THE CITY OF Red Deer

Traffic Section
Engineering Services Department

Temporary Traffic Control Manual

September 2025

Foreword

This manual provides guidance for planning and implementing temporary traffic control for work within the City of Red Deer Right-of-Way (ROW).

It is to be used in conjunction with the *Manual of Uniform Traffic Control Devices for Canada* (MUTCDC) and incorporates practices tailored to Red Deer's transportation network.

The purpose of this manual is to ensure that temporary traffic accommodation is applied consistently and effectively to promote the safety of workers, pedestrians, cyclists, and motorists.

All personnel responsible for traffic control within the City ROW are encouraged to use this manual as a reference for planning and implementing safe and effective traffic control measures.

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Traffic Operations Engineer

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2025-09-16

PERMIT TO PRACTICE
THE CITY OF RED DEER
RM SIGNATURE:
RM APEGA ID #: 77167
DATE: 2025-10-02
PERMIT NUMBER: P003994
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Contents

Introduction

The TEMPORARY TRAFFIC CONTROL MANUAL has been developed to assist with preparing a Traffic Accommodation Strategy (TAS) for review and approval by The City of Red Deer. It establishes standardized temporary traffic control requirements to ensure the safety of all road users, pedestrians, workers, and equipment in and around work zones within the City's Right-of-Way (ROW). This manual serves as a reference for contractors, consultants, utility companies, and City staff involved in temporary traffic control operations.

Use of Streets Permit

A Use of Streets Permit is required for work within the City's ROW. This permit consists of temporary Parking Stall Reservation, Street/Lane/Sidewalk Closure, Lot Parking Stall Reservation, and/or Property Owner Requests within City owned Parking Lots for a defined date range at a specific address/location.

For more information on the Use of Streets Permit, visit:
https://www.reddeer.ca/city-services/permits-and-inspections/use-of-streets--windrow-removal-permits/

To complete the Use of Streets Permit Application, visit:
https://www.reddeer.ca/media/reddeerca/city-services/engineering/Use-of-Streets-Permit-Application.pdf

Applicants can obtain approval for this permit by submitting it to Engineering Services at engineering@reddeer.ca or by calling 403-342-8158 if assistance is required. A minimum of two business days prior notice is required for processing and coordination of these requests.

Traffic Accommodation Strategy (TAS)

A TAS is required for all Street/Lane/Sidewalk Closures within the City's ROW. Applicants must submit a TAS to Engineering Services with a minimum of 2-3 business days' notice for review and approval prior to the closure.

The TAS must include, at minimum:

- Site Map/Drawing/Diagram: Clearly indicating the location, extent of the closure, and the work space.
- Traffic Control Devices: Placement of signs, delineation devices, barriers, arrow boards, etc.
- Flag Persons: Locations of flaggers, if required.
- Site Contact Information: Name and cell phone number of the site contact.

The TAS should be prepared by following the examples provided in this manual. Elements from multiple examples may be combined or adapted as applicable to best suit situational conditions. If a particular closure is not included in this manual, applicants should refer to the *Manual of Uniform Traffic Control Devices for Canada* (MUTCDC), Sixth Edition, for appropriate guidance. If approved, a road closure notification will be sent to Parks & Public Works to communicate the closure to the public and a Use of Streets Permit will be issued to the applicant.

Alternatively, applicants can request traffic control through parksandpublicworks@reddeer.ca. This option also requires a minimum of 2-3 business days' notice prior to the closure to confirm crew availability. If approved, the applicant will need to complete a work order confirming the details of their request. From the completed work order, Engineering Services will issue a Use of Streets Permit to the applicant. Please note that Parks and Public Works charge additional fees for their traffic control separate from the Use of Streets Permit.

Temporary Traffic Control Zone Components

A temporary traffic control zone extends from the first advance warning sign to the last traffic control device which returns vehicles to normal road conditions. The temporary traffic control zone is divided into four components:

1. Advance Warning Area

This area informs drivers to expect work ahead and any necessary actions to take. The number and type of traffic control devices in this area must account for downstream conditions, such as reduced speeds or lane closures. Devices should be spaced appropriately to provide drivers with sufficient reaction time to interpret the information and react before reaching the work area.

2. Transition Area

This area moves traffic out of the normal path to accommodate situations such as lane closures or shoulder work that may encroach into adjacent travel lanes. Delineation devices should clearly define the intended path, ensuring drivers do not follow the wrong direction. This area must be free of parked vehicles, equipment, or material storage.

3. Activity Area

This area is where the work occurs and includes the longitudinal buffer space, lateral buffer space, work space, and traffic space.

- Longitudinal buffer space: Provides protection for traffic and workers, acting as a recovery zone for errant vehicles. This space should remain free of parked vehicles, equipment, or material storage.
- Lateral buffer space: Provides protection for traffic and workers, separating the traffic space from the work space. Engineering judgment should determine its width while considering factors such as speed, traffic volume, lane width, vehicle class, time of day, and work duration.
- Work space: Area set aside for workers, equipment, and material storage. Measures should be taken to minimize hazards and distractions for both road users and workers.
- Traffic space: Allows traffic to pass through the activity area. Minimum lane widths of 3.3 metres shall be maintained for emergency vehicles.

4. Termination Area

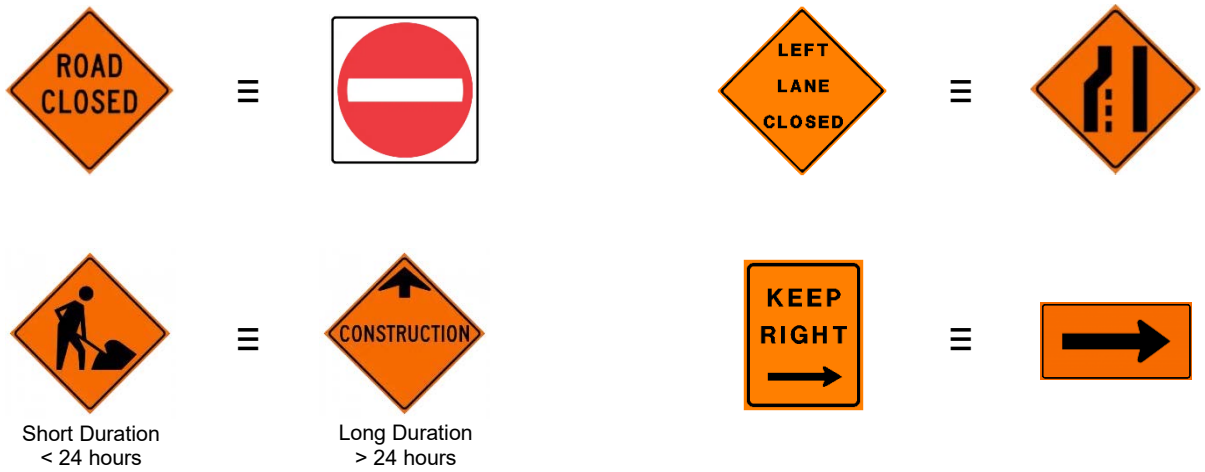
This area lets traffic resume normal driving. It extends from the end of the work space to the point where traffic returns to normal road conditions.

Traffic Control Devices

All temporary traffic control devices – including signs, delineation devices, barricades, flashers, arrow boards, and variable message boards – should comply with the MUTCDC, Sixth Edition.

Equivalent signage not illustrated in this manual is acceptable, provided it conveys the same message to road users clearly and effectively. Any such signage must adhere to MUTCDC standards with respect to size, shape, and colour.

Signage equivalency examples:



Spacing Requirements

The spacing of traffic control devices is determined by the posted speed limit. Proper spacing allows sufficient driver reaction time and provides clear direction for road users while maintaining safety for workers. See Table 1.

Table 1: Spacing Requirements

V (km/h)	A (m)	L (m)	B (m)	D (m)	R (m)	N
30	25	10	20	6	30	5
50	50	30	35	8	40	5
60	50	40	45	12	50	5
70	75	60	50	15	65	8

Where:
V = Speed limit
A = Spacing between signs
L = Length of taper
B = Length of longitudinal buffer space
D = Spacing between delineation devices
R = Run-in-length on centre line
N = Number of delineation devices per taper

Note: Spacing and taper lengths may vary based on situational conditions, such as road geometry and space limitations.

