Temporary Traffic Control Guidelines

Engineering Services Issued 2024

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INTRODUCTION

Purpose

The purpose of these guidelines is to identify standards, specifications and expectations for temporary traffic control associated with the On Street Construction Permit (OSCP) process. This supports:

- On street activities are coordinated and tracked through a permitting system.
- The safety of motorists, cyclists and pedestrians within the work zone.
- The safety of employees and protection of equipment at the worksite.
- Minimizing traffic disruption around the worksite.

Scope

This guideline is intended as a practical working reference to be used by contractors, consultants, utility companies, residents, and City of St. Albert employees (herein referred to as the “Applicant”). This guideline identifies requirements for applying for an OSCP and implementing a Traffic Accommodation Plan (TAP) for on street construction, maintenance, development, and operational activities. The Applicant shall observe and maintain these standards and procedures to ensure:

- Uniformity of design and quality of Temporary Traffic Control Devices (TCDs) and TAPs to be implemented.
- Standardized procedures and placement of TCDs.
- Consistency and alignment to Canadian temporary traffic control designs and standards.

This guideline shall be used in conjunction with the latest versions of the Occupational Health and Safety Act (OH&S), the Traffic Safety Act, the Alberta Building Code, the Safety Codes Act, other associated regulations, all applicable bylaws, and related contract documents.

In cases where this guideline does not provide minimum standards and specifications for a site-specific condition, the Applicant is to refer to the Transportation Association of Canada’s Manual on Uniform Traffic Control Devices for Canada (MUTCDC).

Authority

The City of St. Albert's Engineering Services is the contact department to obtain an OSCP, submit traffic accommodation plans, coordinate TCDs, and sets the tolerances of traffic disruption allowed on City owned land(s) including road right-of-way (ROW). This authority is granted through the City of St. Albert Traffic Bylaw. As such, Engineering Services must be notified and approval for work granted by way of a signed permit, prior to any work commencing on all City of St Albert land(s) and ROW(s).

All work performed on City owned land(s) and ROW(s) shall conform to the policies, standards and procedures set out by the City of St. Albert including, but not limited to this guideline. The OSCP application, associated TAPs and the compliance to the Occupational Health and Safety Act, Traffic Safety Act and other applicable legislation is the obligation of the Applicant.

Contact Information

City of St. Albert
Engineering Services
5 St Anne Street
St Albert, AB T8N 3Z9
780-459-1654 – OSCPadmin@stalbert.ca

City of St Albert

Departments	Services	Phone Number
Engineering Services	On Street Construction Permits (OSCP)	780-459-1654
	Capital Projects	
	Development Engineering	
	Transportation - Fibre and Traffic Signal Locates	
Public Operations and Transit	Operations	780-459-1557
	Tree and Pest Control	
	Building Maintenance	
	Arenas and Parks	
Utilities	Utilities	780-459-1557
	After Hours Utilities	780-458-2020
Environment	Environment	780-459-1500
	Waste Collection	780-459-1557
Human Resources and Safety	Safety	780-459-1650

External

Organization	Contact Department	Phone Number
RCMP	General Inquires	780-458-7700
Sturgeon Hospital	General Inquires	780-418-8200
City of St Albert	General Inquires	780-459-1500
Utility Safety Partners	General Inquires	800-242-3447
Shaw - DigShaw	General Inquires	866-344-7429
TELUS - Locates	General Inquires	800-980-0030
Fortis Power	General Inquires	780-310-9473
ATCO Gas	General Inquires	800-511-3447
Alberta Transportation	General Inquires	780-963-5711
Alberta EDGE (Environment and Dangerous Goods Emergencies)	General Inquires	780-422-9600

BEFORE YOU START WORK

All work on City of St. Albert owned land(s) and ROW(s) requires authorization. An application for an OSCP permit is required. For information on the OSCP and permit application visit https://stalbert.ca/city/approvals/oscp/.

Work that requires temporary traffic control must have an On Street Construction Permit (OSCP) and a Traffic Accommodation Plan (TAP). The OSCP application with supporting TAPs must be submitted online at least five business days prior to the start date of the planned activity. The information submitted on the application and timeframe between application and work date allows for review of impacts from the planned work on other core activities (such as solid waste collection, transit operations, emergency services and enforcement services) and any conflict with prior approved work, or influence the proposed work may have on other public and private entities.

As part of City of St. Albert Traffic Bylaw 18/2005, all construction activity work zones must retain and produce upon request an approved OSCP. Failure to obtain an approved OSCP is a fineable offence. See City of St. Albert Traffic Bylaw 18/2005 for more information.

When is an On Street Construction Permit Required?

