MoDOT
Human Resources - Employee Development
105 West Capitol
P.O. Box 270
Jefferson City, MO 65102-0270
10/22/04

Flagger Training

Missouri Department of Transportation

Course Objectives

- To provide uniformity and consistency of flagging within MoDOT
- To train employees how to protect themselves and co-workers, along with the traveling public

Introduction

Remember – As a flagger, your duties are to protect MoDOT personnel and provide safe, courteous, and authoritative directions to traffic seeking passage through the work area. **Your job is the most important one on the crew.** The lives of all individuals in the work zone depend on YOU!

The following information is designed to give you some basic guidelines regarding flagging operations. Familiarize yourself with these procedures. If you have any questions or concerns, don't hesitate to ask your supervisor.

For your personal safety as a flagger, **always** face towards traffic and stand outside the path of an approaching vehicle.

Policy and Standards

Flagging should only be used when all other traffic control devices are inadequate to warn and direct traffic.

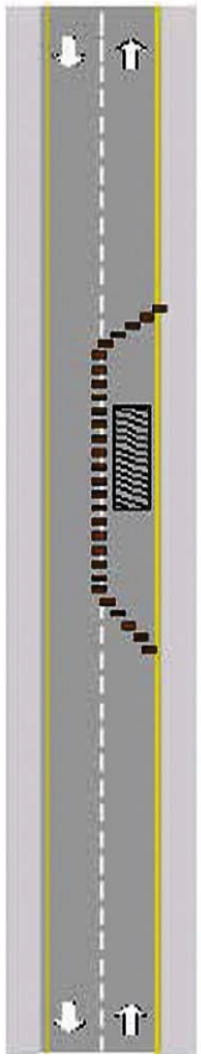
Guidance for Flagger Duration

Flaggers should not flag for more than two hours at one time, unless it is an emergency situation. Supervisors shall provide flaggers with a 15-minute break from flagging in non-emergency situations. The supervisor should consider environmental, physical and work factors when determining appropriate flagging and break durations in the field.

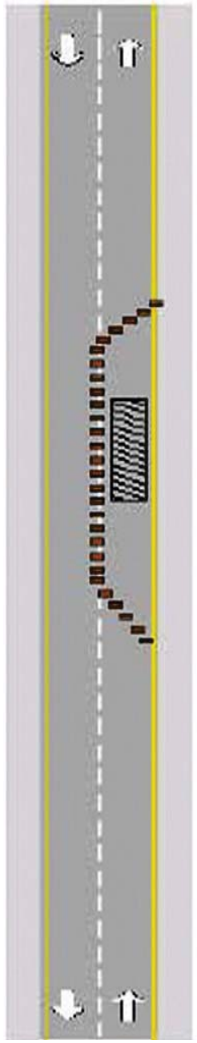
Notes

Label the components of a work zone and then explain where a flagger would stand on a single flagger operation and two flagger operation.

Single Flagger



Two Flaggers



Course Contents

At the end of this class, you should be able to:

- List the qualifications of a flagger
- Understand MoDOT's Traffic Control for Field Operations Manual
- Explain when flagging should not be done
- Describe the components of a work zone
- Describe why flagging is important
- Determine the necessary equipment needed to flag
- Utilize proper hand signals while flagging
- Setup and handle one-lane traffic on a two-way road
- Use various methods to communicate with other flaggers
- Direct traffic while on a haul road
- Recognize different types of drivers and how to deal with them
- Handle nighttime flagging operations
- Communicate with the traveling public, crew workers, and supervisors

Work Zone Manuals

What is MoDOT's governing manual for flagger and work zones operations?