Taper Types

Table 2: Taper Types

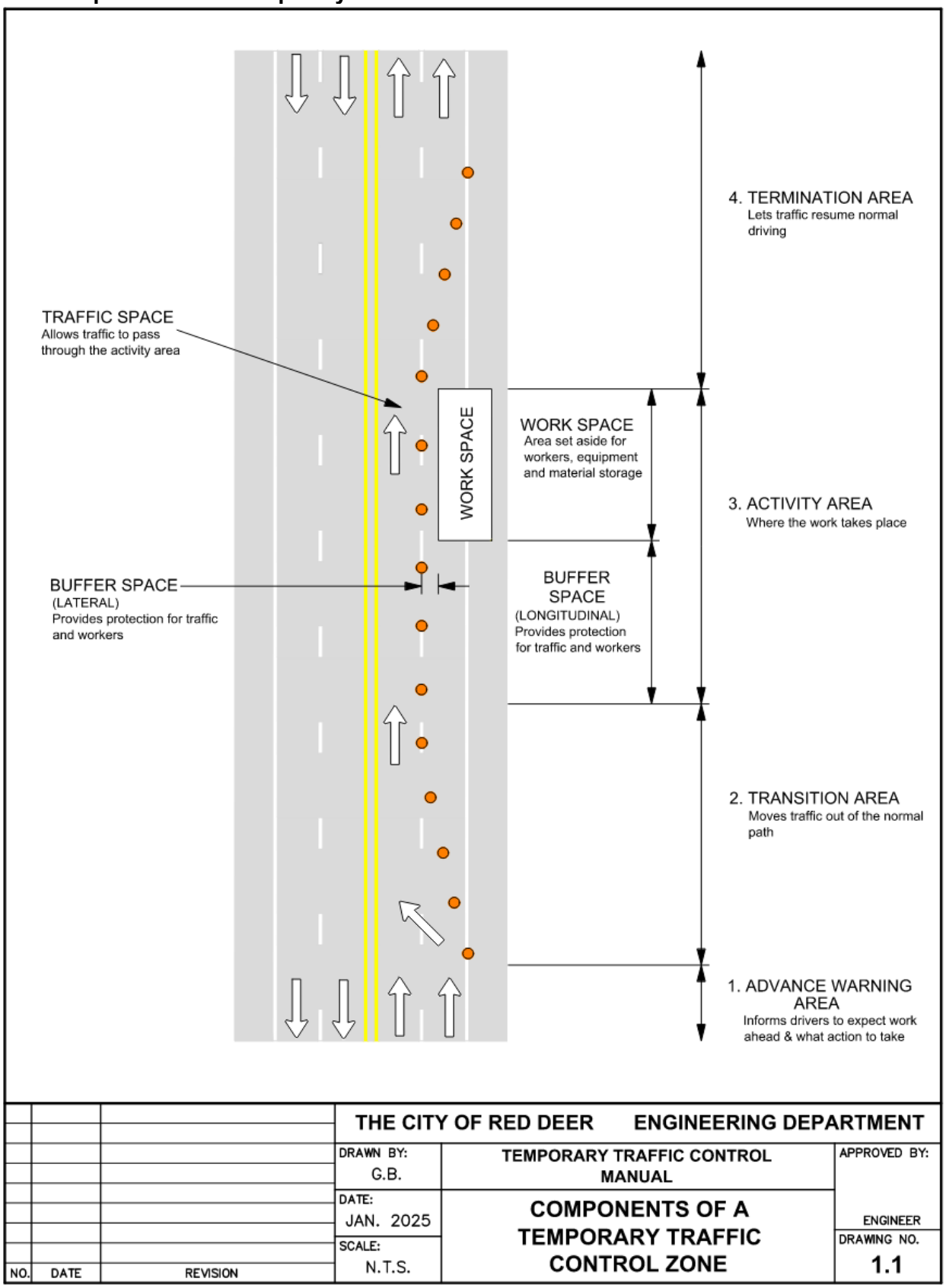
TAPERS		
TYPE	**DESCRIPTION**	**LENGTH**
Merging taper	A lane closure taper used to merge traffic from a closing travel lane into an adjacent travel lane.	L (min)
Shifting taper	Used when a travel lane is shifted laterally by up to one lane width. Drivers follow a path of travel without merging or diverging.	L/2 (min)
Shoulder taper	Closes a shoulder to create a work space or storage area. May be used for full-time parking lanes. For part-time parking lanes, consider a merging taper if necessary.	L/3 (min)
Two-way taper	Closes a travel lane on a two-way roadway while allowing alternating traffic in each direction.	10 m – 30 m
Downstream taper	Provides a transition from the activity area back to the normal path of travel.	L/3 (min)

Tangent Types

Table 3: Tangent Types

TANGENTS		
TYPE	**DESCRIPTION**	**LENGTH**
Merge followed by merge	The parallel distance between the end of one merge taper and the start of another. A minimum of one merge taper length is required; twice the length is recommended for high-speed or high-volume roads.	L (min), 2L (desired)
Merge followed by shifting taper	The parallel distance between the end of a merge taper and the start of a shifting taper. A minimum of one merge taper length should be provided to allow drivers time to react to traffic control devices.	L (min)
Buffer	Provides a recovery area for errant vehicles, separating work zones from traffic or opposing traffic lanes.	B
Run-in-length on centreline	A tangent length used before a lane shift or the end of a merge on the centreline.	R

1.1 Components of a Temporary Traffic Control Zone



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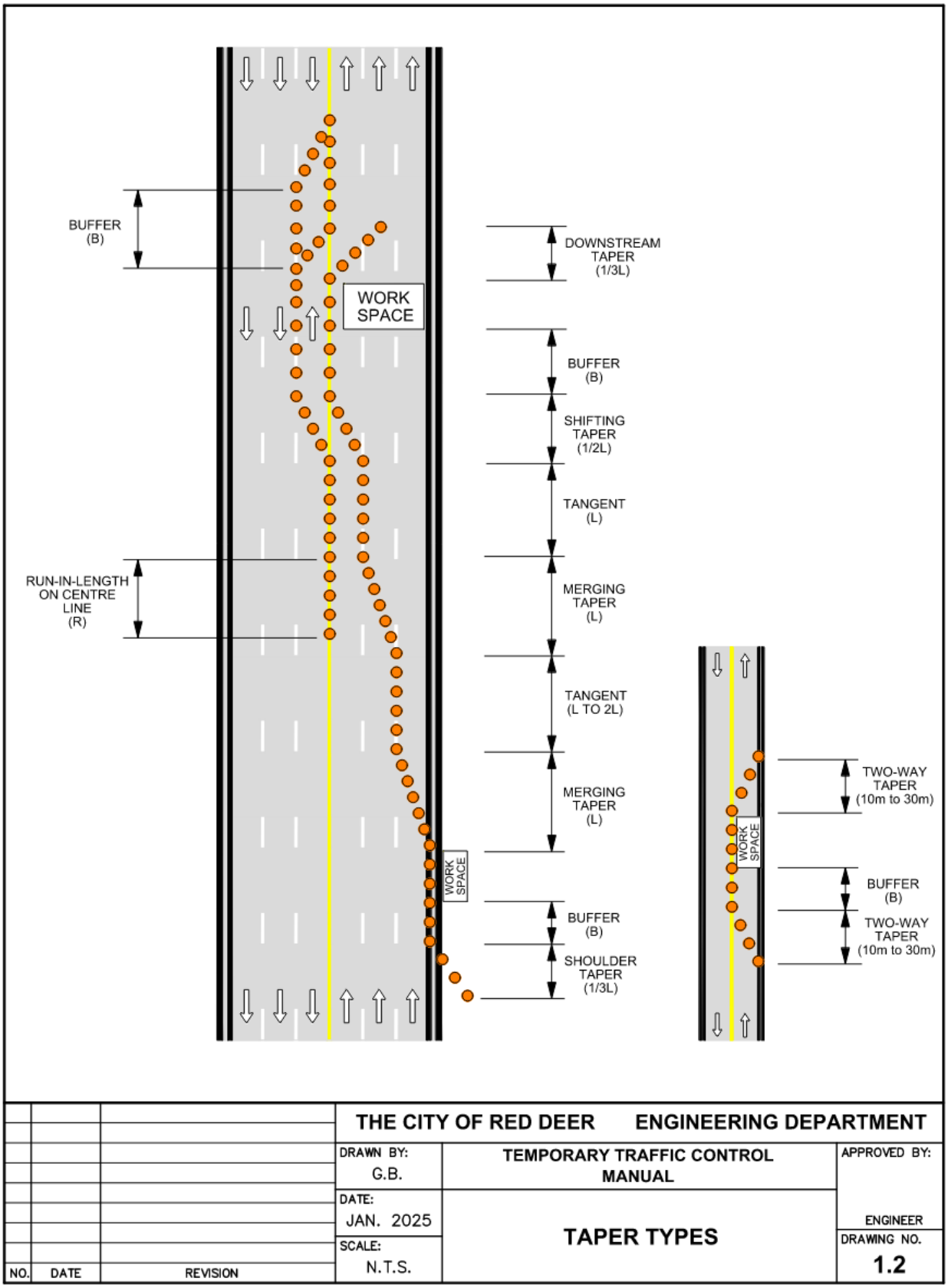
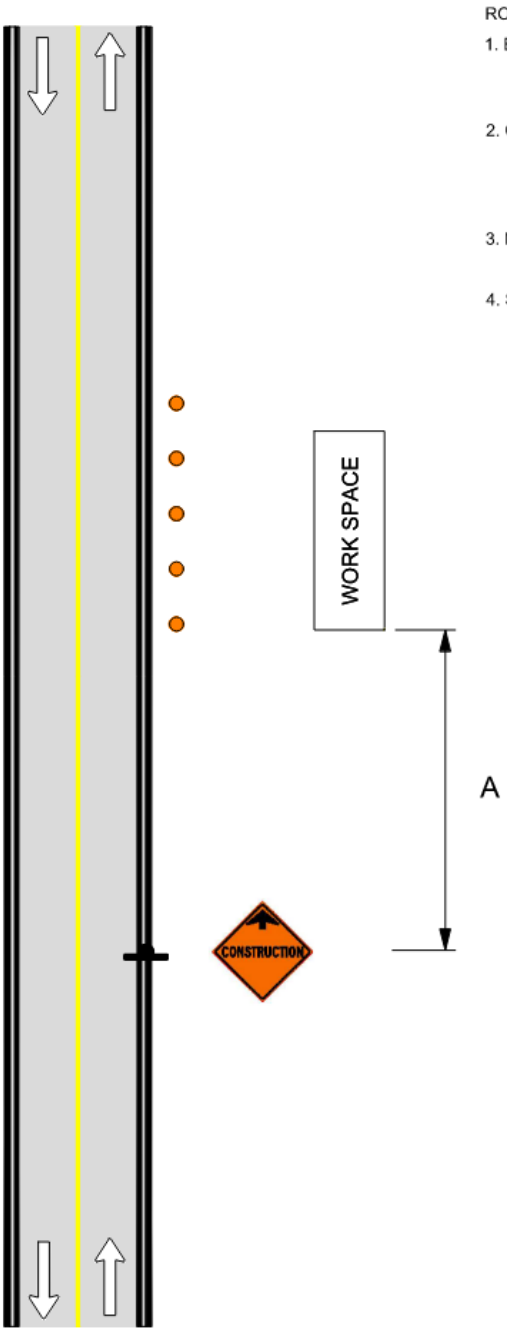
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	COMPONENTS OF A TEMPORARY TRAFFIC CONTROL ZONE	
			SCALE: N.T.S.		DRAWING NO. 1.1

1.2 Taper Types



2.1 Roadside Work



ROADSIDE WORK

1. EXAMPLE SHOWN:
   - Two-lane - two-way road without shoulder.
   - No encroachment onto road.
2. CONDITIONS:
   - Work site must be in the boulevard area, completely off the road.
   - Excavations require protection.
3. NOTES:
   - Note use of advance warning sign.
4. Set-up procedure
   - Set up advance warning sign and then delineation devices.
   - Use rotating light & flashers on equipment.
   - Commence work.

