



Work Area Traffic Control Policies and Procedures

July 2017

Traffic Operations
626 Linden St, Fort Collins 80524
P.O. Box 580, Fort Collins, CO 80522
Phone: 970-221-6630 Fax: 970-221-6282
Email: FCWATC@fcgov.com

Table of Contents

| | |
|---|-----------|
| Introduction | 1 |
| APPLICABILITY AND RESPONSIBILITY | 1 |
| GOALS | 1 |
| DEFINITIONS..... | 2 |
| Work Area Traffic Control Permit Process | 2 |
| PLANNING | 2 |
| DEADLINES..... | 3 |
| WATC PERMIT FORM..... | 3 |
| FEES | 3 |
| CONTACTS | 4 |
| NOTIFICATIONS AND PUBLIC INFORMATION..... | 4 |
| OTHER PERMITS..... | 5 |
| Requirements & Guidelines | 5 |
| CONSIDERATIONS | 5 |
| GENERAL GUIDELINES | 5 |
| REQUIREMENTS | 6 |
| TIME OF WORK | 6 |
| Consideration for All Modes of Traffic | 6 |
| PEDESTRIANS..... | 6 |
| BICYCLES | 7 |
| TRANSIT | 7 |
| Signing, Striping, Devices and Personnel | 7 |
| SIGNS | 7 |
| DELINEATION DEVICES | 9 |
| ARROW PANELS AND MESSAGE BOARDS | 11 |
| PAVEMENT STRIPING | 12 |
| FLAGGERS..... | 12 |
| TRAFFIC CONTROL SUPERVISORS | 12 |
| Emergencies and Incident Management | 12 |
| EMERGENCIES..... | 12 |
| INCIDENTS | 13 |
| URGENT WORK | 13 |
| Non-Compliance | 13 |
| References | 13 |

Introduction

All work occurring in the public right of way under the jurisdiction of the City of Fort Collins that affects the traveling public requires a Work Area Traffic Control permit from the City of Fort Collins Traffic Operations Department.

The purpose of this handbook is to set the basic principles and standards to be observed by all entities and person(s) who perform work in the public right-of-way in the City of Fort Collins, Colorado.

Applicability and Responsibility

The requirements specified in this handbook are applicable for all entities and persons (e.g., contractors, public utilities, and city work crews) undertaking work in the public right-of-way that affects the traveling public and results in traffic moving differently than normal conditions. This includes but is not limited to work that affects sidewalks, shoulders, bike lanes, alleys, travel lanes, medians etc.

The City Traffic Engineer or their designee has authority for reviewing and approving proper traffic control related to the work, and has final determination in case of conflict involving traffic control devices in a work zone.

All those working in the public right-of-way are to provide a safe and effective work area, to warn, control, protect, and expedite vehicular, cyclist and pedestrian traffic.

All persons, or agencies doing work in the public right-of-way are responsible for obtaining all necessary permits, coordinating the work with all affected government agencies and utilities, and informing occupants of adjacent properties of access impacts due to the work as specified on the approved permit.

Responsibility for the installation and maintenance of the approved Work Area Traffic Control Plan shall rest with the contractor, utility company, or public agency doing the work. (The work is often subcontracted to a traffic control company.) All traffic control setups and/or devices shall conform to the requirements of the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

The City Traffic Engineer or their designee reserves the right and is authorized to stop any construction or maintenance activity in the public right-of-way that has not been approved for construction, is not properly configured with the approved plan and/or the MUTCD, or is being done outside approved dates/times.

Goals

Properly executed traffic control techniques will have the following results:

- Conformity with national, state, city and the Manual on Uniform Traffic Control Devices (MUTCD) regulations for traffic control,
- Safety for work crews, motorists, cyclists, pedestrians, and the community,
- Safety in work areas; to warn, control, protect, and expedite vehicular, cycling, and pedestrian traffic,
- Safe access for police, fire, and rescue vehicles,

- Prevent damage to private and public property, e.g., damage to construction projects, construction equipment, sidewalks, vehicles, sprinkler systems, etc.,
- Minimize the possibility of claims and litigation from construction area accidents,
- Reduce confusion to motorists, cyclists, and pedestrians, and
- Improve public communication.

