

NORTH DAKOTA



FLAGGING HANDBOOK

Prepared by
North Dakota Local Technical
Assistance Program
Upper Great Plains Transportation Institute
North Dakota State University

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in cooperation with

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and
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North Dakota Flagging Handbook

Preface	4
Introduction.....	4
Training Requirement.....	4
Overview of the Flagger's Job.....	4
Flagger Equipment	5
Clothing.....	5
Tools	6
Flagger Stations	7
Flagger Situations.....	8
Single Flagger.....	9
Two Flaggers	10
Advance Flagger	10
Pilot Vehicle	11
Flagging Procedures.....	11
With a Paddle	12
Stop.....	12
Proceed	12
Slow	12
With a Red Flag	14
Stop.....	14
Proceed	14
Slow	14
With a Flashlight Traffic Wand	16
Stop.....	16
Proceed	16
Slow	16
Flagging at Intersections.....	18
Remember	18
Notes to Supervisor	22
Proper Flagger Conduct.....	23

Preface

This North Dakota Flagging Handbook has been developed following the guidance and procedures of the Manual on Uniform Traffic Control Devices, 2003 edition (MUTCD) and the specifications of the North Dakota Department of Transportation. These instructions have been prepared for employees of the NDDOT, contractors, and other entities that are assigned flagging duties in work zones on public streets and highways.

Text appearing in a box such as this is derived from the MUTCD. It may or may not be a direct quote of the MUTCD.

INTRODUCTION

Your job as a flagger is the most important one on the work crew. The lives of all individuals in the workspace depend on you and how well you carry out your assigned duties.

The information in this handbook 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.

TRAINING REQUIREMENT

You are required to view a flagging training video and pass a written test before performing any flagging duties.

OVERVIEW OF THE FLAGGER'S JOB

As a flagger, your main duties are:

- To guide traffic safely through work zones using the STOP-PROCEED-SLOW flagging procedures.
- To protect your fellow workers.
- To protect yourself.
- To be alert. **NEVER** turn your back on, or stand in the path of, moving traffic.

FLAGGER EQUIPMENT

Clothing

As a flagger, you are required to be clean, neat and fully dressed at all times when on the job, either day or night. Be prepared for changing weather by bringing suitable clothing and other necessary things like sunscreen, insect repellent, and a water bottle. You must be fully clothed. Immodest or sloppy dress or appearance will not be tolerated. Remember, a neat appearance commands respect.

For daytime and nighttime activity, flaggers shall wear safety apparel meeting the requirements of ISEA “American National Standard for High-Visibility Apparel” and labeled as meeting the ANSI 107-2004 standard performance for Class 2 risk exposure. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined in the standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. The retroreflective safety apparel shall be designed to clearly identify the wearer as a person.

For nighttime activity, safety apparel meeting the requirements of ISEA “American National Standard for High-Visibility Apparel” and labeled as meeting the ANSI 107-2004 standard performance for Class 3 risk exposure should be considered for flagger wear (instead of Class 2 safety apparel in the Standard above).

Tools

You will be given a standard STOP/SLOW paddle. It will be mounted on a rigid handle and should be 7 feet long to the bottom of the sign. You may also be provided with an air horn to communicate an emergency situation to fellow workers.

The STOP/SLOW paddle shall have an octagonal shape on a rigid handle. STOP/SLOW paddles shall be at least 18 inches wide with letters at least 6 inches high and should be fabricated from light semi-rigid material. The background of the STOP face shall be red with white letters and border. The background of the SLOW face shall be orange with black letters and border.

When used at night, all paddles must be retroreflected. If you are flagging at night, your entire flagger station should be illuminated with floodlights and you must have a flashlight traffic wand to use to signal traffic.

If you are in an emergency situation, and a paddle is not immediately available, a red flag may be used. Red flags should only be used in emergency situations and at low-speed and/or low-volume locations that can be controlled adequately by a single flagger.

Flags, when used, shall be a minimum of 24 inches square, made of a good grade of red material, and securely fastened to a staff that is approximately 36 inches in length. The free edge of the flag should be weighted so the flag will hang vertically, even in heavy winds. When used at nighttime, flags shall be retroreflectorized red.

FLAGGER STATIONS

Flagger stations shall be located such that approaching vehicles will have sufficient distance to stop at an intended stopping point.