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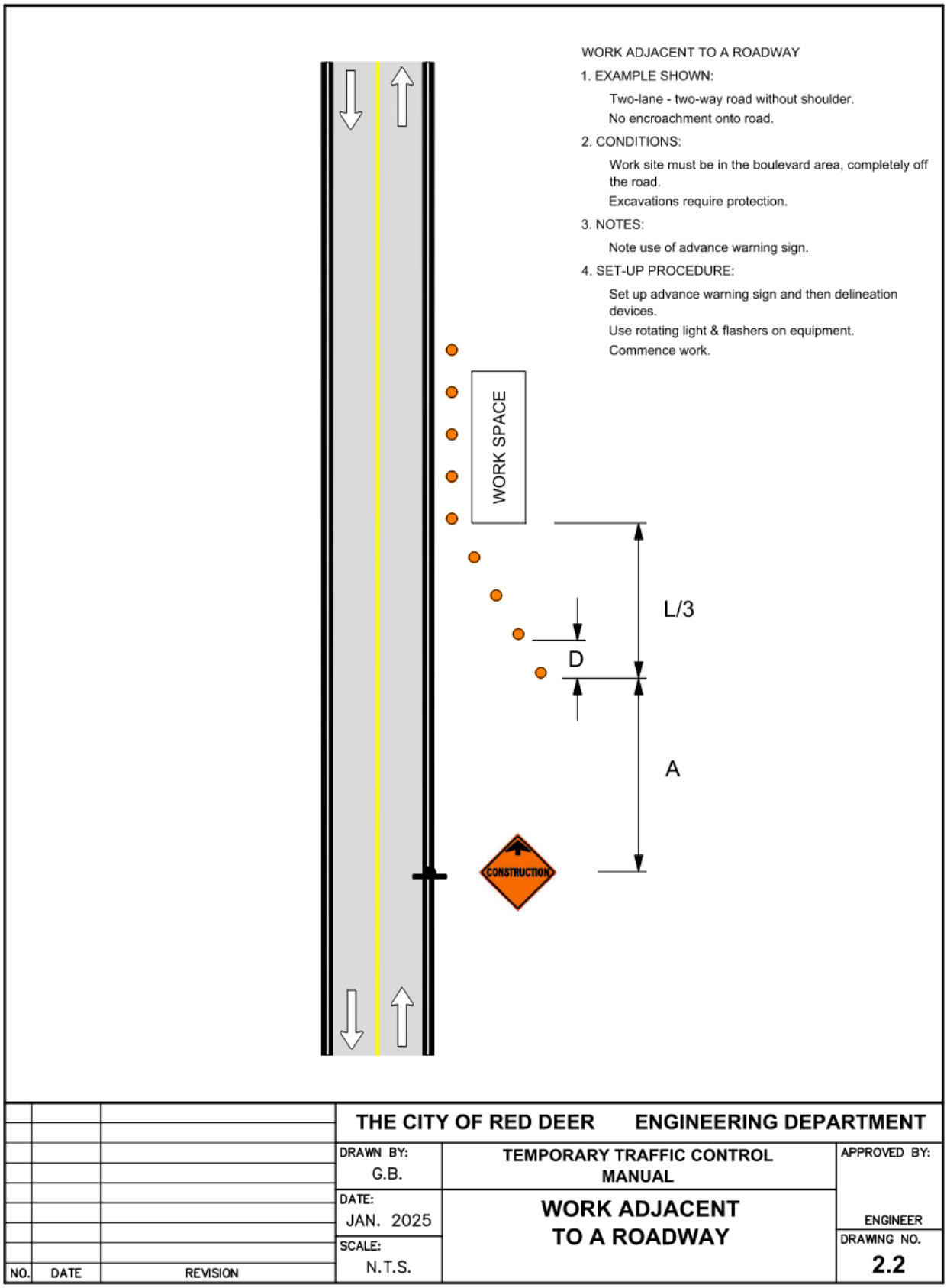
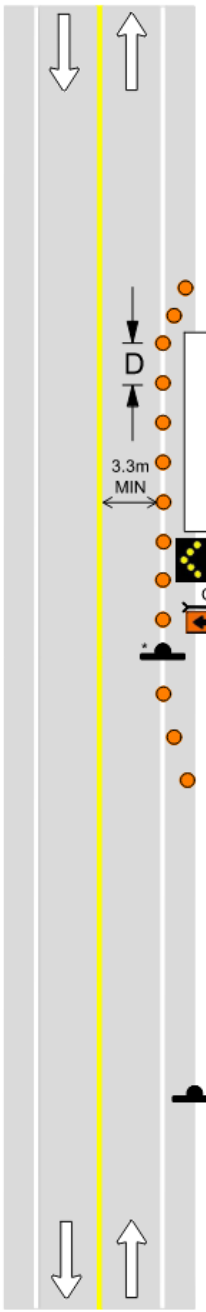
			DATE: JAN. 2025	ROADSIDE WORK	DRAWING NO. 2.1
			SCALE: N.T.S.		

2.2 Work Adjacent to a Roadway



2.3 Shoulder Work



SHOULDER WORK

1. EXAMPLE SHOWN:
   Two-lane - two-way road with parking lane/shoulder.
2. CONDITIONS:
   Approaching traffic must be able to pass by work site while remaining completely within their own lane.
3. NOTES:
   3.3 metre minimum lane width required.
   Applies to sidewalk or curb and gutter repairs.
4. SET-UP PROCEDURE:
   Set up advance warning sign.
   Set up Lane Closure Arrow sign.
   Set up taper and outline work site with delineation devices.
   Commence work.

* Sign is optional if an arrow board is being used.

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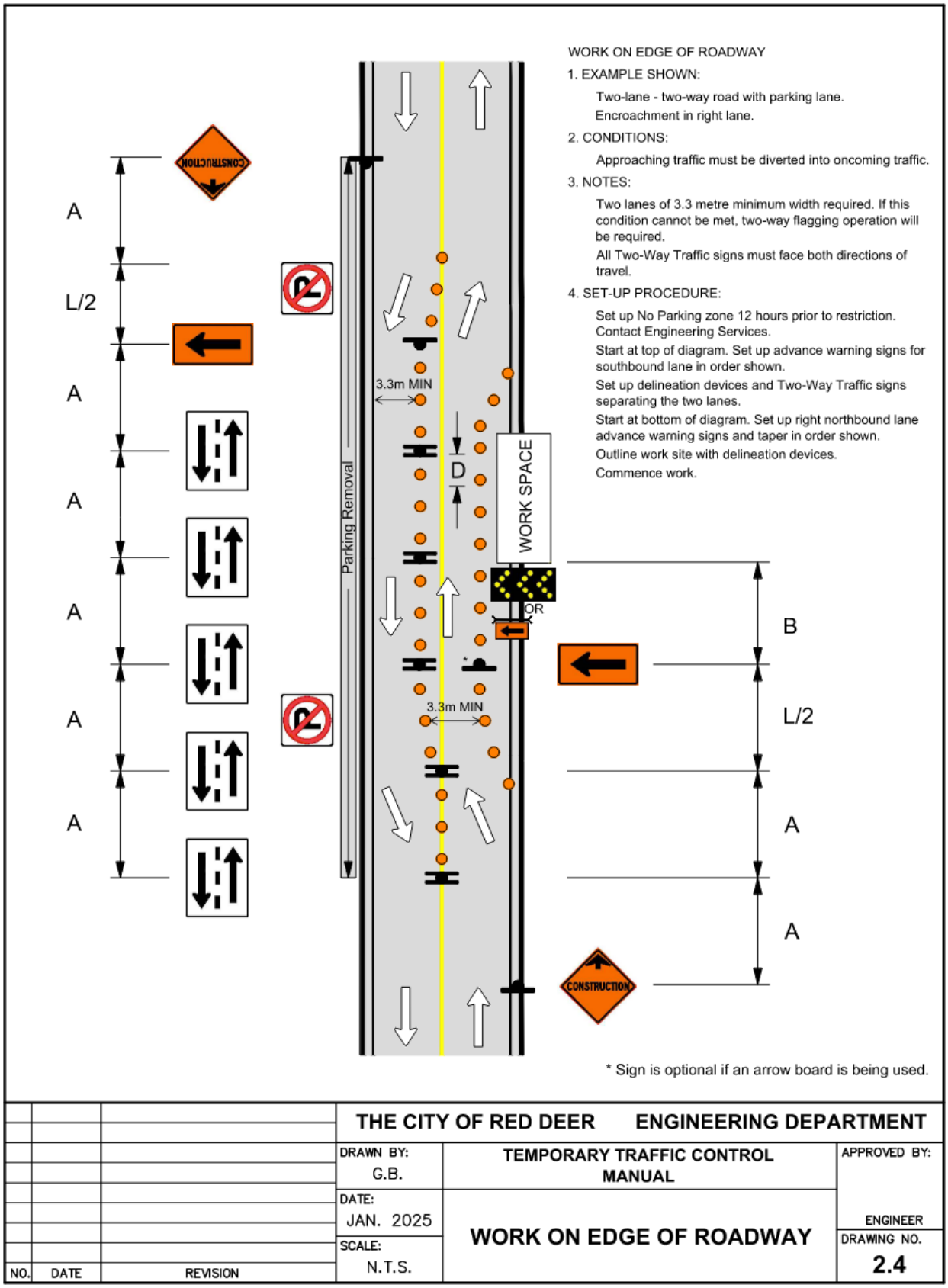
			DATE: JAN. 2025	SHOULDER WORK	DRAWING NO. 2.3
			SCALE: N.T.S.		