Definitions

Emergency is defined as an unexpected circumstance that causes serious concern for safety and/or property and requires immediate action.

Permitting is defined as receiving approval of submitted Work Area Traffic Control (WATC) plan from the City of Fort Collins Traffic Engineer.

Public Right-of-Way is defined as the entire area, including but not limited to the sidewalk(s) and roadway(s) that is owned by and/or under the jurisdiction of the City of Fort Collins.

Special Event Permit and Neighborhood Block Parties please see City of Fort Collins website at www.fcgov.com or call the City of Fort Collins Police Department at 970-221-6555.

Traffic is hereby defined as vehicular, cycling, or pedestrian movement.

Traffic Control Devices are defined as a sign, signal, marking, or other device used to regulate, warn, or guide traffic, placed on, over, or adjacent roadway or shared use path, e.g., bike and pedestrian trails.

Traffic Control Plan (TCP or TC) is a diagram(s) of the plan to work within the public right-of-way efficiently and effectively while maintaining a safe, uniform, flow of traffic for construction work and the public traveling through the work zone in vehicles, as cyclists, or as pedestrians and must be given equal consideration when developing a traffic control plan.

Work Area Traffic Control (WATC) Plan is the combination of the approval form and the TCP, also referred to as the permit.

Work Area Traffic Control (WATC) Zone or Work Zone is defined as the stretch or portion of roadway within the public right-of-way in which traffic control device(s) (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs, and arrow boards mounted, etc.) are used to warn, regulate, or guide motorists, cyclists, and pedestrians through construction, maintenance, or utility operations. Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals. Work zones extend from the first warning sign, signal, or flashing lights to the "END ROAD WORK" sign or the last traffic control device pertinent to that work zone.

Work Area Traffic Control Permit Process

Planning

The entity or person(s) intending to do work in the public right-of-way shall contact the City of Fort Collins Traffic Operations Department, as well as other impacted departments and entities

at the start of the planning process, allowing time for meetings, revisions and submittal timelines.

A permit is required for all work where traffic moves differently than the normal conditions. If the entity doing the work is using a subcontractor for traffic control, it is recommended that the subcontracted traffic control company submit the plan on the entity's behalf. All permit requests will be submitted to the City of Fort Collins Traffic Operations Department for approval. Commencement of work may not begin before the permit is approved, and the traffic control plan is in place per the conditions set by the permit.

Planning for the work must include a thoughtful consideration of minimizing traffic obstructions, public inconvenience, and travel delays due to the work.

Deadlines

All permit requests must be submitted a minimum of two (2) workdays prior to the requested start date, due by 12 noon (10 a.m on Fridays). The typical turn-around time is within 48 hours from plan submission date.

Work on major roadways, including directional and/or full closures on collectors or arterials, or any work in an arterial / arterial intersection requires longer notice (a full week or more). Contact Traffic Operations to determine deadline.

WATC Permit Form

A Work Area Traffic Control Permit form and an attached plan that visually indicates the traffic control plan must be completed and submitted to the Traffic Operations Department. A link to the form, as well as instruction for filling it out may be found at www.fcgov.com/traffic/watc.php.

The submission of the form and plan can be done in the following ways:

- WATC Plans may be emailed to FCWATC@fcgov.com (preferred)
- Deliver WATC to Traffic Operations at 626 Linden St, Ft. Collins

Once approved, the signed permit form is returned to the applicant. Note that if the permit is **"Approved with Changes"** that the changes (whether date, work times, or devices, etc.) should be reviewed and must be adhered to. Likewise, if there are **"Additional Conditions of Approval"** these conditions must also be met.

Work may commence during approved dates and times once the traffic control plan is in place per the approved permit. If any element of the approved permit is not met, work may be suspended.

