



Flagging & Traffic Control Safety Program

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The following safety related program is for informational purposes only. The SORT committee hopes that each participating district will look at this program and discuss how it compares to the district's own practices. This program is NOT a complete safety program, but intended as guidelines. There is no guarantee that following a given program will eliminate or substantially reduce the risk of claim or injuries. It is expected that member districts will consider this program and adapt or modify it to fit the district's particular needs and circumstances.

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PURPOSE / SCOPE

The purpose of the Flagging and Traffic Control Safety Program is to ensure that all employees flagging or controlling traffic must understand the potential hazards and to establish the requirements for working safely in such an environment. The Program designed to help serve the districts safety objectives in conjunction with State Flagging & Traffic Control Certification Training. Review on a regular basis to keep the information fresh in your mind. If you have any questions, talk to your supervisor or your designated employee.

The Flagging and Traffic Control Program is intended to integrate District Policies with State and local laws into a guide which is both easy to implement and increases the safety of employees and the public alike when work interrupts the normal flow of traffic in any way.

This is intended to be a universal document that describes precautions and procedures that must be followed in all cases. Field management and staff will develop Standard Operating Procedures for work at specific sites and for specific work tasks, which will take into account all safety issues and will define the most effective methods of accomplishing the work objectives safely and efficiently.

All employees are encouraged to actively participate in identifying opportunities for applying engineering controls that would reduce hazards.

The trained flagger becomes the key factor in establishing proper warning and traffic control to assure workers' safety and making sure traffic moves cautiously and consistently through the work zone. The flagger must, through visual movements and appearance, establish authority and confidence so traffic will respond in time and consistently with the need to stop, change lanes, proceed more slowly, or maneuver as necessary around the work site. Every employee that is given the responsibility of being a flagger at a particular job site must have full understanding that by their presence and visibility, they are the districts professional representatives.

POLICY STATEMENT

It shall be the policy of the District to require all employees who work in or around traffic to rigidly follow the procedures and safety advisories set forth herein. It is the District's responsibility to provide employees with all the safety devices, Personal Protective Equipment, Equipment and Training that may be necessary or required for any particular use, operations, set-up, or service.

It is the Districts' Policy that everyone will practice safety in or around the workplace. If at any time safety of individuals, property, and/or equipment is in danger, operation will cease and corrective action will be taken.

It is your responsibility to familiarize yourself with the safe and correct use of all traffic equipment and the District Flagging & Traffic Control Program prior to work. It is also your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine and equipment operation and maintenance.

EXEMPTIONS / EXCLUSIONS

Personnel that have not completed a flagger-training course may be assigned duties as flaggers only during emergencies when a sudden and unexpected set of circumstances demands immediate attention. Such emergency assignments are temporary and last only until a certified flagger can be put into the position. "Emergency" is defined as "...an unforeseen occurrence endangering life, limb, or property."

HAZARD ANALYSIS

N/A

Hazard Description

Utility maintenance and construction projects almost invariably involve work in or near motor or pedestrian traffic. Increases in traffic volume and speeds necessitate the proper use of adequate channelization devices and certified flaggers to maintain traffic flow so that utility work & traffic may proceed safely with as little hindrance as possible.

Hazard Evaluation

In emergency situations it may be difficult to assess traffic control needs, prepare a Traffic Control Plan (*TCP*), and notify all pertinent agencies. The responsible person will, set up traffic control as necessary to comply with the law, and then complete a TCP to describe how traffic was handled on the job.

Traffic Control in Fog may, at the discretion of the responsible person, require flares placed near Worker Ahead or Flagger Ahead signs to call attention to signs which otherwise may not be readily visible. Tapers may also need to be lengthened to provide more advanced warning to motorists of upcoming traffic changes. Such adjustments shall be noted on the TCP.

Traffic Control in Snow and Ice, If at all possible, will be avoided where traffic control is needed in these conditions. In emergencies, traffic shall not be altered in any way until contact has been made with a supervisor or the designated person, because stopping or altering traffic in icy or snowy conditions can easily cause accidents and increase liability. When work requires traffic control in these conditions, traffic control shall be set up in strict compliance with state guidelines in the flagging guidebook, striving for maximum visibility and personal protection. Flagger(s) WILL BE SURE to have a planned escape route in the event that a vehicle(s) loses control due to road conditions.

Short Term & Mobile Operations

Each temporary traffic control zone is different. Many variables, such as location of work, road type, intersections, road volumes, road speeds, and other factors affect the needs of each zone. The goal of temporary traffic control in work zones is safety with minimum disruption to traffic.