On Street Construction Permit (OSCP) are required for the following:

- For construction activity on City of St. Albert property or within the ROW.
- Work or activities on or directly adjacent roadways, bridges, railroad crossings or river crossings.
- Work on private property but required to haul material or equipment over a City boulevard.
- Any activities interfering with traffic flows during peak hours (06:00 – 09:00 and 15:30 – 18:00 Monday to Friday excluding holidays).
- Any activity upon City of St. Albert property that detours/disrupts vehicle cyclist or pedestrian movements.
- A total closure of any roadway.
- Special events that affect traffic or pedestrian flow.
- At the discretion of Engineering Services
- Work that adversely effects public transit, bus stops, bus routes, transit timing or work near any major transit station.
- All work requires prior approval before applying for an OSCP which includes, but is not limited to obtaining development agreements, third party agreements and any other permits required to complete the work.

Preparation Checklist

Prior to beginning any work on City of St. Albert property within a road right of way, the following questions should be considered:

- Have you applied for an OSCP from Engineering Services?
- Have you assessed the nature of the traffic at the proposed worksite? Is there a need to accommodate vehicles, cyclists and pedestrians?
- What impact will any proposed temporary traffic control measures have on users of the roadway? (Consider general public, transit, city services, fire and emergency services)
- Have you arranged and prepared for temporary traffic control devices (TCDs)?
- Have you completed third-party utility locates?
- Have you requested City of St. Albert owned fiber, traffic signal, water, storm and sanitary locates?
- Is advanced warning of work and traffic impact required, such as a Variable Message Board (VMS)?
- If requested by City of St Albert, Engineering Services; Have you notified in writing, five business days in advance, the surrounding businesses and/or residents near or adjacent to your proposed work area?

During the Work

- Are pedestrians, cyclists and motorists properly understanding and following your traffic control and continuously separated and protected from each other and the work zone?
- Is there enough proper equipment available to secure the worksite overnight if necessary? These items may include barricades, reflective signs, markers, flashers, sandbags and fencing.
- Are there any signs that need to be covered or removed during periods of inactivity (e.g. flag person sign)?
- Are all TCDs in their proper places, aligned secured and standing upright?
- Are the TCDs clean and legible (day and night)?
- Does the TAP setup continue to meet the needs of your job? If not, contact the original approver to request a change to the TAP plan immediately.
  Is the work zone being monitored regularly?

After the Work

- Have you cleaned up the worksite and rehabilitated the City-owned lands(s) and ROW(s) in a condition equal to or better than it was prior to the start of the work? If not, have arrangements been made to restore or rehabilitate the site?
- Have you removed all TCDs?

Pedestrian Safety

Although the contents of this guideline largely address the motoring public, it must be acknowledged that providing accommodation effectively and safely for pedestrians is equally important. The following must be implemented with applicable TAPs:

- Pedestrian and vehicular traffic must be physically separated.
- Pedestrian traffic must be physically separated from workers and equipment in the work zone. Accommodation must be made for a safe passage through or around the work zone.

For example, crosswalks and sidewalks may be closed to prevent pedestrian traffic through or around the work zone, however, alternate routes via means of detouring pedestrian traffic is required.

In cases where it is not possible to detour pedestrian traffic, pedestrians will have to be protected as they pass through the work zone. This may require the use of barricades to separate the work zone from the pedestrian walkway.

STANDARDS OF PERFORMANCE AND RESPONSIBILITY

With the exception of emergency related work, all work on City owned land(s) and ROW(s) shall:

- Be applied for through an OSCP application (to Engineering Services), a minimum of five business days in advance of the expected start date of work.
- Be approved by Engineering Services under the authority of the Director of Engineering, and a review of the TAP for the work proposed will be undertaken.
- Require authorization from applicable stakeholders and approving authority(ies) and/or special permits when working in restricted areas, i.e. Rail Right-of-Way, Sturgeon River Valley.

In all cases:

- All necessary TCDs must be in place before work commences. These devices shall remain in place, be maintained, and monitored for the duration of the work while any safety hazard or obstruction to vehicular or pedestrian traffic exists.
- Minimum lane width shall be 3.2 metres per lane. This width shall be adjusted upward under circumstances such as curves, heavy vehicle traffic, truck routes, bus routes or high-speed situations. If this minimum width cannot be met, a lane closure is required.
- Any alterations to the TAP setup require the approval of Engineering Services prior to the changes being made.
- It is the responsibility of the Applicant doing the work to notify affected residents and/or businesses of road closures, parking restrictions and other work that impacts normal traffic flow by means of Engineering Services required and approved hand delivered letters five business days in advance of non-emergent work. The recommended method to notify the public of parking restrictions is by advanced signage.
- Waste & Recycling Services shall be notified five business day in advance of laneway or street closures affecting garbage pickup.
- Any work on an arterial roadway must be approved by Engineer Services. Peak hour traffic in St. Albert typically occurs from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:00 p.m. Monday to Friday. During these times, construction work and/or traffic disruption is not permitted on arterial roadways except in cases of emergencies or with prior approval from Engineering Services.