Fees

The Work Area Traffic Control (WATC) Fee is assessed at the time of WATC plan submittal. Fee structure is as follows:

- \$35 for new WATC plans.
- \$10 for re-submittals of the same WATC plan.
- No charges are for date extensions and date change.

Payment options include:

- Cash

- Check: Made payable to the City of Fort Collins, please write the WATC Plan Number in the memo line of the check (this number will be assigned to each plan by the Traffic Operations office at the time of approval)
- Account: Visit the Traffic Operations department to obtain a Billing Account Application. Accounts will be billed at the end of each month. Payment terms are net 30 days. If the account becomes delinquent, further WATC plans will not be accepted or approved until the account is brought current.

Contacts

Contact and coordinate with all relevant City of Fort Collins Departments and other entities who will be involved in or impacted by the project. It's important to remember these contacts must be included at the beginning stages of planning as well as throughout the process.

- City Traffic Operations 970-221-6630
- Fire Department 970-221-6570
- Police Department 970-221-6540
- Poudre R-1 School District 970-490-3232
- City Engineering Department 970-221-6605
- Transfort Bus Service 970-221-6620
- Streets Department 970-221-6615
- Parking Services 970-221-6617
- Utility companies, public or private when applicable

Notification & Public information

Notification and public information is an important component to successful work in the public right of way. The public information can help to reduce overall congestion and improve functionality of a proposed work zone. It is the responsibility of the applicant to complete notification as indicated on the approved permit.

Inform occupants of adjacent properties impacted by the work (by mail, door-to-door flyer delivery, or verbally if allowed by the permit) with no less than 24 hours of advance notice. Notifications should include the following information:

- Name of the entities or person(s) doing the work,
- Times and dates the work will start and end,
- Where the work is taking place,
- Any alternative detour routes, business access, or residential access that may be needed, and
- Contact information for any concerns, questions, or compliments regarding the worksite.

If notification letters/flyers are used, send a copy of these notices to FCWATC@fcgov.com .

The City of Fort Collins Traffic Operations team uses information from applications to populate FCTRIPS (www.fcgov.com/fctrip) to assist in informing the public of current and future work zone impacts. The City also notifies the Coloradoan and radio stations each Friday afternoon of all on-going construction projects for which a TCP has been approved.

Work with significant impacts (especially along arterials or in major intersections) may require other public information methods best suited for a specific project. Identification of additional requirements for notification / public information will be outlined during the planning and permitting process.

Other Permits

Other permits may be required and can be identified by contacting the department/entities listed above. The two most common required permits in conjunction with a Work Area Traffic Control permit are related to excavation and parking.

Excavation Permits

When excavation work is planned, any entity or person(s) must obtain a written permit from the City Engineer (970-221-6605) for any work affecting city streets, alleys, sidewalks, and/or right-of-way according to Chapter 23 of the City of Fort Collins code. (Work performed by City of Fort Collins departments may not require an excavation permit, but are still required to submit a TCP for review/approval to Traffic Operations.)

Obstruction Permits (related to Parking)

Any person desiring to occupy any parking space on a public street in the City in connection with the maintenance, erection, construction, remodeling or demolition of any building or improvement on property abutting thereto (or other reasons), must obtain an obstruction permit from Parking Services. They can be contacted at either 970-221-6617 or parkingservices@fcgov.com.

Requirements & Guidelines

As noted earlier, all traffic control setups and/or devices shall conform to the requirements of the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), and any additional requirements noted on the approved permit. When completing the permit application, the following should be kept in mind:

Considerations

Include the following considerations in all submitted plans:

- Americans with Disabilities Act (ADA)
- Cyclists and pedestrians affected by the work zone
- Vehicular requirements, including sight distances and minimizing lost roadway capacity
- Schedule and expedite the work to cause the least amount of inconvenience to the traveling public
- Other work zone areas within the community

General Guidelines

General guidelines for Traffic Control Plans include the following (not a complete list):