Program Name

Work duration is a major factor in determining the number and types of devices used in temporary traffic control zones. The five categories of work duration are as follows:

Long-term stationary work that occupies a location more than 3 days.

Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.

Short-term daytime stationary work that occupies a location for more than one hour, but less than 12 hours.

Short duration is work that occupies a location up to 1 hour.

Mobile work is work that moves intermittently or continuously.

Most maintenance and utility operations are short-term stationary work lasting between one and twelve hours.

During short-duration work, it often takes longer to set up and remove the temporary traffic control than to perform the work. Workers face hazards in setting up and taking down the temporary traffic control zone. Also, since the work time is short, delays affecting traffic are significantly increased when additional devices are installed and removed. A reduction in the number of devices may be offset by the use of other more dominant devices such as rotating lights or strobe lights on work vehicles to increase visibility and awareness.

Mobile operations often involve frequent short stops for activities such as patching repairs, sewer jetting, meter reading, or other utility maintenance operations. When mobile operations are being performed, a shadow vehicle equipped with an arrow panel or a sign shall follow the work vehicle, especially when motor vehicle traffic speeds or volumes are high. Where feasible, warning signs shall be placed along the roadway and moved periodically as work progresses.

Mobile and short-duration operations are activities that might involve different traffic controls. Devices having greater mobility might be necessary such as signs mounted on trucks. The mobility of the temporary traffic control zone is important.

Methods of Evaluation

A skilled flagger helps reduce problems in a potentially hazardous situation by reducing confusion for the motoring public, preventing fewer accidents and injuries to workers and the public and reducing claims.

Exposure Determination

Maintenance personnel, traffic control personnel and members of the public are exposed to the hazards presented in the operations of flagging and traffic control.

RESPONSIBILITIES

District

- Annual review of this program

Designated Person or Safety Program Coordinator

- Keeping flagger certifications valid.
- Review for compliance with the law and as often as needed, evaluate the content of the Flagging and TCP in light of any changes in laws that govern traffic control. The frequency of review is determined by how often changes in the law take place; however, program review will take place at least annually.
- The review of this program will involve the District designated Employee/Safety Officer and the District Safety Committee.
- Collect all Accident Reports, witness cards, the TCP, and any other information needed by either the police or the District Manager. Employees shall not leave the scene until told to do so as the police may want witnesses to stay longer or there may be a need to continue the job in progress.

Managers

- Maintaining traffic-related safety equipment
- Buy, rent, or borrow the needed equipment. When duties arise which will require more traffic control equipment than is in the District's possession.

Employees

- Each flagger must have in their possession either a Valid Washington State Traffic Control Flagger Card or a valid flagger card from a State having flagger training reciprocity with Washington State. The flagger card must show the following:
 - Verification that the flagger training is State approved;
 - Date the flagger received flagger training;
 - Name of the instructor providing the flagger training;
 - Name of the State that issued the flagger card;
 - The card's expiration date; and
 - Flagger's picture or a statement that says "valid with photo ID."
- Assessing traffic control needs for jobs
- The safety of yourself, fellow employees, motorists, and pedestrians. The flagger's job is to direct traffic safely, while allowing job-site workers to safely perform their duties.
- Be in good physical condition. Good physical condition means able to work 8-10 hours at a flagging station, have good vision and have good hearing.
- Be mentally alert by adapt quickly to emergencies and changing situations and the ability to anticipate potential hazards.
- Be professional by maintaining a neat appearance, always being courteous, brief and to the point with motorists and using proper signals that are clear and decisive.
- The District has provided the equipment required for flagging and for working in traffic. Each employee is expected to use it when flagging or working in and around traffic and to keep it in good condition. Inspect equipment before use and report defective equipment as soon as possible.

GUIDELINES/RULES

- Be clearly visible to approaching traffic at all times. Motorists should be able to see you from 500 feet away.