_____

_____

MUTCD stands for:

_____

_____

List Qualifications of a flagger

(A flagger is a person who provides temporary traffic control)

1. _____

2. _____

3. _____

4. _____

5. _____

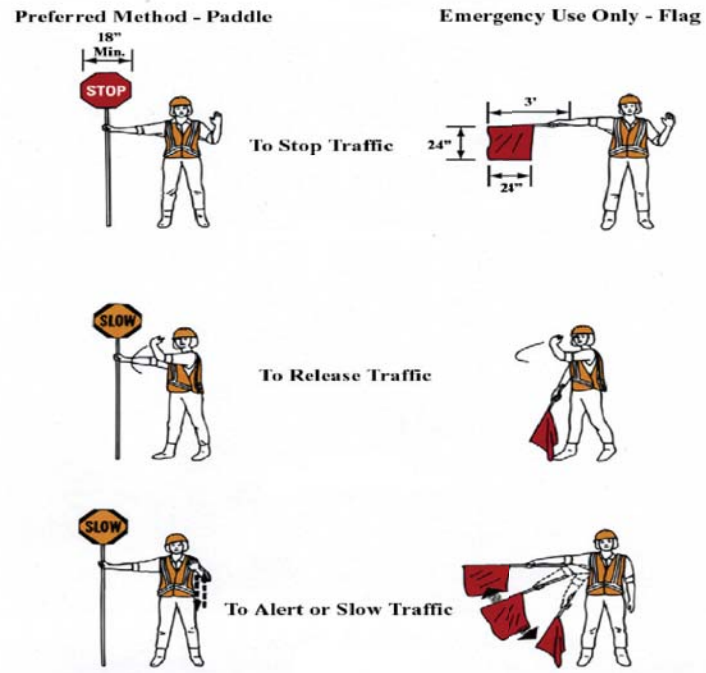
Flagger Guidelines

Prior to the start of flagging operations, all signs should be in place. A good flagger location is one where the sight distance is sufficient and the flagger is clearly visible to approaching motorists, workers and, when practical, the other flagger(s).

When the temporary traffic control zone covers a long segment of roadway, additional flagger symbol signs may be needed. In stationary operations, the flagger should be 500 feet from the flagger symbol sign. For mobile operations, spacing between flagger and FLAGGER symbol signs shall not exceed one mile.

When more than one flagger is being used, all communication procedures should be clear before any flagging begins. If there is a major intersection within the closed area, an additional flagger may be needed to control traffic entering the temporary traffic control zone from the major intersection.

Law enforcement personnel should be secured to perform flagging functions, when needed, at intersections fully-controlled by an active traffic signal or stop signs. Law enforcement personnel are the only ones who can legally assign right of way through an intersection when the assignment is opposed to in-place traffic control.