- Traffic control plans should provide advanced warning to allow sufficient time to react and regulate speed, a guidance pattern that ensures a safe and even flow of traffic, and minimizes decision making.
- Provide adequate safeguards for workers and the general public
 - Adequate and knowledgeable flaggers when required
 - All crew members, employees, and visitors of a work zone, working in or near the public right-of-way must wear personal protective equipment, as required
- Traffic lanes may be narrowed to no less than ten (10) feet in width

- Traffic may be moved over into part of the shoulder, providing that portion is safely drivable to motorists and cyclists.
- The number of lanes may be reduced if needed - approval required by Traffic Operation Department during permit review process.
- Traffic that needs to be detoured should not interfere with another project within the area.
- All open holes, e.g. sidewalk removal, utility trenches, tie-ins- bore pits, etc. left overnight must be surrounded with the proper and adequate safety devices. It is preferred open holes be back filled at the end of the approved working hours.

Requirements

The responsibility for the installation and maintenance of work zones rests with the person(s) or entity, e.g., contractor, utility company, or public agency, doing the work and must be according to the approved plan. The following are also required:

- The Traffic Control Supervisor responsible for the setup must have a copy of the approved plan on site.
- A service check of the construction zone must be completed at least daily and at other times as required and/or requested to insure that all devices are in place and operating at all times.
- The placement of advance construction signs may not obstruct bicycle or pedestrian paths in a manner that diminishes safety or impacts mobility for people using all modes.
- All traffic control devices must be removed immediately when they are no longer needed.

Time of work

Approved times for work zone setups will be noted on the approved permit. Note that there may be restrictions on work during peak traffic hours (7 am - 8:30 am and again 3:30 pm - 6:30 pm). In some cases, work may be required at night and/or weekends to minimize delays.

All traffic control devices must be removed and full capacity restored to the roadway during non-approved times. Non-compliance with time of work requirements may result in a complete work stoppage of the project.

No work will typically be scheduled on holidays (except in cases of emergency).

Consideration for All Modes of Traffic

The City of Fort Collins strongly supports a 'complete streets' approach to travel and considerations for all modes of traffic must be made in Work Area Traffic Control plans.

Pedestrians

When work areas encroach upon sidewalks, walkways, or crosswalks adequate protection and mobility for pedestrians must be provided. There are three primary considerations in planning for pedestrians in the work area traffic control zone:

- Pedestrians shall not be led into conflicts with work site vehicles, equipment, or operations.

- Pedestrians will be provided with a reasonable and accessible path that replicates as nearly as possible the most desirable characteristics of the existing sidewalks or foot paths.
- Access to recommended school crossings must be maintained at all times, or a detour with appropriate signage will be provided.

Bicycles

The ability for a cyclist to move through a work zone must be maintained to the greatest degree possible, preferably separate from vehicular travel lanes. When needed, cyclists can share a lane over a short distance on lower speed roadways and with appropriate signage. On longer projects, busy roadways, and/or higher speeds, a temporary bike lane or wide outside lane may be provided. Debris should be swept to maintain a reasonably clean riding surface in the outer six (6) feet of the traveled way

When needed for the safety of cyclists, a detour can be provided that is as direct as possible. Cyclists will not be detoured onto sidewalks or onto unpaved shoulders.

As noted earlier, the placement of advance construction signs may not obstruct bicycle lanes.

Transit

Provisions for safe and effective continuity of transit service needs to be incorporated into the WATC planning process. If detours are required as part of the WATC these need to be coordinated with Transfort if on an existing transit route. The plan must provide for temporary bus stops and waiting areas if existing facilities are impacted and as requested by Transfort.

Signing, Striping, Devices and Personnel

Properly planned usages of traffic control devices, when uniformly placed and well-maintained, are the most effective system of warning and guidance. All traffic control, warning, and guidance will meet at least the minimum requirements of the latest MUTCD for streets and highways. These requirements are just minimums and in some cases the City of Fort Collins Traffic Operations Department may request devices that exceed the minimum requirements.