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- Do not stand in front of parked/stopped cars.
- Always be aware of oncoming traffic.
- Do not step into, or turn your back on the traffic.
- Stand on the Shoulder of the road observing traffic and the work zone. Sometimes you may have to stand on the opposite side of the road to effectively direct traffic around the work area.
- Choose the best flagging position that will provide the greatest color contrast between you and the background.
- If at all possible do not stand in the shade.
- Never flag from inside a vehicle.
- Do not lean, sit, or lie on a vehicle.
- Stand alone. Do not permit a group of workers to congregate around you.
- Familiarize yourself with the nature of the work being performed. Be able to answer motorists' questions.
- Establish a warning signal with the work crew in case of an emergency.
- Plan an escape route in case of an emergency.
- Stay alert! Be ready to respond to any emergency.
- Record the license number and description of any vehicle whose driver disobeys your instructions and threatens the safety of the work area.
- Be courteous and professional.
- Keep your mind on your job. Be aware of work in progress.
- Do not perform any other duties when flagging.
- Do not involve yourself in unnecessary conversations with workers, pedestrians, or motorists.
- Do not leave your position until you are appropriately relieved.
- Cover, turn or remove the FLAGGER AHEAD sign when a flagger is no longer on duty.
- Always carry your flagger certification card and picture ID while on the job.

Washington State requires that all traffic control devices conform to the latest version of the Manual Uniform Traffic Control Devices (MUTCD) requirements. It is crucial to verify that any new equipment purchased by the District conforms to the latest MUTCD and ANSI standards. Traffic control devices shall be set up in accordance with the MUTCD and State, City and County requirements.

Once the traffic control equipment and flagger(s) are in place, the traffic control zone will be evaluated for efficiency and adequacy of the plan and make any adjustments necessary to improve its effectiveness. Any changes made to the traffic control plan shall be briefly noted on the plan. A crewmember will drive through the traffic control zone to better judge its effectiveness from the perspective of a motorist. Ultimately, the "Lead Flagger" or the Traffic Control Specialists (TCS)/Traffic Control Manager (TCM) will be responsible for the traffic control zone, its safety & its effectiveness.

After work is completed, all equipment and materials will be removed from the roadway. Traffic control devices will be removed in reverse order from how they were set up, beginning with the work area itself and proceeding outward to the signs furthest from the job. Any damaged pieces of equipment will be tagged "Out for service" for repair or replacement as soon as possible.

If an accident occurs in a traffic control zone, certain tasks will need to be performed. **No employee shall make any comments to anyone other than immediate supervisor, designated safety person or police.** Statements may possibly place you and the District in a serious liability situation. Employees will fill out forms with factual details only. Following this policy will protect both the District and the employee from unnecessary risk and liability.

Applicable SOPs

Traffic control equipment shall be set up on the job in accordance with the written plan. The equipment shall be set up beginning with the signs farthest from the work area, proceeding toward the work area itself, ending with cones or barricades around the work area and placing vehicles in a manner that gives easy access and optimum safety to the workers (i.e. buffer space). When vehicles are parked in the right of way, the emergency flashing lights must be on.

When setting up the flagging stations always plan for an emergency. Allow enough space to escape in the event that a vehicle fails to stop in the designated zone. Position flaggers so they are not exposed to traffic or equipment approaching from all directions. It is suggested that flagging paddles are equipped with a convex mirror at the base of the sign allowing flagger's adequate warning of equipment or vehicles approaching from behind the flagger.

Traffic control equipment must be kept in working order. Therefore, you shall set aside time regularly to inspect the equipment and make repairs or replacements before bad equipment causes an accident. Time will be set aside for inspecting all traffic control devices by using the form titled Traffic Control Devices Inspection Form. A copy of this form is in Appendix A. These forms shall be turned in to your direct supervisor.

The TCP is to be on-site during the job. It can be used as a checklist to ensure that all necessary traffic control equipment is loaded onto the appropriate vehicle.

Required PPE

PPE is an essential part of keeping individuals safe in a traffic control zone. All employees who work in traffic zones must wear appropriate protective gear.

While flagging during daylight hours, a flagger must, at a minimum, wear:

- A high visibility safety garment designed according to Class 2 specifications in ANSI/ISEA, American National Standard for High Visibility Safety Apparel. Specifically, a garment containing at least 775 square inches of background material and 201 square inches of retro reflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger. The acceptable high visibility colors are fluorescent yellow-green, fluorescent orange-red or fluorescent red.
- A high visibility hard hat. The acceptable high visibility colors are white, yellow, yellow-green, orange or red.

While flagging during hours of darkness, snow, fog or low visibility, a flagger must at least wear:

- A high visibility safety garment designed according to Class 2 specifications in ANSI/ISEA consisting of at least 775 square inches of background and material that is fluorescent yellow-green, fluorescent orange-red or fluorescent red in color. With 201 square inches of retro reflective material that encircles the torso and is placed to provide 360 degrees visibility around the flagger. White coveralls, or other coveralls or trousers that have retro reflective banding on the legs designed according to ANSI/ISEA standards.