Unless otherwise permitted with approval from the Director of Engineering Services, all work must occur within the allowable working hours according to the City's Noise Bylaw (reference the St. Albert Noise Bylaw for details).

- The Applicant shall ensure that private contractors and other agencies working for them maintain the TAP procedures and standards set out in this guideline. Engineering Services may inspect any worksite at any time and recommendations made by Engineering Services shall be implemented.
- No permanent traffic signs shall not be removed or covered without prior approval from Engineering Services.
- Any disruption that may affect signal timing or signal operations shall be coordinated with the Transportation branch a minimum of three business days prior to work occurring.
- Detouring through private developments, school zones and playground zones shall be avoided wherever possible.

Securing the Worksite

The Applicant is responsible for ensuring a safe work zone that complies with OH&S safety requirements. Securing the worksite is necessary to protect the public from potentially hazardous conditions within the work zone. It is necessary to secure the worksite during any period of activity as well as inactivity. Some examples of inactivity are shutdowns due to weather conditions, end of shift, weekends, holidays and lunch/coffee breaks. The necessary steps to secure the worksite are outlined below.

During Periods of Activity

- Ensure that all TCDs are legible, properly positioned and secured.
- Remove or securely cover any signs that are not required or are conflicting. For example, cover the gazetted speed if the setup requires a speed reduction.

Once secured, inspect the worksite to ensure that the setup provides the motorists and/or pedestrians with adequate advance warning and positive guidance through the work zone. This should be done during the day, and at night for overnight setups. Monitor driver and pedestrian behaviour, watching for any possible confusion, conflict or adverse conditions that may require adjustments of the traffic control devices and any changes made shall be recorded. Ensure that safe pedestrian movement is maintained, and pedestrian and vehicle movements are separated and do not conflict.

During Periods of Inactivity

- Ensure that all TCDs are legible, properly positioned and secured.

- Chevrons or flashers shall be used to delineate the tapers. Flashers shall be used at night to separate the travel lane(s) and the worksite.
- Remove or cover any TCDs that are not required.
- Inspect the worksite as required and keep a record of the inspections.

Once secured, inspect the worksite to ensure that the setup provides the motorists and/or pedestrians with adequate advance warning and provides positive guidance through the worksite. This should be done during the day, and at night for overnight setups. Adverse conditions may require adjustments of the traffic control devices and any changes made shall be recorded. Ensure that safe pedestrian movement is maintained, and pedestrian and vehicle movements are separated and do not conflict.

INSTALLATION AND MAINTENANCE OF TRAFFIC ACCOMMODATION PLAN

Installation

All devices shall be placed in a manner so as not to interfere with the existing TCDs. It is important to survey the worksite before preparing the TAP. This ensures any conflicting signs are covered or removed. For example, if a speed reduction is required, the existing signs shall be covered.

Maintenance

It is important to maintain all TCDs. Some examples of maintenance include, but are not limited to:

- Cleaning all devices.
- Ensuring all devices are located and oriented as per the approved plan.
- Ensuring all devices are secured for adverse conditions.
- Cleanliness and operation of flashing lights for night use.
- Replacing any damaged or missing signs or devices.

Record Keeping

The Applicant is responsible for maintaining a record of the approved TAP used to document and ensure the appropriate measures are in place at all times and take the necessary steps to correct any deficiencies. An inspection form is provided within the guideline.

CLASSIFICATIONS OF WORK

Mobile Operation

- Normally performed on the move at low speed and may require periodic stopping for only a few minutes.

    - Examples include street sweeping, street plowing, pavement marking, watering of trees and hydro-seeding.

Short Duration

- Work can be completed in 30 minutes or less and may be stationary or mobile with frequent short stops.

    - Examples include minor utility and roadwork, crack sealing, bus shelter washing, catch basin cleaning, pothole patching/repair, symbol and transverse road-marking, minor sign maintenance, signal light replacement and emergency response (e.g. spills and vehicular collisions).

Long Duration

- Long duration work space is stationary and may take longer than 24 hours.

    - Examples include manhole replacement, utility replacement, bridge rehabilitation, roadway upgrading (e.g. interchange construction), large paving operations, emergency water-main repairs, sidewalk/boulevard replacement, and utility repairs and new installations.