Clothing

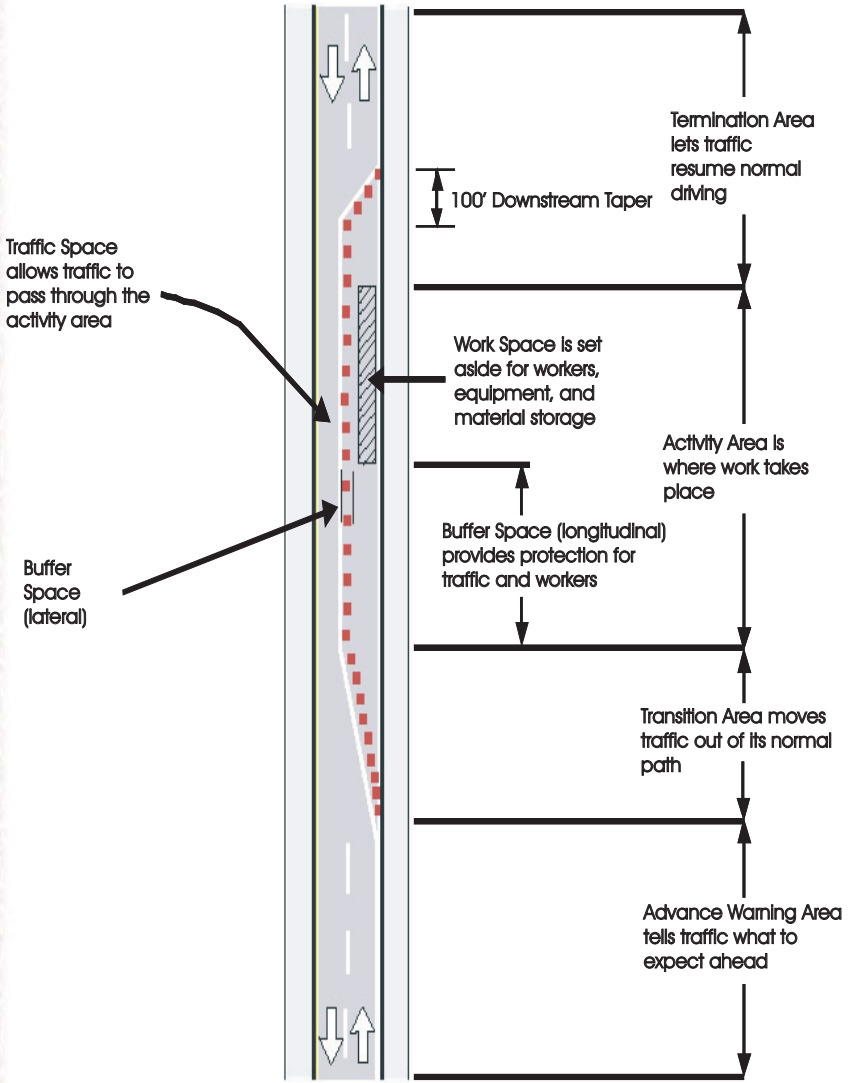
- Type 2 apparel, orange vest and orange hat for daytime operations.
- Type 3 apparel and a hat shall be worn during nighttime flagging operations.
- Clothing shall be in accordance with MoDOT's Traffic Control Manual and Safety Rules and Regulations.
- All PPE (Personal Protective Equipment) worn during nighttime operations shall be retroreflective.
- Vest, shirt, jacket or pants (when required) shall be orange, silver, or a fluorescent version of these colors.
- A neat appearance helps gain respect and makes your job more effective.

Retroreflective clothing shall:

- Be visible at a minimum distance of 1000 feet for nighttime flagging.
- Identify the wearer as a person.

When flagging on a rural undivided highway, the length of the work zone should not exceed three miles. When flagging in an Urban area, the length of a work zone should not exceed one mile. When work is completed and flaggers are off the road, remove work zone signs promptly.

Emergency vehicles have right of way priority in a work zone.



List Flagging Equipment

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Stop/Slow Paddle

- Shall be retroreflective
- Shall be octagonal shape on a rigid handle
- Shall be 18” wide with letters at least 6” high

Flags

- In emergency situations, a minimum size 24” x 24” red flag on a 3’ staff may be used in place of a paddle until a paddle is available. However, as soon as a paddle is available it shall be used.
- When flags are used at night, they shall be retroreflective.

Communication Devices

- When required, flaggers shall be equipped with a portable, two-way, FCC approved communication system. The two flaggers must be able to see each other or be equipped with an appropriate communication device.

Inspection Schedule

Work zone supervisors need to check the flow of traffic to ensure traffic is flowing as it was designed.

- When to inspect:
  - Immediately after work zone set up
  - After any modifications
  - At night
  - Intermittently throughout the duration of the job
  - Under adverse weather conditions
    - Wind
    - Rain
    - Fog
    - Snow

Workers Safety Considerations

Protect yourself and co-workers! Once you have been selected or assigned your flagger position by your supervisor, look over the area for one or more methods or routes of escape - a place to get to in order to avoid being injured by oncoming vehicles, regardless of the reason.

Should you observe a vehicle coming your direction, protect yourself first - **THEN** warn the crew.

It is a good idea to have an air horn or some type of warning device that can be heard by the crew above construction noise.

Make sure that the crew is aware of your signals and knows what to do when you sound the warning.

Remember, your job is handling traffic. Do not otherwise assist the work crew, watch construction operations instead of traffic, or engage in any other activity in addition to your duties as a flagger.

If you need a break, tell your supervisor so that another qualified flagger may relieve you.

