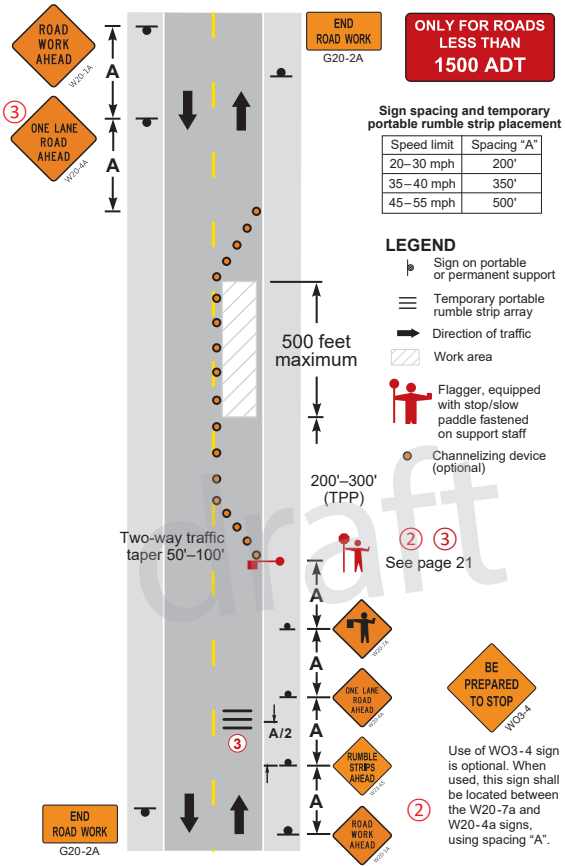


Figure 7: Single Flagger Operation

PILOT CAR OPERATIONS

Pilot car operations using a Stop/Slow paddle

1. When the distance between flaggers exceeds 2 miles, a pilot car shall be required.
2. Try to limit delays to 15 minutes maximum.
3. Stop vehicles in the approved manner (See Stopping Traffic, pages 8).
4. Detain all vehicles until the pilot car arrives from the opposite direction.
5. After the pilot car arrives and has pulled into position at the head of your column of vehicles, step back onto the shoulder with STOP displayed. Follow the procedure for releasing traffic on page 10.
6. Refrain from unnecessary conversations with the pilot car driver.
7. Turn the SLOW side to face traffic, and motion the pilot car driver and others to proceed.

Note: More than one pilot car may be used.

Pilot Car

1. Driver shall have a valid drivers license.
2. Be in radio contact with all flaggers.
3. Drive at a speed not to exceed posted speed limit.
4. Use a street legal vehicle.
5. Prominently display the name of contractor or contracting authority on each side of the vehicle.
6. Have a "Pilot Car, Follow Me" sign mounted on the rear of the vehicle, a minimum 5-feet above the pavement.
7. "Do Not Pass" signs may be added to the work zone.



CHANNELIZING DEVICES

Use Traffic Control Drums or 42" cones if the flagging operation crosses a railroad.

A taper of 42" cones may be used to direct traffic to the appropriate side of the roadway. For operations where the flaggers are moving every 15 minutes or less, 28" cones may be used.

OTHER SITUATIONS

Equipment crossings

Generally, traffic control procedures are the same for haul road intersections as for other work areas (See Stopping Traffic and Releasing Traffic, pages 8, 10).



Figure 8: Stopping traffic for left-turning vehicles

When trucks are crossing the highway or making a left turn, two flaggers may be required, one for each direction (See Figure 8).

When trucks are making a right turn onto the highway, only one flagger may be required (See Figure 9).