Program Name

- A high visibility hard hat that is marked with at least 12 square inches of retro reflective material applied to provide 360 degrees of visibility.
- For the purpose of this rule, “hours of darkness” means one-half hour before sunset and one-half hour after sunrise.

Supplemental PPE:

- Extra Jacket
- Gloves
- Safety Glasses
- Sunscreen
- Pencil & Notebook for Records
- Warning Device (i.e. Whistle, Air Horn, etc.)
- Approved Boots

Controlling traffic at night occurs primarily in emergency situations and occasional jobs that are scheduled for night work. In addition to the normal PPE specialized PPE may be required such as flashlights with colored wands for flaggers, large reflectorized cones (min. 28” height), all signs (including Stop/Slow paddles) either reflectorized or illuminated and flagging stations will be illuminated (street lighting is not acceptable and lighting shall not be shining in oncoming traffic’s vision).

On November 24, 2008, a new federal regulation (23 CFR 634) took effect. It requires anyone working in the right of way of a federal-aid highway to wear high-visibility safety apparel that meets the performance class 2 or 3 requirements of ANSI/ISEA.

Prevention Actions

Before work begins, the responsible person for the job will complete all necessary paperwork for the job, including a TCP. This plan will be based on an assessment of what traffic control devices and methods are necessary to provide maximum safety for workers and the public. The TCP is a written description and diagram of how traffic will be controlled, using the TCP form. A copy of this form is in the Appendix.

The responsible person will also contact any agencies that would be adversely affected by traffic flow changes. Examples of such agencies that would need notice are Local City/County Fire Department, Police Departments, County Public Works, Schools and local transit.

In some cases it may be necessary to contact the local Washington Department of Transportation (WDOT) office to inquire or inform them of width or weight restrictions in a given area.

Notification of these agencies is only necessary when traffic is diverted in some way. On jobs where traffic control devices serve as warning devices only (not as channelization devices), then notifying these agencies is not required.

EMERGENCY PROCEDURES

If an accident occurs, securing the scene for safety is the first priority. This will help prevent conditions from getting worse. Once this is accomplished, applying first aid to injured parties will be the next priority. This involves assessing if there are any injuries, and how many are hurt and the amount and extent of the injuries. Call 911 and notified them of the amount and extent of the injuries.

First Aid Awareness and Actions

If an accident occurs have necessary information readily available such as the location, the number of cars involved, if there are injuries, if traffic is blocked and anything else requested by operator.

Trained personnel should administer first aid to those in need. Use of cell phones or sending someone to call for help allows you the ability to remain on the scene as your presence will be needed.

It is important to prevent the situation from escalating. Flaggers or employees trained in flagging, have the responsibility of controlling traffic so that no further damage is done and so that emergency response vehicles can get to the accident scene.

*Note: In an emergency situation, anyone can flag until a certified flagger shows up on the scene.

Once 911 have been notified, the injured are being cared for and the work zone has been secured. The responsible person shall determine if the road could be cleared of equipment, etc., to allow traffic through more efficiently.

FORMS USED

If an accident occurs, an Accident Report Form will be filled out as soon as possible. The vehicle accident envelope is located in each District vehicle's glove box.

Employees on the job are potential witnesses and shall fill out a report form and answer questions for police, immediate supervisor or designated safety person.

TRAINING

It is the intent of the District to be in compliance with the law by utilizing certified flaggers at all times to ensure the safety of motorists, pedestrians, and District employees whenever work must be done on or near roadways. This means that flagger certification must be updated regularly to prevent expiration of flagger cards.

WAC 296-155-305 (6) (7) requires each flagger must be recertified a minimum of every three years.

WSDOT and an increasing number of other City or County Agencies are requiring a Certified TCS/TCM for road construction and maintenance projects. The State of Washington requires a TCS/TCM on all State Projects. Other agencies, through contractual language, might require a TCS and a TCM on all projects within their boundaries or specified projects.

A TCS and TCM certification is good for 4 years and is an intense and in-depth training schedule providing an individual with expertise in traffic control plan development and implementation. Washington State has recognized this certification as higher level of training when compared to the standard flagging certification. However, in order to be certified as a TCS and/or TCM current certification as a flagger is required.