Except in emergency situations, an advance warning sign or signs shall precede flagger stations. Except in emergency situations, flagger stations shall be illuminated at night.

Prior to starting your flagging duties, all signs must be in place. A good station is one where approaching motorists have a good sight distance and can see you clearly. Avoid standing in shadows, if possible. If you are stationed near a hill, take a position in advance of the hill to make sure you are visible to approaching traffic. **NEVER take a position over the crest of a hill.** The same is true when flagging near curves. Your flagging station should be well in advance of a sharp curve to make sure you are visible to approaching traffic. **NEVER take a position around a sharp curve.**

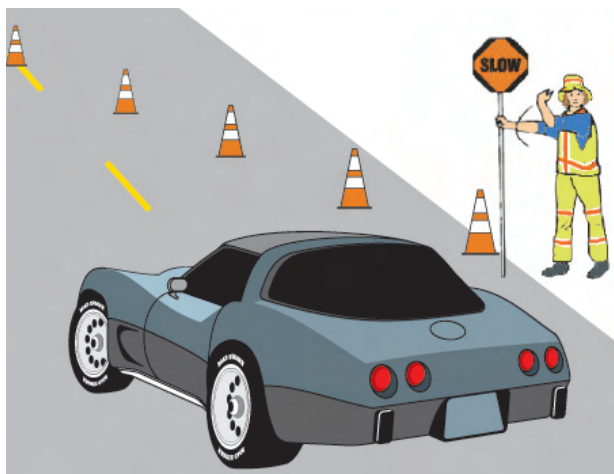
If the temporary traffic control plan requires two flaggers, you should understand the communication procedures before any flagging begins. An additional flagger may be needed to control traffic entering the temporary traffic control zone if there is a major intersection within the closed area. Your supervisor should assist you in setting this up.

Watch for traffic becoming backed up over long distances due to flagging operations. This may cause potentially dangerous situations. When you see this type of situation occurring, you should notify your supervisor. You may be given instructions on how to help maintain a shorter backup of vehicles.

When traffic control is not required, you should turn your paddle $\frac{1}{4}$ turn to traffic (making it parallel with the traffic) so no message is displayed to either direction of traffic.

FLAGGER SITUATIONS

You, the flagger, should stand either on the shoulder adjacent to the traffic being controlled or, in limited circumstances, in the barricaded lane. In rural areas, your position will normally be on the right shoulder of the roadway and in urban areas, on the right curb. Your location may differ according to conditions, especially on multilane highways and streets. In some locations, to operate effectively, a position may have to be taken on the shoulder opposite the barricaded section. You should only stand in the lane being used by traffic after traffic has stopped (see details in the Flagging Procedures section). Stand where oncoming traffic can see you. Make sure you are visible, not standing where the sun or a shadow makes it hard to see you.



Preferred Flagging Position

Single Flagger

There are two different applications of the single flagger situation.

1. On a low volume road with good visibility, a single flagger may be used to control one direction of traffic while the other direction flows free. In this situation, you are positioned near the closed lane at the beginning of the taper of cones. Your job is to stop the traffic approaching the closed lane. When the open lane is clear, allow traffic to proceed. If adequate sight distance is not available beyond the workspace for a flagger to detect oncoming traffic, two flaggers must be used (see the Two Flaggers information).
2. A single flagger may also be used to stop traffic when a lane is briefly closed. An example would be a truck depositing material off the edge of the roadway. In this situation, you would stop the traffic in this lane while the other lane flows free. When the lane is open again, you can allow traffic to proceed in their normal lane.

After stopped traffic is allowed to proceed or when no traffic control is required, you should turn your paddle $\frac{1}{4}$ turn so the edge, not the face, is toward the traffic and no message is displayed to either direction of traffic.



Quarter-Turn Position

Two Flaggers

When two flaggers are required, you must coordinate communication procedures prior to the start of flagging operations. The two flaggers must be on each end of the work zone and you must be able to see each other, or have two-way radios for proper communication. One flagger should be the lead flagger and coordinate all activities.

When two flaggers are used and two-way radios are unavailable, the flag transfer method may be used. To do this, you must stop the last vehicle in the line proceeding into the one lane section. Hand a flag or other object to the driver and instruct the driver to deliver it to the flagger at the other end. Then stop all oncoming traffic until the flag or object is returned to you. The second flagger then knows that it is safe to allow traffic to move in the other direction.