Figure 9: Stopping traffic for right-turning vehicles

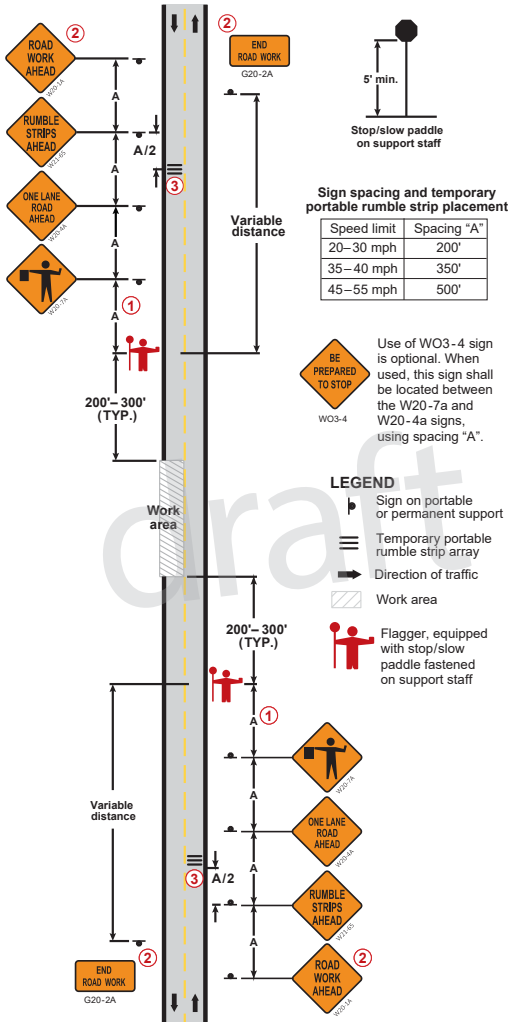


Figure 10: Two Flagger Operation

GENERAL NOTES

- Details of traffic control devices and installation not shown on this drawing shall conform to the pertinent requirements of the standard specifications, the special provisions, and the WMUTCD.
- All signs are 48" x 48" unless otherwise noted.
- "WO" signs are the same as "W" signs except the background is orange. The exact number, location and spacing of all signs, devices and location of all flaggers shall be adjusted to fit field conditions as approved by the engineer.
- The first advance warning sign should typically be located in advance of the anticipated traffic backup or queue.
- When a side road or ramp intersects the facility on which the work is being performed, additional traffic controls shall be provided as specified in the plans and/or the special provisions or as approved by the engineer.

FLAGGING

- When the flagging operation is not in effect remove temporary portable rumble strips prior to covering or removing all advance signing.
- ① For moving work operations, post additional W20-7a flagger signs at approximately 3,500' intervals in the moving work operation or as approved by the engineer.
- ② Sign not required if flagging operation occurs within a signed road work zone area.

TEMPORARY PORTABLE RUMBLE STRIPS

- Utilize temporary portable rumble strips on all flagging operations.
- ③ Each temporary portable rumble strip array consists of three rumble strips spaced according to manufacturer's recommendation, placed transverse across the lane at locations shown.
- Only use temporary portable rumble strips from the approved products list.
- Place advance signing prior to installing temporary portable rumble strips.
- Do not install temporary portable rumble strips on gravel, milled surfaces, or asphalt that has been paved less than 12 hours.
- Temporary portable rumble strips are not required on roadways with posted speed limits of 35 mph or less.

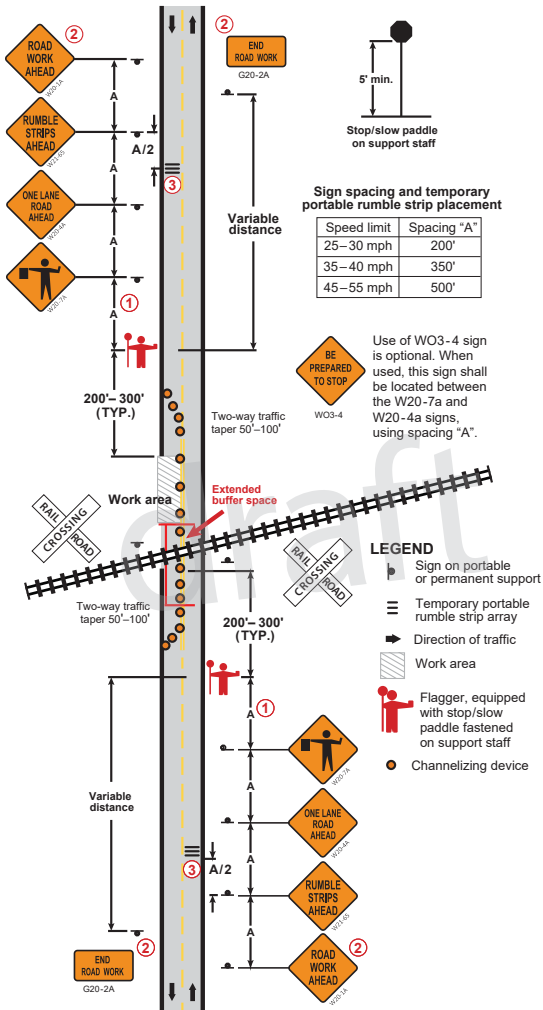


Figure 11: Work in the vicinity of a grade crossing/RAIL

Railroad crossings

When flagging near railroad crossings, be sure your flagging station is not located where traffic may be backed up over the crossing. If the flagger position cannot be moved, an additional flagger will be needed to keep the crossing clear of stopped traffic (See Figure 11). Refer to Part 6 of the MUTCD for more details.