Program Name

Required Materials

N/A

Employee Training

State certification

Supervisor Training

N/A

Outline: [x] – hour class

N/A

REFERENCES/RESOURCES

The Federal Document, which governs flagging and traffic control, is called the MUTCD. This document contains the specifications for traffic control devices, their placement in various applications as well as standards on flagger training, etc. All equipment, methods and training used by the District will comply with the latest version of the MUTCD. In Washington State, the Washington Administrative Codes (WAC) reiterates on the state level the standards set forth in the MUTCD. District field employees will receive flagger training which will give them the knowledge to be State certified flaggers.

REVISION RECORD

Revision No.	Revision Date	Approval Date	Change
1.0.0	08-09-07		Initial design.
2	1-27-09		Placed in new format Robert R Smart

APPROVALS

Safety Committee Chairperson _____ Date _____ General Manager _____ Date _____

DEFINITIONS

Barricade

An obstruction to deter the passage of persons or vehicles.

Signs

Devices that are warnings of hazard, temporarily or permanently affixed or placed, at locations where hazards exist.

Signals

Moving signs, provided by workers, such as flaggers, or by devices, such as flashing lights, to warn of possible or existing hazards.

ANNEX

N/A

APPENDIX

Appendix A: Traffic Control Devices Inspection Form

Date of Inspection: _____

CONES: Look for faded color, cracks and ability to stand upright.

- Total # in useable condition _____
- Total # needing replacement _____

Comments: _____

Total # of Cones:

- _____ 18" Regular
- _____ 24" Regular
- _____ 18" ReflectORIZED
- _____ 24" ReflectORIZED

BARRICADES: Look for broken / bent legs, broken panels, stripes going the right way, missing bolts, nuts, etc.

- Total # in useable condition _____
- Total # needing repair or replacement _____
- Total # of flashers in working condition _____

Comments: _____

Total # of Barricades:

SIGNS & STANDS: Look for tears in fabric, broken or missing fasteners, flags in good condition, and generally clean, stands should not be bent or have missing pieces. Tighten any loose nuts or bolts. Set aside and note any signs or stands in need of repair or replacement.

Comments: _____

Types & # of Signs:

- _____ Construction Ahead
- _____ Flagger Ahead
- _____ Be Prepared To Stop
- _____ Lane Closed Ahead
- _____ Slow
- _____ Other _____

PADDLE SIGNS: Note any broken signs or handles, or other reasons the sign(s) may not be usable.

Comments: _____

Number of Usable Paddles:

- _____ 18" Paddle(s)
- _____ 24" Paddle(s)

FLASHLIGHTS & WANDS: Light works and batteries are not run down. Wand is clean and in good condition.

FLARES: Dry and in good condition.

Appendix B: Traffic Control Plan Form

Date: _____ **Job Supervisor:** _____

Scheduled Dates for Job: _____ **To:** _____

Address / Location:

Description of Work to Be Done:

Sewer System:	Water System:
<input type="checkbox"/> Clean / Camera	<input type="checkbox"/> Service Install
<input type="checkbox"/> MH Repair	<input type="checkbox"/> Leak Repair
<input type="checkbox"/> Main Line Work	<input type="checkbox"/> Vault / Valve Work
<input type="checkbox"/> Other (Explain)	<input type="checkbox"/> Other (Explain)

Posted Speed Limit (mph): _____

Lane Width (feet): _____

Urban / Low Speed (25-30)

Urban / High Speed (35-40)

Rural (45-55)

Expressway / Freeway (55+)

How Will Traffic Be Controlled:

Traffic Signs, Cones, and Flagger(s)

Traffic Signs and Cones Only

Road Closure / Detour

Other (Explain)

Comments: _____

Number & Types of Signs:

_____ Construction Ahead _____ Be Prepared To Stop

_____ Flagger Ahead _____ Lane Closed Ahead

_____ Slow _____ Other _____

Which Flagger Is Designated "The Lead Flagger?"

#1 Flagger

#2 Flagger

#3 Flagger

#4 Flagger

See Drawing On Reverse Side For Location(s)

Name(s) Of Certified Flagger(s):

Flagger #1 _____ Flagger #2 _____

Flagger #3 _____ Flagger #4 _____

See Drawing on Reverse Side for Location(s)

Agencies/Bodies Notified Of Possible Traffic Delays:

City / County / State Police Fire Department

School Districts County/City Rd

Effected Businesses Effected Residence

Other

Will a Traffic Control Supervisor / Manager be on site? Yes/No

If Yes who: _____

Procedure for Getting Emergency Equipment through Work Site:

Changes to TCP: _____

Signature: _____ Date: _____

Program Name

WAC/RCW

WAC 296-155-305, 310 and 315