Two Flaggers Operation

Advance Flagger

An advance flagger may be used where there is limited sight distance to the activity area or when long lines of traffic form. Where there is limited sight distance, the advance flagger should stop each vehicle and inform the driver of the situation ahead. 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.

Pilot Vehicle

The use of a pilot vehicle is a safe and efficient means of moving traffic when a lane must be shared by traffic going both directions and the work zone area is lengthy or difficult to navigate. Two flaggers must be used when using a pilot vehicle. You will stop traffic following the usual procedures and hold the vehicles until the pilot vehicle arrives. The pilot vehicle will move to the head of the line of waiting vehicles and you will release the vehicles to follow the pilot vehicle back to the other flagger. After the line of cars has passed your station and there is a gap in traffic, you will again stop the oncoming traffic and hold the vehicles until the pilot vehicle returns.

When a pilot vehicle is used, traffic delays should be limited to 15 minutes. If the wait is longer, inform your supervisor and an additional pilot vehicle may be used to keep the delay time within the 15-minute limit.



Use of a Pilot Vehicle

FLAGGING PROCEDURES

There are three flagging procedures: stop, proceed, and slow. And there are three tools to carry out the procedures: a paddle, a red flag, and a flashlight traffic wand.

With a Paddle

The STOP/SLOW paddle should be the primary and preferred hand-signaling device because the STOP/SLOW paddle gives road users more positive guidance than red flags.

Stop

Stand on the shoulder of the road, away from moving traffic. Face traffic and hold the paddle with the STOP face towards traffic with your right hand in a stationary position with your arm extended horizontally away from your body. Your left arm should be raised with the palm toward the approaching traffic. Look directly at the approaching driver. Make sure that you make eye contact with the driver.

Remain on the shoulder of the road until after the first vehicle has stopped. Once the first vehicle has stopped, move to a spot where other approaching vehicles can see you (usually near the centerline of the roadway), and stop all remaining vehicles. **NEVER cross the centerline into the adjacent lane when stopping vehicles.** Keep the STOP face towards traffic until you can allow the stopped vehicles to proceed.

Proceed

You should be at the flagger station on the shoulder. If you are in the stopped traffic lane, return to the shoulder. Face traffic and turn the SLOW paddle to face traffic. Hold the SLOW paddle in a stationary position with your arm extended horizontally away from the body. Use your free hand to motion traffic to proceed. **NEVER wave the paddle.**

Slow

Stand on the shoulder of the road and face traffic with the SLOW paddle facing traffic and held in a stationary position with your arm extended horizontally away from your body. You may motion up and down with your free hand, palm down, indicating that the vehicle should slow down. **NEVER stand in the path of oncoming traffic.**



STOP



PROCEED



SLOW

With a Red Flag

In emergency situations where a red flag is used, follow the same procedures as with a paddle: STOP – PROCEED – SLOW.

Stop

Stand on the shoulder of the road, away from moving traffic. Face traffic and hold the red flag with your right hand in a stationary position with your arm extended horizontally away from your body. Keep the staff horizontal. **NEVER raise the flag above this horizontal position.** Your left arm should be raised with the palm toward the approaching traffic. Look directly at the approaching driver. Make sure that you make eye contact with the driver.

Remain on the shoulder of the road until after the first vehicle has stopped. Once the first vehicle has stopped, move to a spot where other approaching vehicles can see you (usually near the centerline of the roadway), and stop all remaining vehicles. **NEVER cross the centerline into the adjacent lane when stopping vehicles.** Keep the red flag extended horizontally until you can allow the stopped vehicles to proceed.

Proceed

You should be at the flagger station on the shoulder. If you are in the stopped traffic lane, return to the shoulder. Face traffic and lower the flag to your side. Use your free hand to motion traffic to proceed. **NEVER wave the flag.**

Slow

Stand on the shoulder of the road and face traffic. Swing the flag from a horizontal position to a position down and near your side and then back up again. Repeat this up and down sweeping motion but **NEVER** raise the flag above your shoulder. Your free arm should remain motionless at your side. **NEVER stand in the path of oncoming traffic.**



STOP



PROCEED



SLOW

With a Flashlight Traffic Wand

In cases where visibility may be limited by shadows, ambient light, background distractions, or other impediments, a flashlight with a red cone attached, or a similar device, may be provided in combination with a STOP/SLOW paddle to enhance your visibility to motorists. A flashlight traffic wand must be used during nighttime flagging operations.