Signs

Placement

Overnight Signs are to convey their message during darkness and will be reflectorized and/or illuminated. Signs not used for overnight projects should not be left in any portion of the roadway (including bike lanes or sidewalks) unless otherwise approved by the Traffic Operations Department. Signs may not be left in place and turned backward. Examples of acceptable overnight signage would include total road closures, partial road closures, drive lane, or a closure due to an emergency.

Raised Center Medians Islands are the only place where double posted signs can be used, never on just a painted center median island, unless prior approval is obtained from the Traffic Operations Department. All signs placed on state highways right hand shoulders are 48" x 48" and all signs that are 36" x 36" will be placed on the center median and meet all highway specifications. Two signs are required on either side of the roadway when a divided center median is present.

Sign Face and Visibility will be to oncoming traffic and should be a minimum of two (2) feet from the bottom of the sign to the pavement of the roadway. When sight lines are not straight the location and placement of the sign will need to be adjusted.

Signs Installation will be immediately before work is to commence and will be removed immediately when they are no longer needed. Pre-project specialty signs may be placed prior to work for additional pre-warning of projects.

Types

Advanced Warning Area starts the work area traffic control zone and consideration will be taken in the placement of the traffic control devices, depending on varying situations, e.g. driveways, side streets, site obstruction, parked vehicles, etc.

Traffic signs are classified into several functional groupings: Regulatory, Guide, and Warning. Non-standard signs of any type are not acceptable.

Distance Signs for footage, such as, "ROAD WORK AHEAD 1000 FEET," will not be used within the city limits. Advance warning signs will only read, "ROAD WORK AHEAD," unless prior approval has been given by the Traffic Operations Department. When used the "END ROAD WORK," (GH20-2) sign will be placed at the end of the termination area. Check with City of Fort Collins Traffic Operations Department prior to placing the "END ROAD WORK" sign on city right-of-way.

Pre-warning Signs will not be placed in any portion of the bike lane, sidewalk, or driveway. Contact the Traffic Operations Department for specific instructions regarding exceptions. The only sign that may be placed in the bike lane is the "BIKE LANE ENDS MERGE WITH TRAFFIC" sign. This sign is to be placed at the point where the transition starts. Contact the Traffic Operations Department for specifics on placing this sign.

Regulatory Sign usage will be approved by the City of Fort Collins Traffic Operations Department and when required, the contractor or permittee will provide, install, and maintain all such signs. The contractor or permittee will also maintain existing regulatory signs within or adjacent to the work area. If existing signs are not appropriate for the traffic conditions in the work area, the City of Fort Collins Traffic Operations Department will be notified if the signs are to be covered, replaced or relocated. No existing signs of any type will be removed by the contractor or permittee without consent of the Traffic Operations Department. The contractor or permittee will notify the Traffic Operations Department 48 hours in advance of any signs to be removed, replaced or relocated.

Specialty Signs may be required for long duration projects (for informational purposes) or where construction will impact traffic on major streets, roadways, intersections, bike lanes, sidewalks, etc. They may be also used in some cases where full road closure is allowed to pre-warn motorists in advance of the start of a project. Contact the Traffic Operations Department for specifics before manufacturing these signs.

Temporary "No Parking" Signs will be installed and removed as directed by the City of Fort Collins Traffic Operations Department, and in compliance with any requirements from Parking Services. All "No Parking" signs will be a minimum of 12" x 18" red on white and will include the times and dates legibly written when parking is to be restricted. Property owners and businesses must be given a minimum of 24 hours' notice.

Traffic Control Zones will have an advance warning area, a transition area, a buffer area, a work area and the termination area. The main devices used in these areas are cones, barrels,

barricades, and the diamond-shaped pre-warning signs in the black on orange series specified for construction and maintenance sites. Each traffic control devices may or may not require various predetermined illumination, but must have reflectorized material. The minimum sized accepted by the City of Fort Collins Traffic Operations Department for these signs is 36" x 36".