Special Events

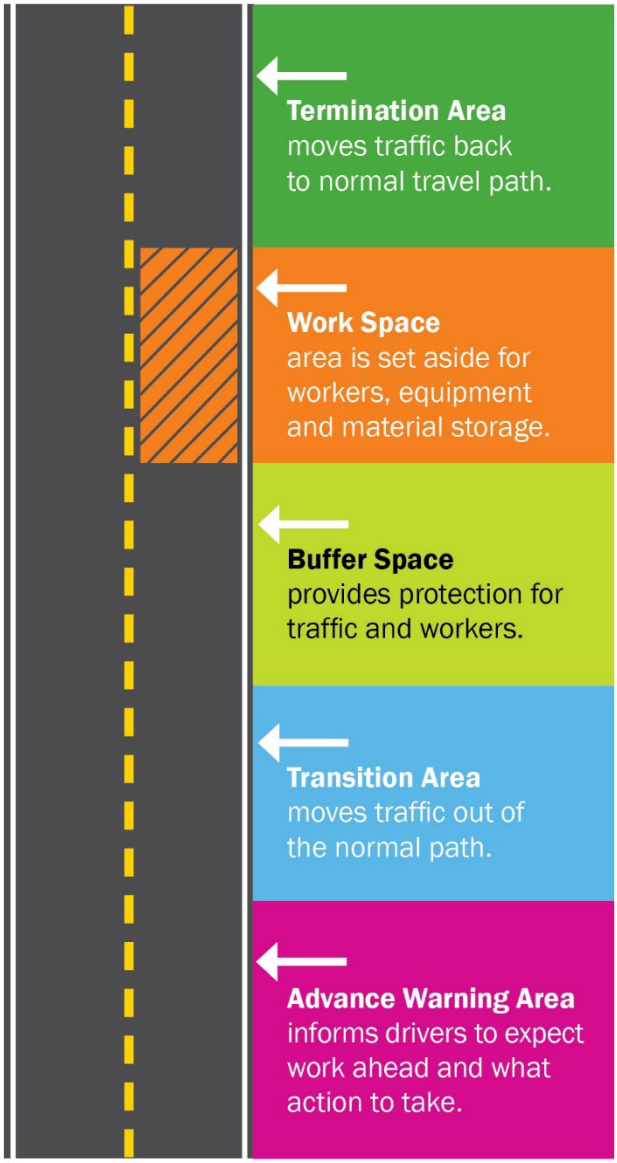
- Any special event that affects vehicle or pedestrian traffic.

    - Examples include Remembrance Day, Children's Festival, Fire and Ice Festival, Snowflake Festival and all community lead events.

TEMPORARY TRAFFIC CONTROL ZONE COMPONENTS

A typical TTC setup can be divided into five areas:

- Termination Area
- Work Space/Area
- Buffer Space
- Transition Area
- Advanced Warning Area



The City of St Albert Traffic Accommodation (TAP) plan will include all aspect of the Temporary Traffic Control Zone Components (TTC).

Signs and Specifications

Below is a listing of common TCDs. The sizes identified are recommended under normal conditions. Sign sizes are dictated by roadway classification, speed or by the City of St. Albert Engineering Services. Size, colour, and shape shall be in accordance with the most current version of the MUTCDC.

All signs must meet the minimum retroreflective sheeting requirements set forth in the most current revision of the ASTM D4956 standard specification.

Regulatory Signs

Regulatory signs are used to identify a traffic regulation that is applicable at a given time or place on a road as well as to identify legal requirements.

The following codes are used to categorize the various regulatory signs,

RA: Right-of-way control signs

RB: Road use control signs

RC: Miscellaneous regulatory signs



Name Stop **MUTCDC Code** RA – 1
Colour White legend on red background **Size** 600mm x 600mm
Purpose Indicates that drivers must come to a complete stop and must not proceed until it is safe to do so.



Name Yield **MUTCDC Code** RA – 2
Colour Red legend on white background **Size** 750mm sides
Purpose Indicates that drivers must yield the right of way, stop if necessary and must not proceed until it is safe to do so.



Name Maximum Speed **MUTCDC Code** RB – 1
Colour Black legend on white background **Size** 600mm x 750mm
Purpose Indicates the maximum legal speed a vehicle can travel while on the current roadway.



Name Maximum Speed Ahead **MUTCDC Code** RB – 5
Colour Black legend on white background **Size** 600mm x 750mm
Purpose Indicates an upcoming change in the maximum legal speed a vehicle can travel while on the current roadway.



Name Turn Prohibited (Left or Right) **MUTCDC Code** RB -11R(L)
Colour Black legend, red restrictive symbol on white background **Size** 600mm x 600mm
Purpose Indicates that a Left or Right turn is prohibited.