2.4 Work on Edge of Roadway



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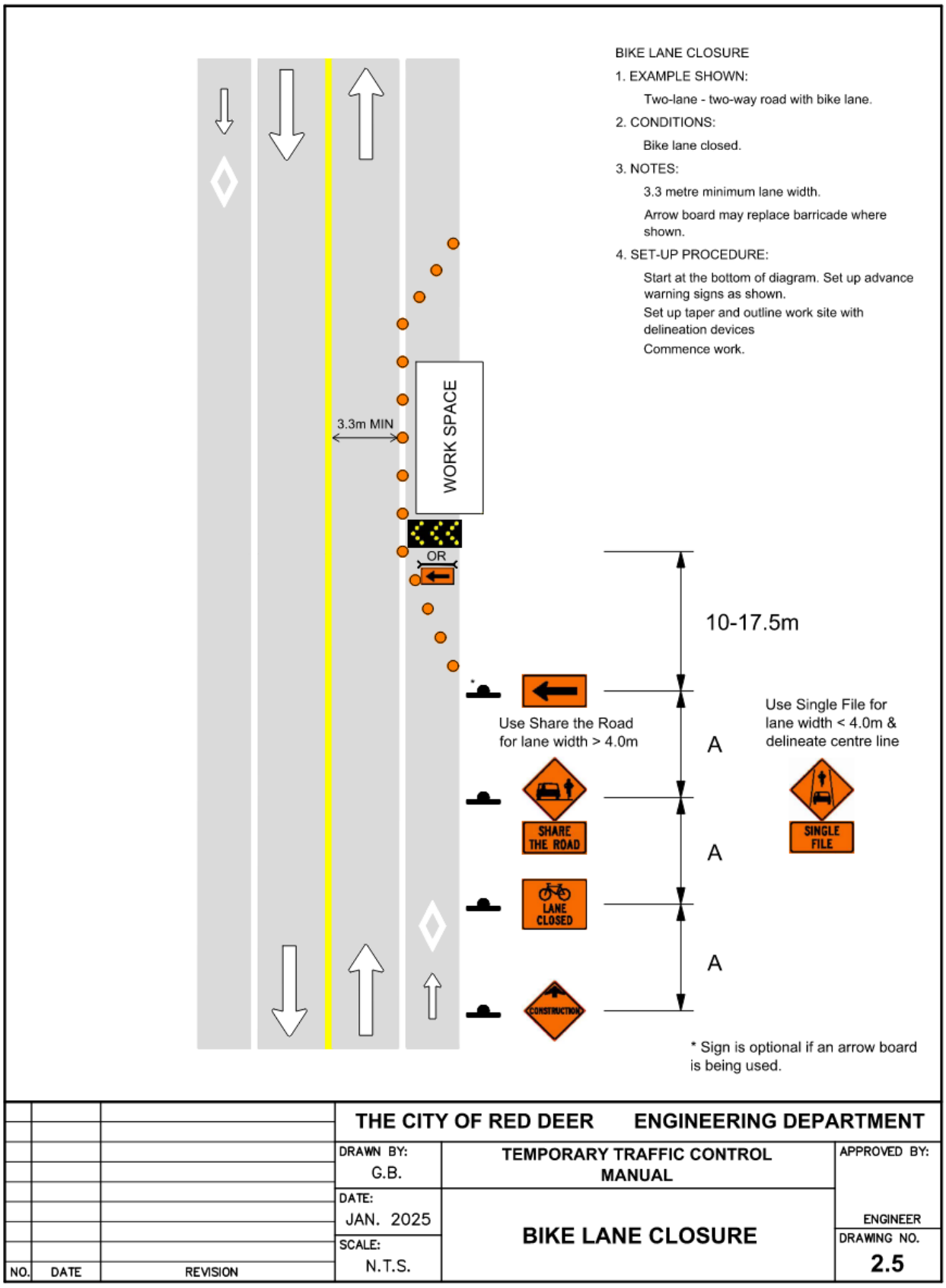
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	WORK ON EDGE OF ROADWAY	DRAWING NO. 2.4
			SCALE: N.T.S.		

2.5 Bike Lane Closure



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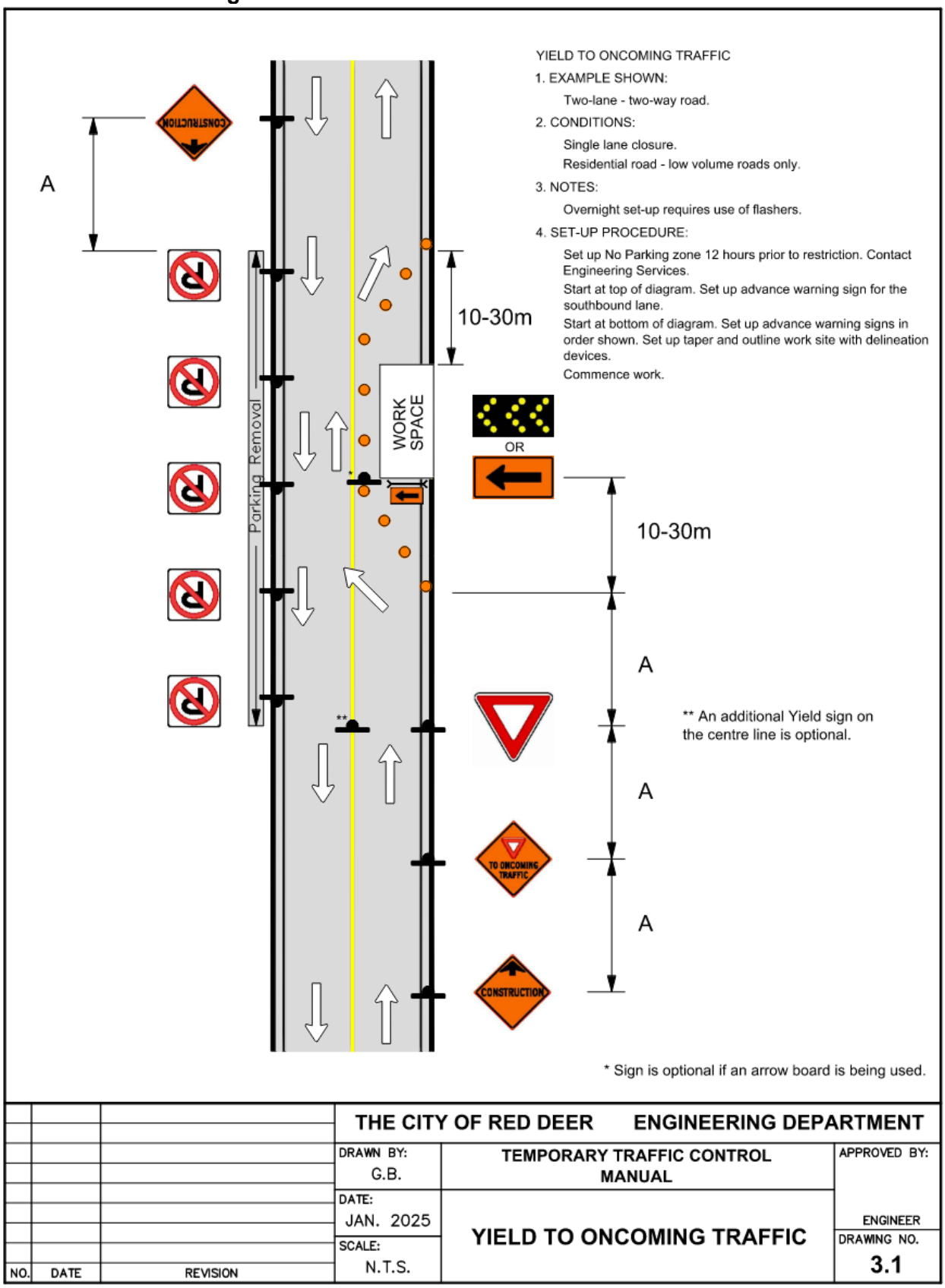
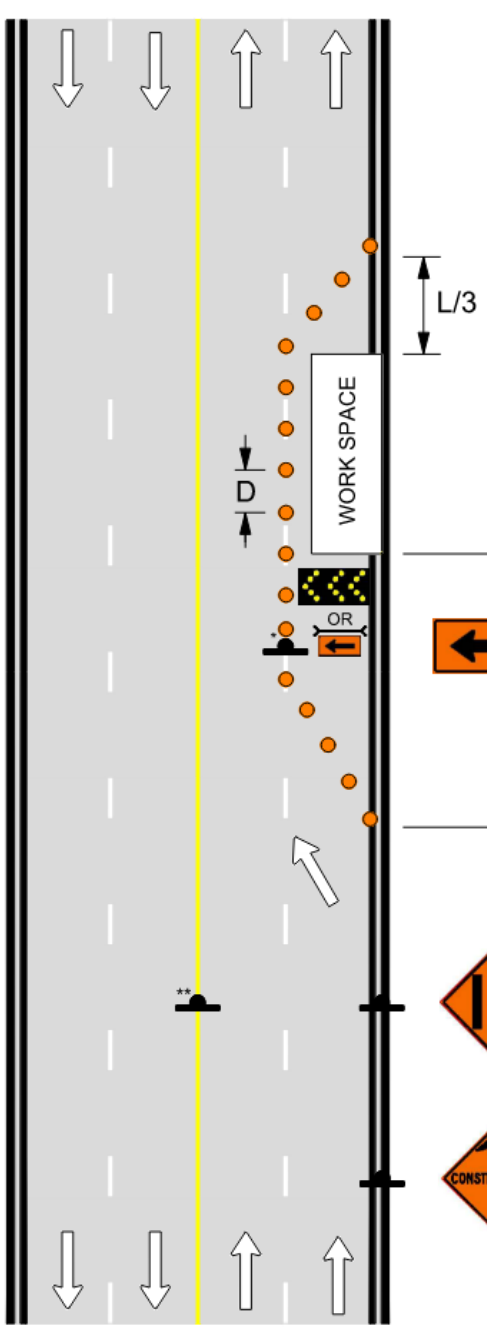
			DATE: JAN. 2025	BIKE LANE CLOSURE	DRAWING NO. 2.5
			SCALE: N.T.S.		