Delineation Devices

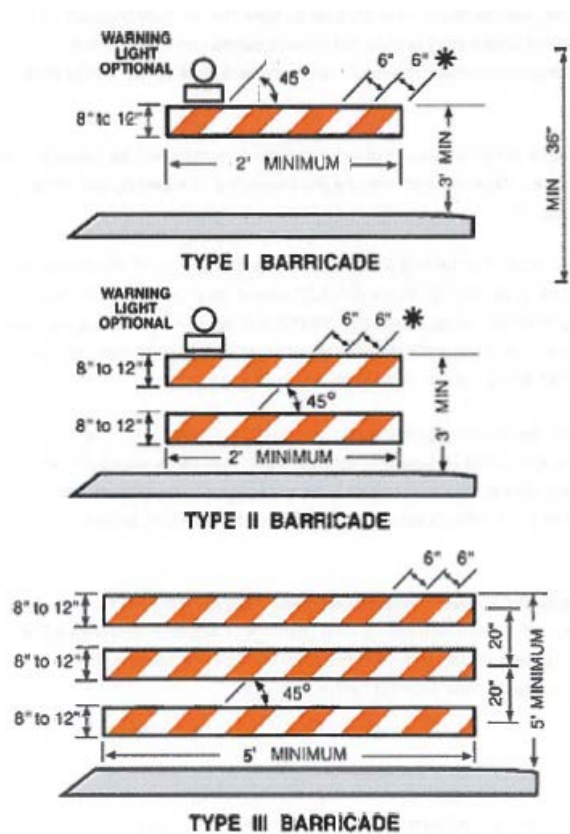
Barricades

Barricades serve the following purposes:

- Alert the public of the fact that a particular area is closed to traffic.
- Prevent drivers, cyclists and pedestrians from entering the work area.
- Protect the workers, other people, equipment or items inside the work area.
- Support warning lights and specific signs that are required on certain projects.

Barricades are not to be placed in a drive lane or bike lane without the proper advance warning signs. When barricades are used to close the roadway, they will be placed so there is no gap large enough for a vehicle or cyclist to pass through, usually between two to three (2-3) feet, except when it is necessary to provide access for local traffic or emergency vehicles. Type I and Type II barricades are prohibited to have stiff legs or "fixed leg" supports. Instead, barricades with collapsible legs will be used.

Markings for barricade rails will alternate orange and white stripes sloping downward at an angle of 45 degrees in the direction traffic is to pass. The entire area of white and orange shall be reflectorized.



Delineators

Delineators are markers which aid the driver and cyclist in determining the location and alignment of the traffic lane or the edge line. By day, the effectiveness of the delineators is determined by the position, spacing, form, texture, size, and color. By night, the effectiveness is determined by position and visibility. All delineators used at night must be reflectorized and adequately maintained.

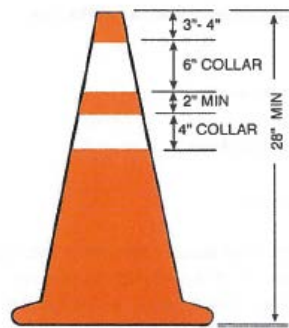
Delineators are used to:

- Channel and divert traffic in advance of the work zones.
- Define the travel way through the work zone.
- Define curves and the edge if the roadway detours.
- Delineators will be of a material that withstands impact without appreciable damage to the device, the striking vehicle, or passing traffic.

- Delineators will withstand wind and turbulence from passing traffic with no effect on their position.
- Devices that could roll into adjacent traffic lanes when hit are not to be used, for example: posts (metal, plastic, wood, etc.) mounted in concrete filled buckets; automobile wheels; rounded metal bases, etc.
- All vertical panels shall be a minimum of 36" in height.