Stop

Stand on the shoulder of the road, away from moving traffic. Face traffic and hold the STOP paddle with your right hand in a stationary position with your arm extended horizontally away from your body. Your left hand should hold the flashlight traffic wand. Slowly wave the wand back and forth in front of your body. Look directly at the approaching driver. Make sure that you make eye contact with the driver.

Remain on the shoulder of the road until after the first vehicle has stopped. Once the first vehicle has stopped, move to a spot where other approaching vehicles can see you (usually near the centerline of the roadway), and stop all remaining vehicles. **NEVER cross the centerline into the adjacent lane when stopping vehicles.** You should request the first driver to activate their vehicle's flashers until the traffic line is released. Keep the STOP face towards traffic until you can allow the stopped vehicles to proceed.

Proceed

You should be at the flagger station on the shoulder. If you are in the stopped traffic lane, return to the shoulder. Face traffic and turn the SLOW paddle to face traffic. Hold the SLOW paddle in a stationary position with your arm extended horizontally away from the body. Use the flashlight traffic wand in your left hand to motion traffic to proceed. **NEVER wave the paddle.**

Slow

Stand on the shoulder of the road and face traffic with the SLOW paddle facing traffic and held in a stationary position with your arm extended horizontally away from your body. You may motion up and down with the flashlight traffic wand in your left hand, indicating that the vehicle should slow down. **NEVER stand in the path of oncoming traffic.**



STOP



PROCEED



SLOW

FLAGGING AT INTERSECTIONS

A flagging operation within a non-signalized intersection may over-ride stop and yield signs in the intersection. When traffic signals that are set on all red flash or turned off and temporary stop signs installed, then the intersection may be treated as a non-signalized. **Only a licensed uniformed law enforcement officer may override a fully operating traffic control signal system.**

High volume intersections, large intersections, or complicated situations may require additional flaggers, and you should coordinate with your supervisor to eliminate conflicts.

REMEMBER

As a flagger, your number one consideration is **SAFETY** – the safety of:

- Yourself
- The workers
- The traveling public

To the traveling public, you are the most important person in the construction zone.

NOTES TO SUPERVISOR

- Training of all flaggers is required and written documentation that a flagger has received the appropriate training must be obtained prior to beginning work.
- All flaggers shall be properly equipped, properly dressed, and properly trained PRIOR to the start of work.
- Inform the flaggers of work activities so they may provide brief answers to motorists' questions.
- The importance of the job must be impressed upon the flaggers. They are responsible for worker safety.
- Arrange for flaggers to have regularly scheduled rest breaks.
- Drive through the temporary traffic control zone after all signs, devices, and flaggers are in place. Check the visibility of signs, flaggers, and activity areas.
- Supply flaggers with information on how to contact you and a means of communication for getting questions answered and assistance in handling potential issues.

PROPER FLAGGER CONDUCT

- Stay at your position until relieved by another flagger or your supervisor. DO NOT abandon your post for any reason until the work is finished or a replacement flagger arrives.
- Wear the required clothing and use the proper equipment.
- Stand alone at your position. DO NOT sit in a chair or vehicle at your flagger station. DO NOT mingle with the work crew. Your job is to protect them.
- Park your vehicle in the area designated by your supervisor. DO NOT park your personal vehicle at your flagger station.
- Always maintain an escape route in case an errant driver is headed in your direction. DO NOT let your avenue of escape be blocked by equipment, vehicles, material or barricades.
- Be visible. DO NOT get lost among signs, workers and equipment. DO NOT stand where the sun or a shadow will get in the way of drivers seeing of you.
- Be sure you have made eye contact with a driver and are satisfied they see you and are completely stopped before you move in front of the vehicle
- When talking with motorists, be polite, but brief. DO NOT engage in extended conversation with motorists or lean on vehicles.
DO NOT argue with motorists.
- If a driver refuses to obey instruction, record a description of the car, driver, license plate, and the circumstances. Report this information to your supervisor as soon as possible.
- Remove or cover all signs indicating the presence of a flagger when a flagger is not actually flagging. This includes lunch or other breaks.
- Be alert for emergency vehicles. They have the priority rights. Allow them to pass as quickly as possible.
- If you have any questions about your duties, check with your supervisor.
- **When in doubt, STOP TRAFFIC.**

RESPONSIBILITY



SAFETY