3.1 Yield to Oncoming Traffic



3.2 Single Right Lane Closure



SINGLE RIGHT LANE CLOSURE

1. EXAMPLE SHOWN:
   Two-way - four-lane road.
2. CONDITIONS:
   Closure of single lane.
3. NOTES:
   Note Right Lane Closed sign to allow reaction time for motorists to change lanes.
4. SET-UP PROCEDURE:
   Start at bottom of diagram.
   Set up advance warning signs in order shown.
   Set up taper and outline work site with delineation devices.
   Commence work.

** An additional Right Lane Closed sign should be placed adjacent to the left lane where median space may allow.

* Sign is optional if an arrow board is being used.

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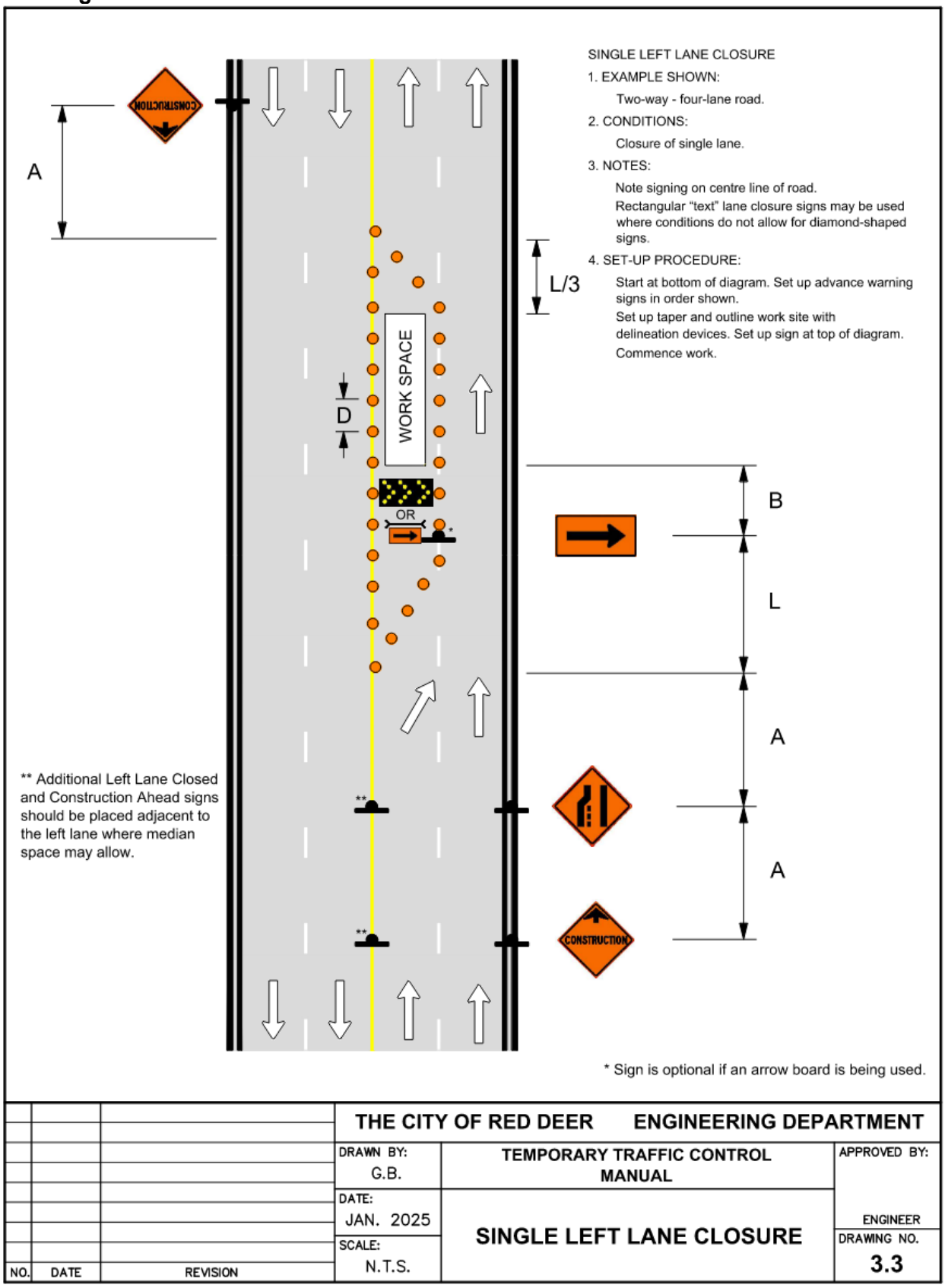
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SINGLE RIGHT LANE CLOSURE	DRAWING NO. 3.2
			SCALE: N.T.S.		

3.3 Single Left Lane Closure



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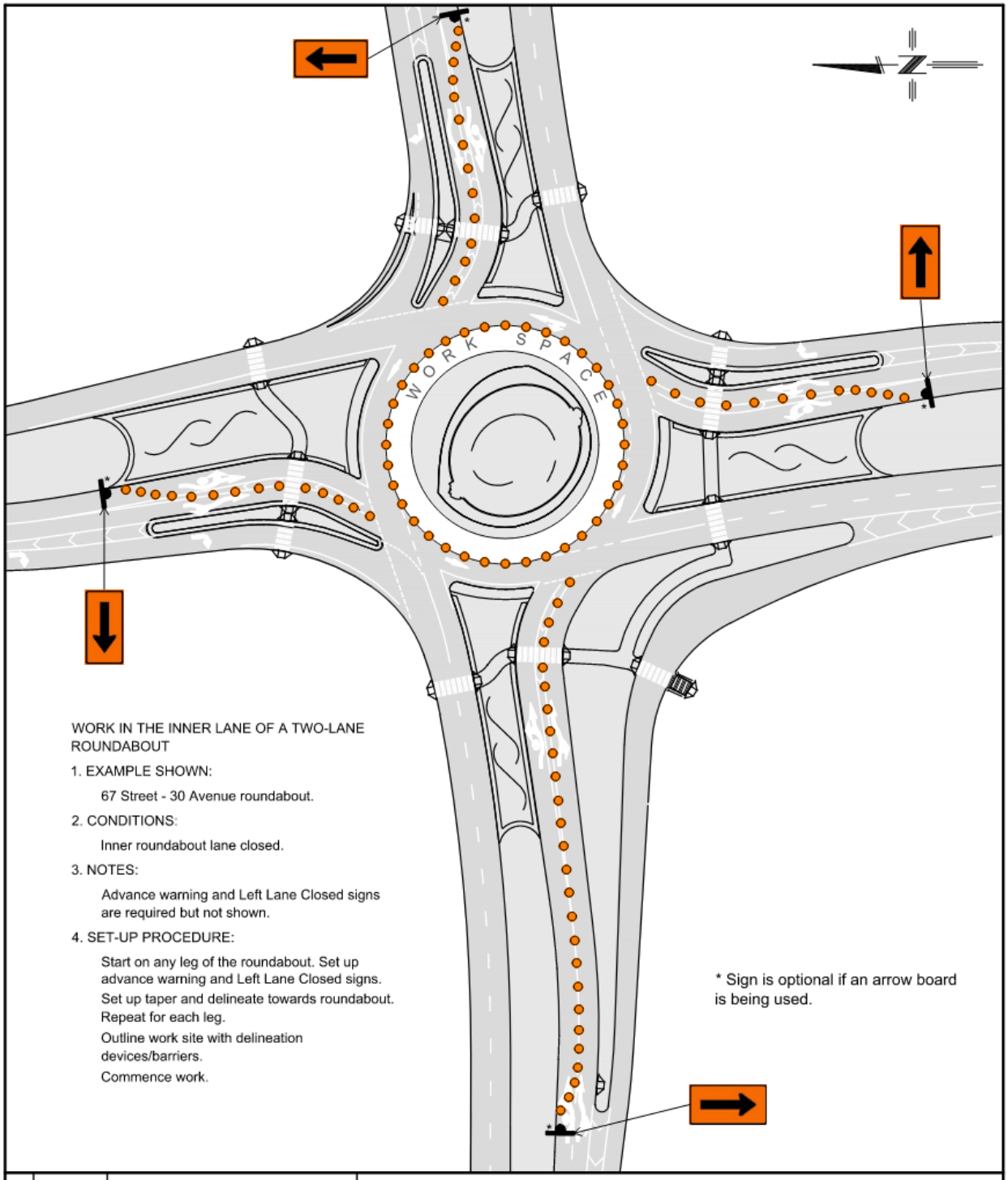
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SINGLE LEFT LANE CLOSURE	DRAWING NO. 3.3
			SCALE: N.T.S.		

3.4 Work in the Inner Lane of a Two-Lane Roundabout



WORK IN THE INNER LANE OF A TWO-LANE ROUNDABOUT

1. EXAMPLE SHOWN:

   67 Street - 30 Avenue roundabout.

2. CONDITIONS:

   Inner roundabout lane closed.