Cones

Traffic cones and tubular markers of various configurations are available. All cones must have a reflective collar to help highlight the taper or transition and work area. The collar must be a six (6") inch band and should be placed three to four (3-4) inches from the top of the cone and supplemented with a four (4") inch collar spaced a minimum of two (2) inches below the six (6") inch collar.



| Speed (MPH) | Minimum Cone Size (in) |
|-------------|------------------------|
| 25-40 | 28 |
| >40 | 36 |

Cones should not be used for nighttime operations unless an emergency should arise and must be replaced with the proper nighttime equipment. Any work areas that need to remain in place through the night must be cleared with the Traffic Operations Department.

Illumination

Barricade Warning Lights are used to indicate hazards and to delineate the safe path of travel. A single flashing light is to be mounted on barricades to indicate a hazard in or adjacent to the roadway. Flashers are also effectively used to draw attention to warning signs in the traffic control zone. Flashing lights are also used to highlight the beginning of tapers or lane shifting.

| Type | Type A | Type B | Type C |
|--------------------|--------------|----------------|--------------|
| Lens Directional | 1 or 2 | 1 | 1 or 2 |
| Flash Rate | 55 to 75 | 55 to 75 | Constant |
| Type | Low | High | Steady |
| Hours of Operation | Dusk to Dawn | 24 hours a day | Dusk to Dawn |

Steady-Burning Lights are used on a series of barricades or other movements through a work area. They are particularly advantageous:

- When reflectorized panels may be covered with dust or snow.
- In times of decreased visibility due to rain, snow, or fog.
- On barricades and vertical panels for or around curves in the roadway.
- To alert pedestrians and cyclists.
- At hazardous locations and for channelizing slow speed areas.

Flashing Yellow Lights used for advance warning must be clearly distinguishable from primary delineation and shall be seen above normal reflectorized units. Warning lights are portable, lens-directed, enclosed and mounted at a minimum of three (3) feet from the bottom to the pavement of the roadway. The color of the light emitted shall be yellow. Barricade warning lights shall be in accordance with the requirements of the MUTCD.

Arrow Panels and Message Boards

If an arrow panel (arrow board) consisting of a bulb matrix is used, the element should be recessed, mounted, or equipped with an upper hood of not less than 180 degrees.

Arrow panel shall have the following three (3) mode selections:

1. Either a flashing arrow, sequential arrow, or sequential chevron mode
 - a. Used only for stationary or moving lane closures on multi-lane roadways
2. Flashing double arrow mode
3. Flashing caution mode
 - a. Used only for shoulder work, blocking the shoulder for the roadside work near the shoulder, or for temporarily closing one lane on a two-lane, two-way roadway

A vehicle displaying an arrow panel should be equipped with rotating lights or strobe lights.

The minimum size of an Arrow Panel allowed in the City of Fort Collins jurisdiction should be 48" x 24", where the length of the arrow equals 48" and a width of 24"

Variable Message Signs (VMSs) or Variable Message Boards (VMBs) are used for controlling and diverting traffic, providing notice of current and anticipated roadway conditions, and regulating access to specific lanes. Proper placement of portable VMSs is critical for its effectiveness. The placement must give the motorist adequate time to react to the message.

VMSs are to be located as follows:

- On level surfaces.
- With the message being legible from a minimum distance of 650 feet from all lanes.
- Placed prior to major decision point and expected traffic back up locations.
- Right of the roadway, off of the shoulder.
- VMSs will be completely off the shoulder and have no portion protruding over the travel lanes (vehicular or bicycle) at any time.

Message text displayed on VMSs will comply with the following general standards:

- The message must be clear and concise
- Must convey a single specific thought per panel
- Must be timely, accurate, and up-to-date

Pavement Striping

Under certain circumstances, the use of pavement striping and raised pavement markers may be justified to supplement devices for delineation. On major construction projects where traffic is diverted for extended periods, pavement striping and markers are required to assure positive delineation and to minimize driver confusion. The Traffic Operations Department will determine the need for and the extent of striping removal, as well as the re-striping of the project.