Name Entry Prohibited **MUTCDC Code** RB – 23
Colour Black border, red legend on white background **Size** 600mm x 600mm
Purpose Indicates that a vehicle is prohibited to enter the roadway.



Name Two-Way Traffic **MUTCDC Code** RB – 24
Colour Black legend on white background **Size** 600mm x 750mm
Purpose Indicates that a roadway operates with two-way traffic.



Name Passing Prohibited **MUTCDC Code** RB – 31
Colour Black legend, red restrictive symbol on white background **Size** 600mm x 600mm
Purpose Indicates that a driver shall not overtake another vehicle.



Name Turn Only Lane (Left or Right) **MUTCDC Code** RB-41L (R)
Colour White legend on black background **Size** 600mm x 600mm
Purpose Indicates only a Left or Right turn from the designated lane.



Name Parking Control **MUTCDC Code** RB – 51
Colour Black legend, red restrictive symbol on white background **Size** 300mm x 300mm
Purpose Indicates that parking is always prohibited in the direction of the arrow(s).

TEMPORARY CONDITIONS SIGNS

Temporary condition signs are used to raise awareness to and help road users safely navigate a temporary worksite.



Name Construction Ahead **MUTCDC Code** WD-101
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Provides advance warning of a major temporary worksite and temporary traffic control zone ahead.



Name Utilities Construction Ahead **MUTCDC Code** WD-101C
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Provides advance warning of a major temporary utility worksite and temporary traffic control zone ahead.



Name Men Working / Road Work **MUTCDC Code** WD-A-41
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates workers, equipment and/or materials may be exposed to motorists.



Name Survey Crew **MUTCDC Code** WD-A-46
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Used when surveying is taking place within the ROW. Must be relocated as necessary.



Name Traffic Control Person Ahead **MUTCDC Code** WD-A-21
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates that a traffic control person is temporarily directing traffic ahead.



Name Be Prepared to Stop **MUTCDC Code** WD-111
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates drivers are approaching a zone where they may be temporarily stopped.



Name Steel Plate on Roadway **MUTCDC Code** WD-AE45 or SPOR
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates steel plate on roadway (Must be safely secured)



Name Construction Ends **MUTCDC Code** WD-154
Colour Black legend on orange background **Size** 1200mm x 600mm
Purpose Indicates the end of a Temporary Traffic Control zone.



Name Speed Fines Double **MUTCDC Code** ID-503
Colour Black legend on white background **Size** 600mm x 600mm
Purpose Indicates speed fines double



Name Speed Fines Double – Begins/Ends **MUTCDC Code** ID-503A(B)
Colour White legend on black background **Size** 300mm x 600mm
Purpose Indicates the start and end of the speed fines double zone.



Name Sidewalk Closed **MUTCDC Code** SC-2
Colour Black legend on white background **Size**
Purpose Indicates sidewalk is closed temporarily closed.



Name New **MUTCDC Code** WD-182
Colour Black legend, red circle with white text on yellow background **Size** 750mm x 750mm
Purpose Indicates that new intersection geometry or traffic control exist ahead.



Name Detour Ahead **MUTCDC Code** WD-A-10
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates that drivers will be temporarily re-routed from the through path of the roadway, around a work zone.



Name Detour Direction Marker (Right, Left or Straight ahead) **MUTCDC Code** ID-1R (L) ID-1S
Colour Black legend on orange background **Size** 600mm x 450mm
Purpose Indicates the alternate route that drivers are to follow while temporarily detouring around a work zone.



Name Two-Way Traffic Ahead **MUTCDC Code** WD-B-3
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Provides advance warning that the road temporarily operates with two-way traffic ahead.



Name Lane Closed Ahead (Left or Right) **MUTCDC Code** WD-A-33L (R)
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates that a lane is temporarily closed ahead for construction work.



Name Reverse Curve (Left or Right) **MUTCDC Code** WD-A-5L (R)
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates a temporary realignment of the normal travel path.



Name Turn (Left or Right) **MUTCDC Code** WD-A-1R (L)
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates mandatory turn to the left or right



Name Road Narrows **MUTCDC Code** WD-A-24
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates a temporary reduction in the width of the road.



Name Bump **MUTCDC Code** WD-A-22
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates that a temporary bump exists ahead.



Name Truck Entrance (Left or Right) **MUTCDC Code** WD-A-48L (R)
Colour Black legend on orange background **Size** 750mm x 750mm
Purpose Indicates to drivers that they are approaching a location where trucks are entering, leaving, or crossing the road.



Name Chevron Alignment **MUTCDC Code** WD-A-9
Colour Black legend on orange background **Size** 450mm x 600mm
Purpose Provides additional guidance to drivers where there is a change in the horizontal alignment of the road.