Coordinate with the appropriate railroad for any work near a railroad as additional measures may be required.

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Intersection work

When work activities occur in an intersection, at least one additional flagger may be needed per intersection. Approaches with high traffic volumes may need a dedicated flagger assigned to them.

The flagger(s) should use hand signals with a flag or flashlight with red glow cone to control traffic movements rather than the typical STOP/SLOW paddle (See page 26).

Intersections with traffic control signals must be either, flashing red, or deactivated with STOP signs displayed for a flagger to override the signal. Contact the signal maintaining authority for coordination.

Flaggers may direct vehicles to proceed through a STOP sign controlled condition while holding traffic on other approaches. Although the flagger may urge motorists to continue through the STOP sign, the flagger has no authority to prevent traffic from stopping and must allow for stopping within the operation.

Mobile operations

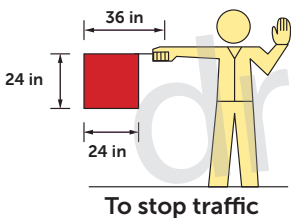
Mobile work zones present particular challenges for flaggers. Because you may be moving down the road with the other workers, your visibility and conflicts from intersecting roads and driveways are continually changing. As a flagger, always be alert for the need to maintain adequate advance warning for approaching drivers while providing protection and warning for workers. It will be necessary to stop operations periodically to relocate advance warning signs and other devices.

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EMERGENCY FLAGGING

In emergencies, the following equipment and procedures may be used. However, provide standard traffic control as soon as possible (See Figures 7 and 10).

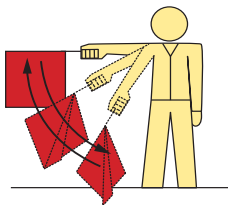
If the STOP/SLOW paddle is not available, use a good quality red flag to regulate traffic in emergency situations. The flag shall have minimum dimensions of 24 inches by 24 inches (600 mm by 600 mm) and a minimum 3-foot (0.9 m) handle. The free edge of the flag should be weighted so the flag will hang vertically even in windy conditions.



To stop traffic

To stop traffic, the flagger should stand on the shoulder of the road and extend the flag across the traffic lane. The flagger's free hand

should be raised above shoulder height with the palm facing the approaching vehicle and eye contact should be made with the driver.



To alert and slow traffic

To let traffic proceed, the flagger should lower the flag to their side and with their free arm motion traffic to proceed. Do not use the flag to motion traffic through.



To alert and slow traffic, the flagger should extend the flag staff and slowly move the flag up and down in a sweeping motion between shoulder height and straight down. Their free hand should be kept down.

To let traffic proceed

Nighttime emergency situations

- A flashlight with red glow cone may be used in addition to the red flag. Retroreflectorized clothing shall be worn.

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GUIDELINES FOR THE SUPERVISOR

- The supervisor's involvement is critical to proper flagging and traffic control.
- Be sure flaggers are properly trained and instructed. Impress on flaggers the value and importance of performing their duties properly.
- Provide proper equipment and apparel for flaggers.
- Provide adequate breaks for flaggers.
- Provide relief for flaggers by alternating flaggers and/or pilot car drivers periodically throughout the day.
- Develop a procedure for handling non-compliant drivers.
- Discuss appropriate actions for possible incidents in or near the work zone.
- Drive through the work area periodically to observe traffic control operations. Correct activities not in compliance with this *Flagger's Handbook*, the *MUTCD* and other contract documents.
- Ensure proper signs are in place prior to beginning operations and that they remain in place only as long as they are needed.

TRAINING REQUIREMENTS

Flaggers will understand the requirements for proper personal protective equipment.

Flaggers will demonstrate the proper advance warning sign placement for flagging.

Flaggers will demonstrate the proper placement of temporary portable rumble strips.

Flaggers will demonstrate properly locating themselves in relation to traffic.

Flaggers will demonstrate properly locating themselves in relation to obstructions (clear escape route).

Flaggers will demonstrate proper single flagging technique.

Flaggers will demonstrate proper two flagger flagging technique.

Flaggers will demonstrate proper flagging technique at an intersection.

Flaggers will demonstrate proper flagging technique when pilot cars are used.

Flaggers will demonstrate proper measures for warning others of non-compliant vehicles.

Flaggers will demonstrate proper technique when flagging at night.

Each flagger is required to have a minimum of 4 hours of hands on training to demonstrate the proper flagging techniques shown in this document.

Flaggers are required to take a refresher course every 2 years and demonstrate these skills.

NOTES

Flagger Certification card here.

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CONTACT US

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