Flaggers

Flaggers have significant responsibility. They should be alert, thoughtful, and neat in appearance, have good hearing, eyesight, and be capable of commanding the traveling public. They should be stationed far enough from the work area to slow down or stop traffic before it enters the work area. A practical number of pre-warning signs will be placed to give adequate notice of flaggers. Cell phone use and the use of earbuds or headphones are not acceptable while flagging in the public right-of-way.

Flaggers are required:

- Where workers or equipment intermittently block traffic lanes or a two-lane roadway, or any other operation where equipment will obstruct the free flow of traffic.
- Where the safety of the public and/or workers is at risk, or where the Traffic Operations Department determines the need for safety reasons.

All flaggers will have and wear the proper safety equipment:

- Hard hat at all times (fluorescent orange-red, fluorescent yellow-green)
- Safety vests (in good repair), class 2 daytime, class 3 nighttime
- Stop/slow sign paddle (18" x 18" minimum) in good repair. A six (6) foot minimum staff-measured from the ground up
- Proper attire for all weather conditions
- Will have in their possession a current flagger certificate card (copies will not be accepted) at all times while working in the public right of way

Traffic Control Supervisors

All Traffic Control Supervisors (TCS) will have in their possession a current TCS card issued by the Colorado Contractors' Association, Inc., and/or by the American Traffic Safety Services Association while working in the public right-of-way. Copies of the above mentioned card(s) will not be accepted. TCSs will wear the proper safety equipment, including a hard hat while on the job site.

Emergencies and Incident Management

Emergencies

It is understood that emergencies do occasionally occur on the roadway. An emergency is defined as an unexpected circumstance that causes serious concern for safety and/or property and requires immediate action. In such a case, needed action should be taken to ensure safety for the traveling public. A call should be placed as soon as possible to Traffic Operations to report the emergency, and discuss the required work zone. This is the only situation in which a

Work Area Traffic Control (WATC) plan will be given a verbal confirmation. As soon as possible, a post-dated WATC Plan Approval Form should be submitted to Traffic Operations.

Incidents

Incident management consists of a coordinated process to detect, respond to, and clear incidents. A traffic incident management area is an area of a roadway in the public right-of-way where an incident has occurred and temporary traffic controls are needed. This could be in response to a road-user incident, natural disaster, hazardous material spill, construction incident, or other unplanned incident.

There is a four (4) phase procedure to address incidents:

1. Provide immediate warning to drivers and contact emergency personnel as necessary.
2. Establish traffic control.
3. Communicate closure to key parties (i.e. Traffic Operations)
4. Provide traffic control plans to Traffic Operations within 24 hours of the incident. Plans will show incident response traffic control configuration(s).

Under no other circumstances besides a true emergency/incident will a verbal confirmation for work approval ever be given.

Urgent Work

Urgent work being scheduled for upcoming days is not considered an emergency, and must obtain a WATC permit in advance of work commencement. Contact Traffic Operations as soon as possible to discuss urgent work.

Non-Compliance

All work not in compliance with aforementioned requirements of this handbook, the approved permit, or in conflict with the MUTCD can be immediately suspended until such time the Traffic Operations Department determines that such work is in compliance.

References

Federal Highway Administrator, comp. The Manual on Uniform Traffic Control Devices. 2009 ed. N.p.: Federal Highway Administration, 2009. Print.

Migletz, James, Joseph K. Fish, and Jerry L. Graham. Roadway Delineation Practices Handbook. Washington DC: Office of Safety and Office of Technology Applications, 1994. Print.

Seyfried, Robert K., comp. Traffic Control Devices Handbook. 2nd ed. N.p.: Institute of Transportation Engineers, 2013. Print.

"Traffic Control Plan Guidelines | Temecula CA." Traffic Control Plan Guidelines | Temecula CA. Ed. CivicPlus Content Management System. Temecula CA, 2017. Web. 09 Jan. 2017. <<http://temeculaca.gov/290/Traffic-Control-Plan-Guidelines>>.