Advance Flagger

An advance flagger may be used where there is limited sight distance to the activity area or where long lines of traffic form. The decision to use an advance flagger should be made at the Supervisor level at the work zone. As an advance flagger, you should stop **each** vehicle as it approaches, inform the driver of the situation ahead, and explain the actions required such as: "fresh oil ahead, drive slowly," "keep to the right and stay in line," etc. Where there are long lines of stopped traffic waiting to proceed, the advance flagger should move down the line and inform each driver of the reason for the delay and the approximate length of the delay. Be considerate, alert, and avoid unnecessary conversation.

Nighttime Work Zones

What is considered nighttime work? Nighttime work is work that begins one-half hour before sunset and ends one-half hour after sunrise.

Requirements for Nighttime Flagging

1. _____

2. _____

3. _____

4. _____

Traffic Control Techniques

Flagging Procedures

1) To stop traffic
   - Stand on shoulder
   - Face traffic
   - Hold STOP sign vertically to side at arm's length
   - Hold other arm outstretched with palm facing motorist
   - Make eye contact with driver
   - Walk towards the centerline when one or two cars have stopped

2) To release traffic
   - Walk back over to shoulder
   - Stand facing towards the flow of traffic
   - Hold SLOW sign facing traffic at arm's length
   - Motion traffic through with sweeping motion of free arm

3) To alert or slow traffic
   - Stand on shoulder
   - Face traffic
   - Hold SLOW sign vertically to side at arm's length
   - Lower and raise free hand slowly with palm down

4) To temporarily stop traffic
   - Only one lane closed for loading/unloading
   - Only one flagger
   - Stop traffic as #1 above
   - Wait until obstruction has passed
   - Walk back to shoulder
   - Stand facing towards the flow of traffic
   - Turn sign parallel to shoulder, with STOP side facing flagger
   - Motion traffic through with sweeping motion of free arm

Flagger Station

- Located in advanced warning area.
- Be alert, remain standing at all times.
- **Always face oncoming traffic** and stand outside the path of an approaching vehicle.
- A flagger's normal station is on the shoulder of the road, minimum of 500 ft. from the flagger symbol sign and minimum of 100 ft. from the work space.
- Park your vehicle off the road, away from your station.
- Stand alone, do not mingle with the work crew or the public.
- Make sure you are visible to oncoming traffic, not standing where the sun is impeding visibility or in a shadow.
- Stand in a location that allows approaching traffic adequate time to respond.
- **Have a planned escape route.**

Factors That Affect Sight Distances

You should be visible for at least 500 feet in daytime operations, 1000 feet for nighttime operations, or more if conditions warrant. What are some of the things that might hide you from the driver's sight?

- Hills
- Curves
- Obstructions
- Shade – hard to see people in shaded area
- Color contrast – wearing an orange vest and standing next to a similarly colored truck
- Bad weather
- Darkness

Note: If it's a minimum value, you can go greater. If it's a maximum value, you can go less. Use no less than the minimum value and no more than the maximum value.

Single Flagger

There are two different applications of the single flagger situation.

1. A single flagger may be used when all three of the following are met:
   - A low volume road is less than 500 ADT
   - A good sight distance is greater than 1000 feet
   - A short work zone is less than 500 feet

   Note: The flagger should have:
   - A safe location to stand
   - A planned escape route
2. A single flagger may also be used for short-term, single lane closures. An example would be a truck depositing material off the edge of the roadway. In this situation, the flagger would stop the traffic in this lane while the other lane flows free. When the lane is opened again, the flagger allows the traffic to proceed in their normal lane. After stopped traffic is allowed to proceed, the flagger should turn the STOP/SLOW paddle parallel to the flagger so that no message is displayed to either direction of traffic.

Note: *Single flagging procedures should not be conducted during nighttime work zone operations.*

Two Flaggers

When two flaggers are required, lines of communication must be established prior to the start of flagging operations. The two flaggers must be able to see each other or have two-way walkie talkies designated for proper communication. One flagger should be the lead flagger and coordinate all activities.

Always use appropriate advance warning signs, giving particular attention to sign visibility, legibility and placement.

Remember to always remove signs or completely cover the sign messages when they do not apply to present traffic control conditions.