Name Barricade Arrow **MUTCDC Code** WD-116-5
Colour White arrow with black background **Size** 615mm x 230mm
Purpose Provides guidance to drivers where there is a change in the alignment of the road

For a full list of all signage please refer to MUTCDC.

TRAFFIC CONTROL PERSONS

Traffic control persons are required in the following circumstances:

- When two-way traffic must be guided through a single travel lane.
- When materials or equipment are being raised above a sidewalk or travel lane.
- When required by the City of St. Albert Engineering Department.

Traffic control persons are responsible for the safety of motorists, pedestrians, their fellow workers, and equipment used on the worksite.

Important Note: Traffic control persons shall be certified by an accredited training facility.

A traffic control person is required to use a “Stop/Slow” (TC-65) paddle. At night, a red lantern or flashlight must be used in addition to the paddle.



Illumination should be provided for traffic control persons required to be working in areas where normal street lighting is not available during the hours of darkness. Always use a Traffic Control Person Ahead sign (TC-21) and a Be Prepared to Stop sign (WD-111) in advance to alert motorists of a flagging operation.

Where possible, traffic control persons shall co-ordinate direction of traffic flow with existing traffic signals. If coordination cannot be managed, contact Engineering Services a minimum of five business days prior to the flagging operation to arrange to have the signalized crossings timing modified.

When more than one traffic control person is required at an intersection, traffic shall be moved through the intersection one direction at a time. Use a predetermined clockwise or counterclockwise rotation to accomplish this.

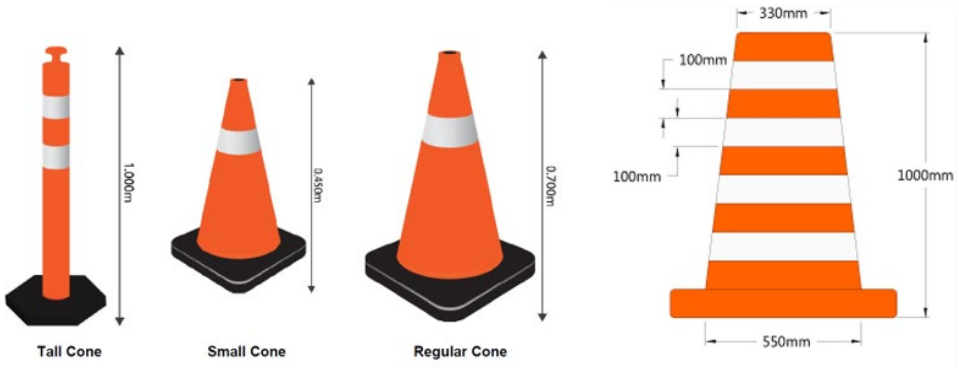
DELINEATION (CHANNELIZATION) DEVICES

Delineators are used to outline lane transitions and indicate the intended path for road users passing through the work zone. Effective delineation can be achieved through the use of chevrons, plastic drums, traffic cones (including tubular delineators) or other similar devices. Delineators are not to be used without the appropriate advance warning signage.

To be effective, delineators must be reflectorized and the proper size. When traffic cones are used, the size required is dependent on traffic speed. For speeds greater than 50 kilometres an hour traffic cones must be a minimum of 700 millimetres in height. For speeds of 50 km/hr. or less, the height of the traffic cones must be a minimum of 450 mm.

Typical situations where delineators are used:

- Lane closure
- Lane closure tapers
- Termination area tapers
- To separate opposing lanes of traffic
- To identify temporary hazardous conditions
- Detours



TC-61
Traffic Cones

TC-63
Flexible Drum

Amber flashers/warning lights shall be used to identify obstructions at night. There are three main types of lights for the purpose of TTC:

- **Type A:** low intensity flashing lights for night time use
- **Type B:** high intensity flashers are effective day and night
- **Type C:** steady burn, low-wattage lights are used at night for delineation

Additional consideration should be given for night time work. Night time work can expedite the work, reducing the disruption to traffic. Refer to the City of St. Albert Noise Bylaw for information on noise level restrictions during night time work.