3. NOTES:

   Advance warning and Left Lane Closed signs are required but not shown.

4. SET-UP PROCEDURE:

   Start on any leg of the roundabout. Set up advance warning and Left Lane Closed signs.
   Set up taper and delineate towards roundabout. Repeat for each leg.
   Outline work site with delineation devices/barriers.
   Commence work.

* Sign is optional if an arrow board is being used.

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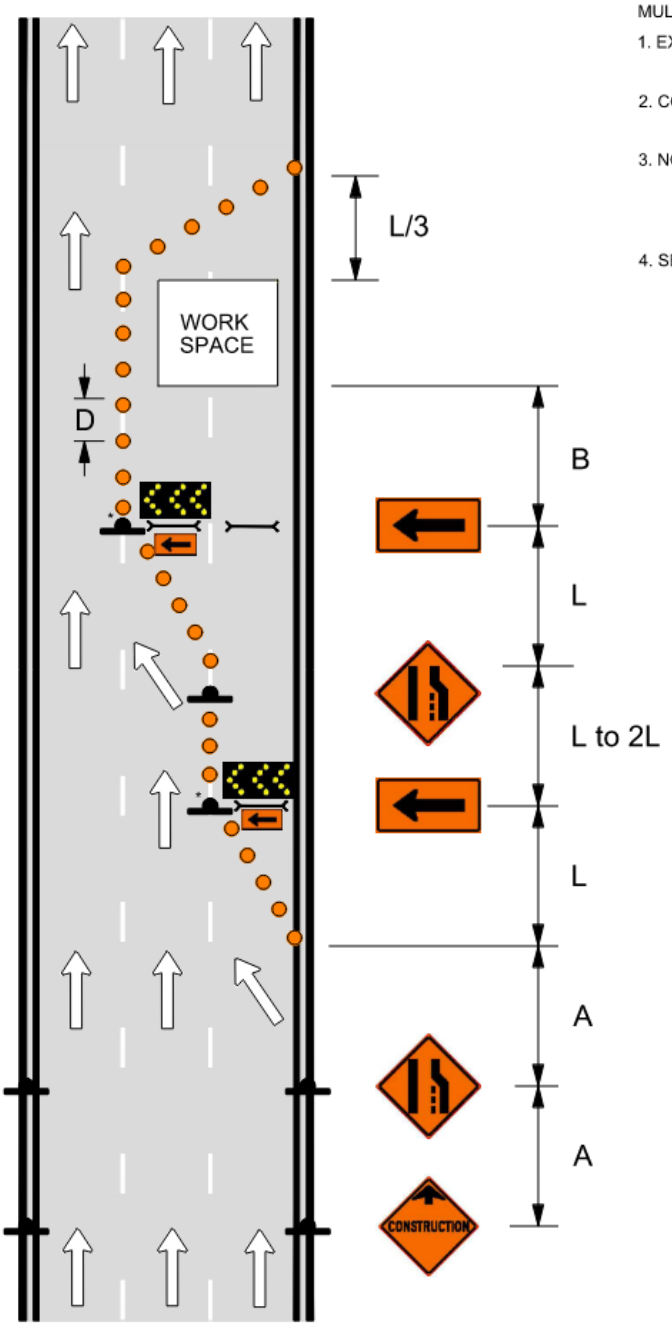
			DATE: JAN. 2025	WORK IN THE INNER LANE OF A TWO-LANE ROUNDABOUT	DRAWING NO. 3.4
			SCALE: N.T.S.		

4.1 Multi-Lane Closure Two Right Lanes



MULTI-LANE CLOSURE TWO RIGHT LANES

1. EXAMPLE SHOWN:

   Three-lane - one-way road.

2. CONDITIONS:

   Two-lane closure.

3. NOTES:

   Each lane must be closed separately and a straight section (tangent) provided between tapers.

4. SET-UP PROCEDURE:

   Start at bottom of diagram. Set up double-lane closure in order shown. Work towards top of diagram.

   Outline work site with delineation devices.

   Commence work.

* Sign is optional if an arrow board is being used.

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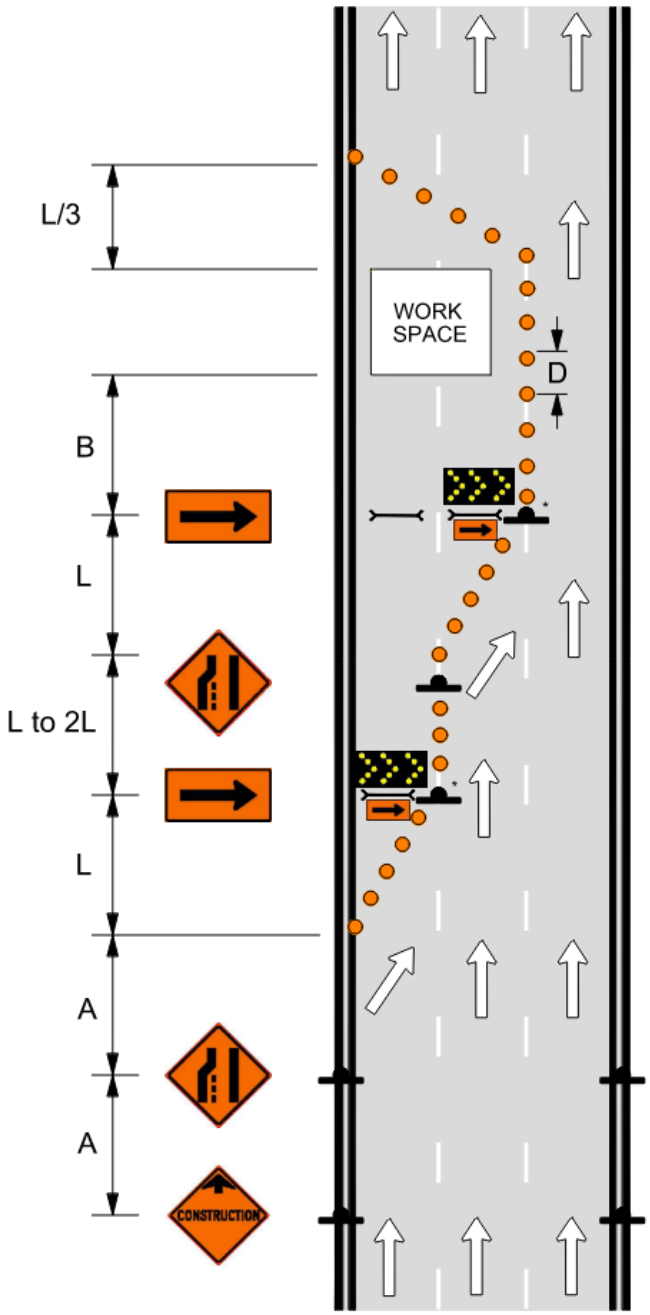
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MULTI-LANE CLOSURE TWO RIGHT LANES	
			SCALE: N.T.S.		DRAWING NO. 4.1

4.2 Multi-Lane Closure Two Left Lanes



MULTI-LANE CLOSURE TWO RIGHT LANES

1. EXAMPLE SHOWN:

   Three-lane - one-way road.

2. CONDITIONS:

   Two-lane closure.

3. NOTES:

   Each lane must be closed separately and a straight section (tangent) provided between tapers.

4. SET-UP PROCEDURE:

   Start at bottom of diagram. Set up double-lane closure in order shown. Work towards top of diagram.

   Outline work site with delineation devices.

   Commence work.

* Sign is optional if an arrow board is being used.

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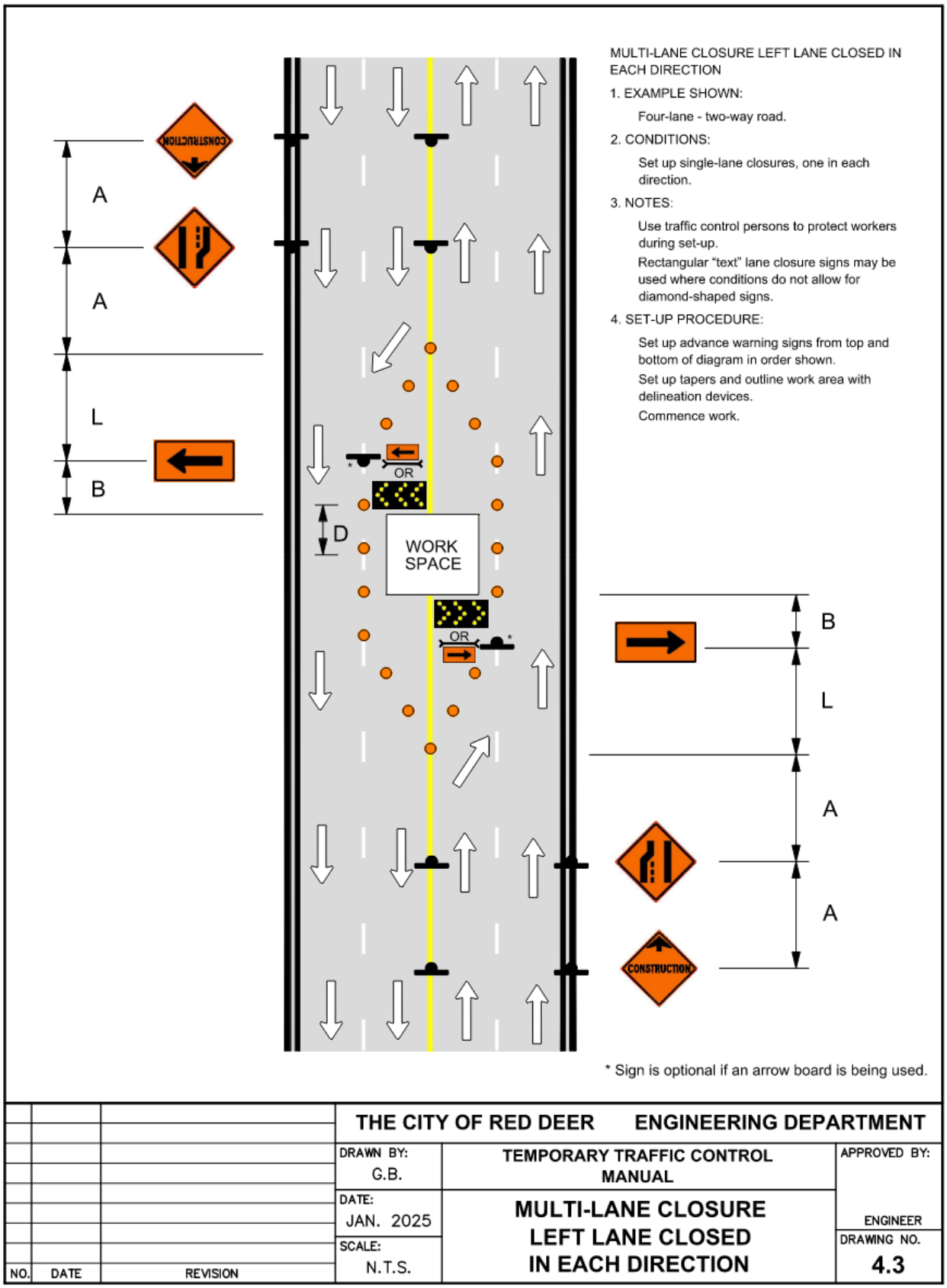
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MULTI-LANE CLOSURE TWO LEFT LANES	
			SCALE: N.T.S.		DRAWING NO. 4.2