BARRICADES

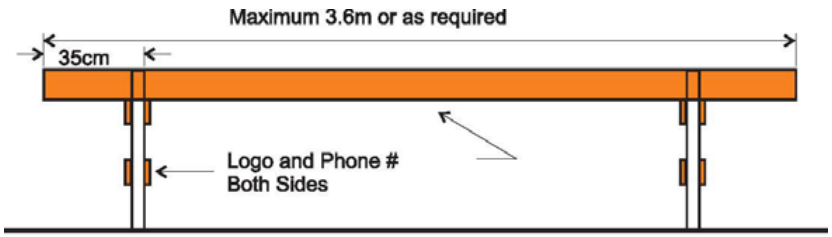
Proper placement of barricades is necessary to ensure public safety, as barricades are a potential hazard. The following provides some examples of acceptable and non – acceptable use of barricades:

Acceptable use of barricades

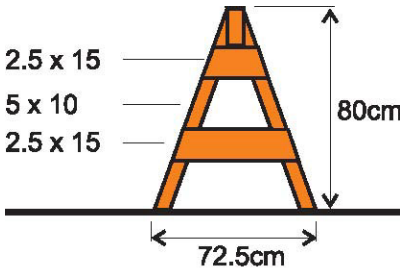
- Barricades shall face oncoming vehicular traffic.
- Barricades are used to outline and prevent vehicles and pedestrians from entering the work zone.
- Barricades are used to warn of and to obstruct entry into an activity area.
- Temporary signage may be placed on barricades only if necessary.

Non-acceptable use of barricades

- Barricades shall **not** be placed parallel to the flow of traffic. (For example, they are not to be used to mark the boundary between a travel lane and the work zone or separate adjacent lanes of traffic)
- Barricades shall **not** face oncoming traffic without necessary advance warning devices and signs.
- Barricades shall **not** be located within the buffer area.

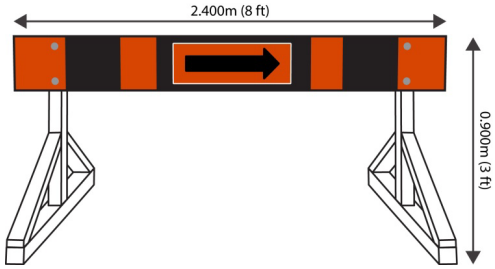


ELEVATION



END VIEW

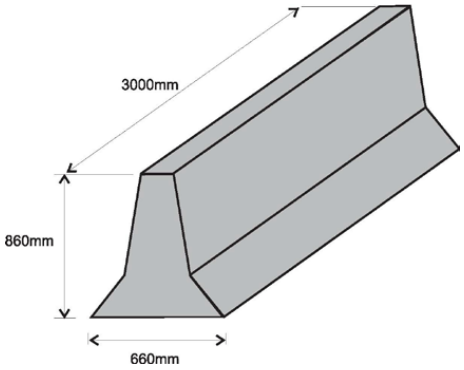
Traffic Barricades



Urban barricade or highway barricades are both acceptable for road, street, lane or shoulder closures; barricades shall have equally sized alternating black and reflective orange vertical stripes. All stripes should be 150-250 mm in width. Barricade design may vary, but should be consistent with the City of St. Albert, Alberta Transportation, or MUTCDC guidelines.

Concrete Traffic Barriers

Concrete traffic barriers are used in TAPs to:



- Limit the possibility of traffic entering the work zone.
- Protect the workers.
- Separate traffic.
- Protect the worksite.
- Separate pedestrians from vehicular traffic.

The use, placement and maintenance of concrete traffic barriers should be based on acceptable engineering practices.

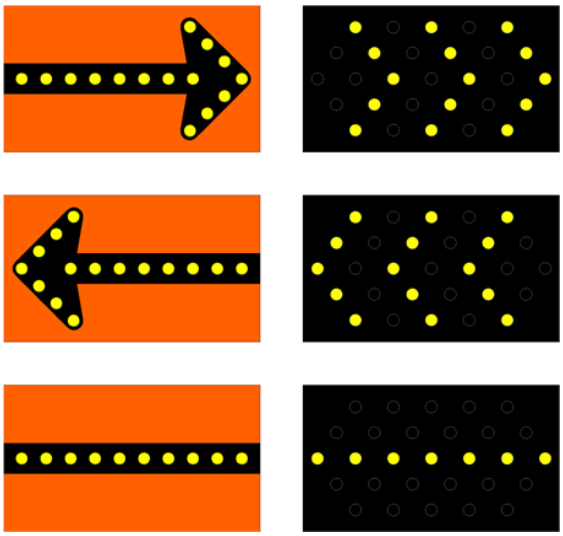
Concrete traffic barriers should:

- Be placed continuously without gaps between sections.
- Have acceptable flare rates on the leading edge, or have appropriate end treatments (e.g. impact attenuators).
- Be equipped with glare screens where necessary.
- Be placed 0.6 metres from the edge of the driving lane.

For acceptable applications and installation requirements, please refer to the roadside safety section of the Transportation Association of Canada - Geometric Design Guide for Canadian Roads.

Arrow Boards

Arrow board are traffic control devices which can provide an illuminated flashing display of a left arrow, a right arrow, or combination of the left-right arrow, sequencing arrow modes, or a bar which inform the driver to either change lanes or proceed with caution.