4.3 Multi-Lane Closure Left Lane Closed in Each Direction



MULTI-LANE CLOSURE LEFT LANE CLOSED IN EACH DIRECTION

1. EXAMPLE SHOWN:

   Four-lane - two-way road.

2. CONDITIONS:

   Set up single-lane closures, one in each direction.

3. NOTES:

   Use traffic control persons to protect workers during set-up.

   Rectangular "text" lane closure signs may be used where conditions do not allow for diamond-shaped signs.

4. SET-UP PROCEDURE:

   Set up advance warning signs from top and bottom of diagram in order shown.

   Set up tapers and outline work area with delineation devices.

   Commence work.

* Sign is optional if an arrow board is being used.

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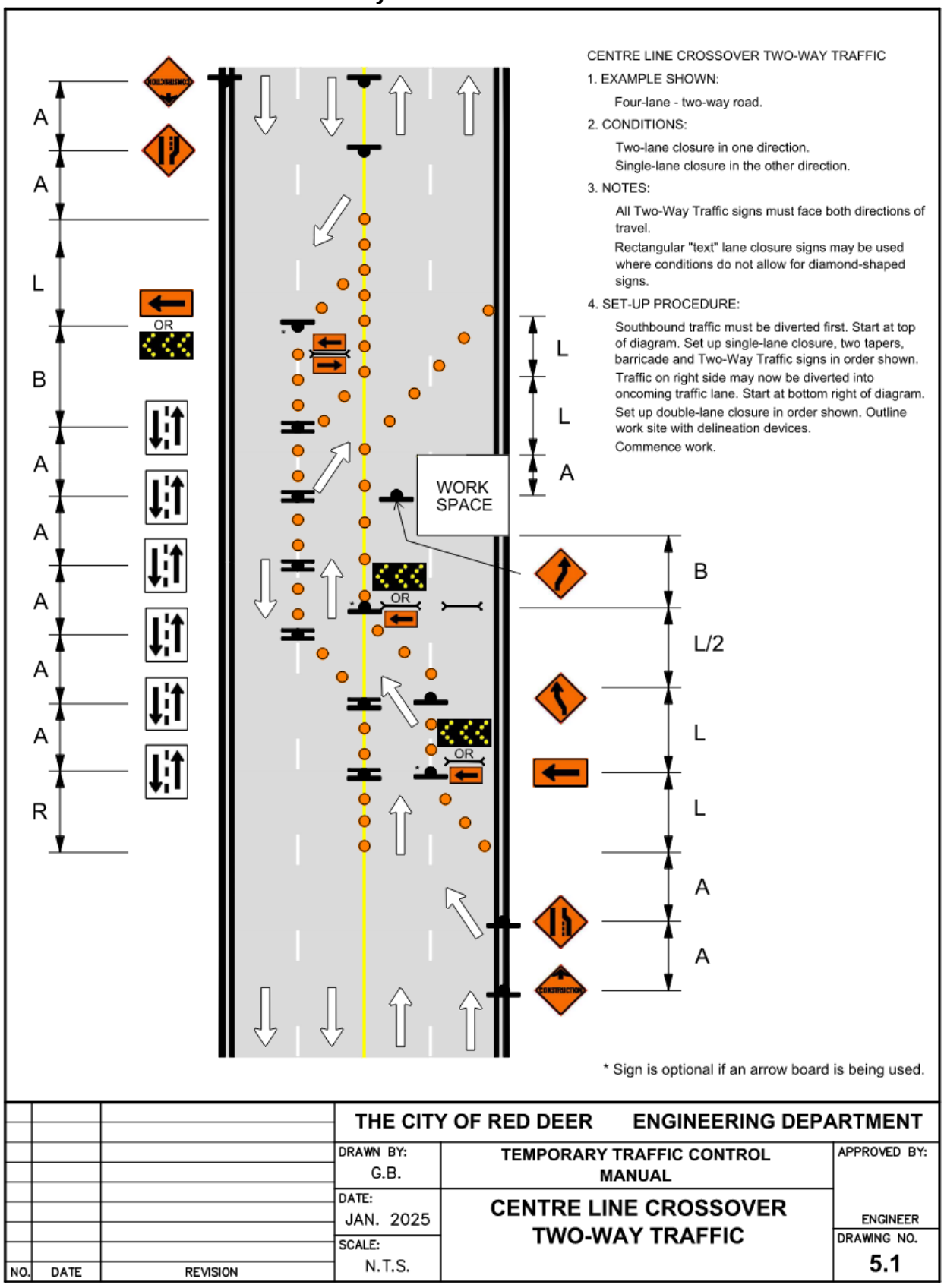
			DATE: JAN. 2025	MULTI-LANE CLOSURE LEFT LANE CLOSED IN EACH DIRECTION	DRAWING NO. 4.3
			SCALE: N.T.S.		

5.1 Centre Line Crossover Two-Way Traffic



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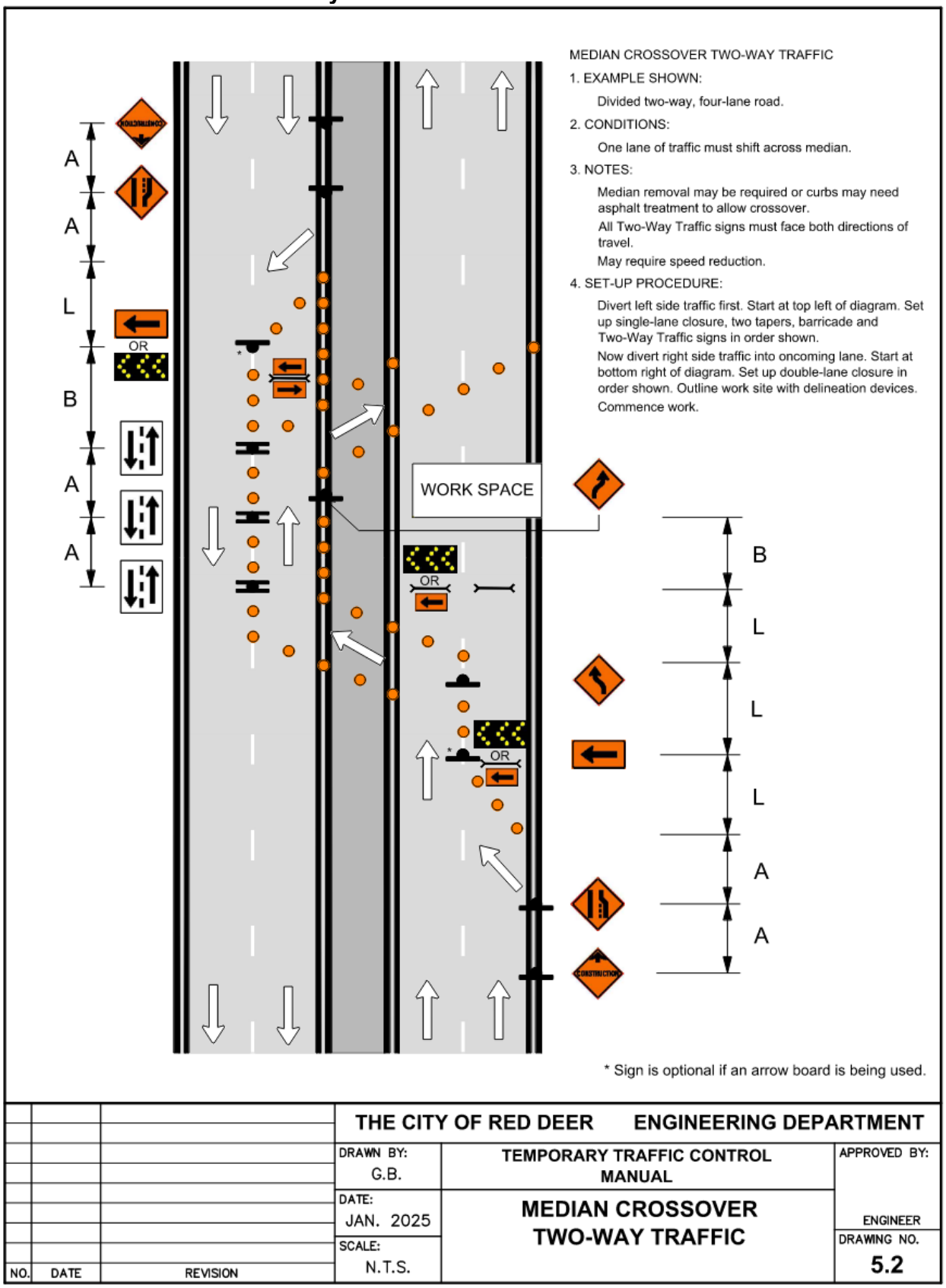
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY:
			DATE: JAN. 2025	CENTRE LINE CROSSOVER TWO-WAY TRAFFIC	ENGINEER
			SCALE: N.T.S.		DRAWING NO. 5.1

5.2 Median Crossover Two-Way Traffic



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			DATE: JAN. 2025	MEDIAN CROSSOVER TWO-WAY TRAFFIC	ENGINEER
			SCALE: N.T.S.		DRAWING NO. 5.2

6.1 Intersection Work – Example 1

INTERSECTION WORK - EXAMPLE 1

1. EXAMPLE SHOWN:

   Two-lane - four-legged intersection.