When combined with the use of advance warning signs and delineation devices, arrow boards are very effective, and are especially useful in situations that require higher than normal visibility. Arrow boards shall be used on arterial roadways, and may be used for overnight setups, high speed/high volume roadways (60 km/h and greater) and in poor weather conditions.

Variable Message Boards

Variable message boards are used to relay information to motorists. For example, they are used to advise motorists to expect delays or use alternative routes where possible.

Variable message boards should be programmed so motorists are able to read the message twice given the posted speed. These can also be used as arrow boards.



GLOSSARY

Advance Warning Area
Is where drivers are informed of what to expect in the downstream work zone.

Advance Warning Signs
Provides motorists and pedestrians advance notice of disruptions in normal traffic flow. These signs indicate the nature of traffic disruption, and the required action on the part of motorists and pedestrians.

Arterial Roadway
Arterials are prioritized for the movement of higher volumes of vehicles and transit. These roadways generally will have access limited to 400 metres between intersections, restrict private access directly to the roadway and facilitate speeds of between 50 km/h to 60 km/h.

Buffer Space
Is the area that separates traffic flow from the work activity or a potentially hazardous area and provides recovery space for an errant vehicle. Neither work activity nor storage of equipment, vehicles, or material shall occur in this space. Buffer spaces may be positioned longitudinally and laterally, with respect to the direction of traffic flow.

City
The City of St. Albert

City Representative
The City official who liaises with Contractor, Consultant, Utility Company or Resident.

Collector Road
Collector roads are primarily residential, with direct access to private driveways, and serve to feed local traffic onto the major arterials.

Consultant
The Consultant is an engineering company (or their representative) retained by the City to undertake work for the City. A Consultant is also defined as an engineering company (or their representative) retained by a private entity (ie. Developer) retained to undertake work.

Contractor
The Contractor is the person or company that has entered into a construction or maintenance contract with the City and or a private entity.

Detour
Is a temporary route where a driver or pedestrian is required to depart completely from the normal route to bypass the activity area.

Local Roads
Local roads are typically designed with two driving lanes with resident parking available on both sides and speed limits no greater than 50km/h. Local roads accommodate pedestrians in the form of sidewalks on both sides.

Long Duration Projects
Stationary work that requires a separate work area for longer than 24 hours or during night time hours.

Mobile Operations
Work that is performed while moving continuously, usually at low speeds, or intermittently, with periodic stops which do not exceed a few minutes in duration.

On Street Construction Permit (OSCP)
An On Street Construction Permit (OSCP) is required for construction activity on City of St. Albert property or within the road right-of-way.

Short Duration Projects
Stationary work that requires a separate work area that is continuously attended by workers for more than 30 minutes within a single daylight period.

Standards
The latest editions of the City of St. Albert Engineering Standards
https://stalbert.ca/dev/engineering/standards/

Taper
Is the gradual narrowing of a lane using channelization devices, intended to safely guide drivers into the adjacent lane.

Temporary Traffic Control (TTC) Zone
Provides for the safe movement of vehicular, bicycle and pedestrian traffic, when the normal function of a roadway is suspended. This should be outline within the Traffic Accommodation Plan.

Termination Area
Is used for traffic to make the transition back to the normal path of the road. It extends downstream from the end of the workspace to the point where normal speed resumes.

Traffic Accommodation Plan
Plans and written procedures detailing the traffic accommodation activities for any work within the roadway right-of-way. This plan must provide road users with adequate warning of the activity being performed, protection for workers and equipment within the work area and allow traffic to pass safely through the work zone.

Traffic Control Devices (TCDs)
Devices used to direct vehicle and pedestrian movement through an area in which normal traffic flow has been disrupted. This includes all signs, delineators, barricades and arrow boards.

Traffic Control Person
Is a trained and certified person responsible for controlling traffic.

Transition Area
Is the section of roadway where road users are redirected from their normal path.

Utility Company
The person(s) installing, adjusting, maintaining or relocating a utility within the roadway right-of-way.

Very Short Duration
Work can be completed in 30 minutes or less and may be stationary or mobile with frequent short stops.

Work Space/Area
The area or location of the actual traffic disruption or hazard. This area is set aside for workers, equipment and material storage. There may be several work areas within the work zone.

Work Zone
A work zone is an area where roadwork takes place and may involve lane closures, detours and moving equipment. This area extends from the first advance warning sign to the last construction sign.

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The City of St. Albert would like to acknowledge the following resource materials used in preparing this guideline:

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- Traffic Accommodation in Work Zones (2nd Edition), Alberta Transportation, 2018
- City of Lethbridge Temporary Traffic Control Manual
- Right of Way Construction Activity Manual