2. CONDITIONS:

   Require a portion of each lane in each direction.

3. NOTES:

   Use traffic control persons to protect workers during set-up.

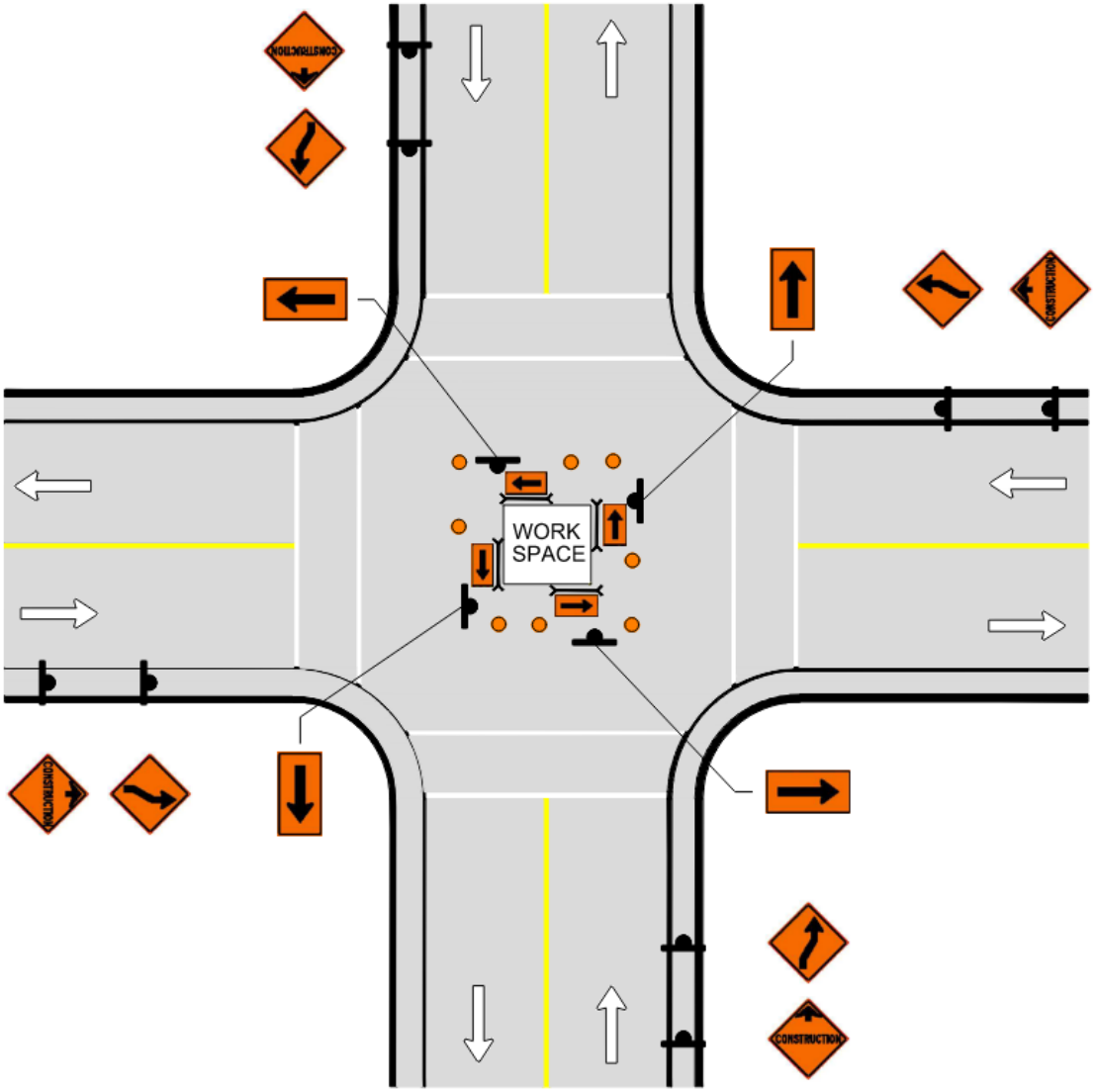
   Use No Left Turn signs where applicable. Confirm vehicle turn path.

4. SET-UP PROCEDURE:

   Set up all advance warning signs first.

   Outline work site with delineation devices and Lane Closure Arrow signs.

   Commence work.



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			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	INTERSECTION WORK EXAMPLE 1	DRAWING NO. 6.1
			SCALE: N.T.S.		

6.2 Intersection Work – Example 2

INTERSECTION WORK - EXAMPLE 2

1. EXAMPLE SHOWN:

Four-legged intersection. Two approaching lanes in all directions.

2. CONDITIONS:

Single-lane closure in all directions.

3. NOTES:

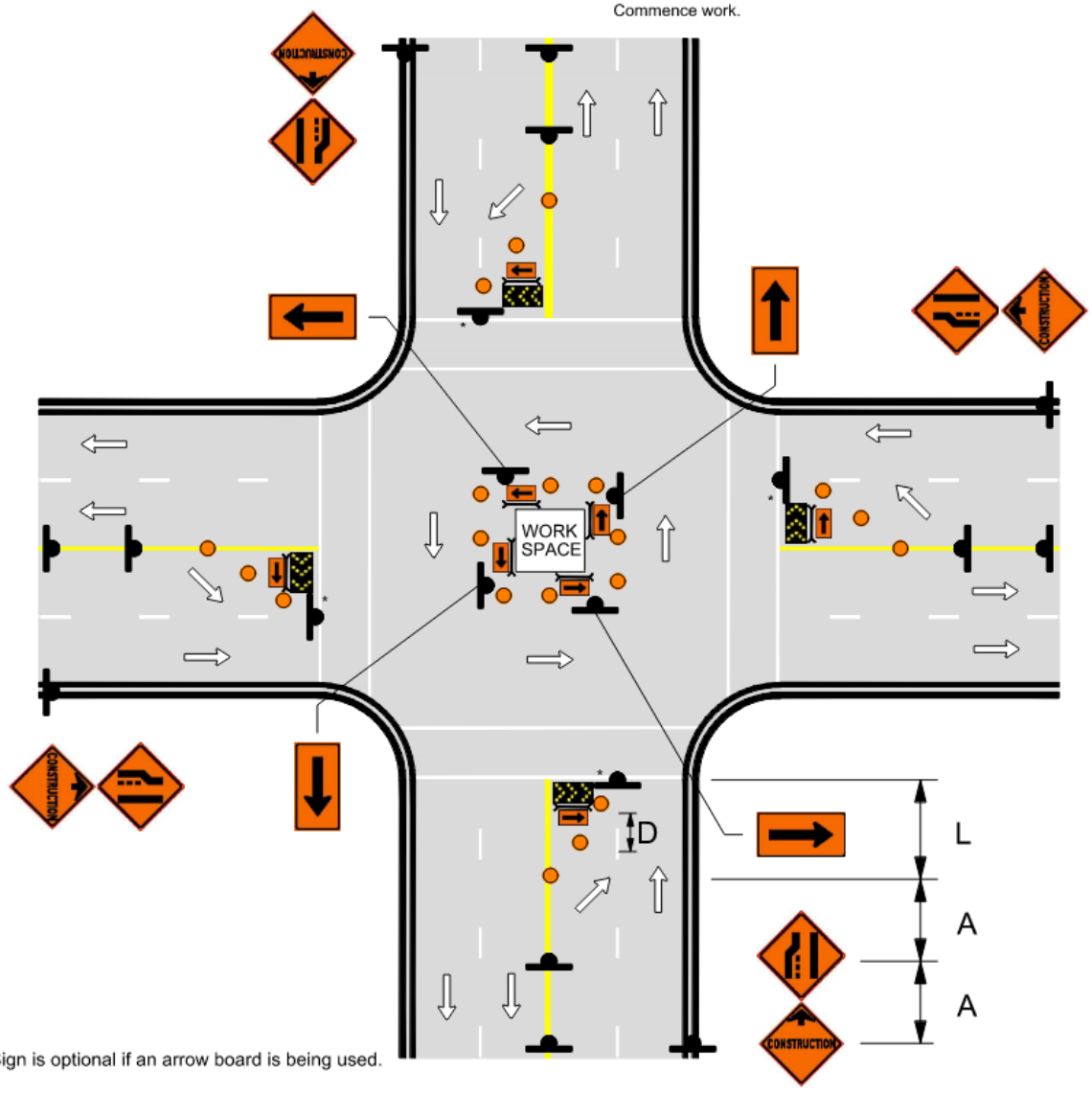
Use traffic control persons to protect workers during set-up.
May require left turn prohibitions. Consult Traffic Section.
Ensure lane closures are in place before reaching intersection.
Arrow board may replace barricade where shown.

4. SET-UP PROCEDURE:

Set up advance warning signs and tapers for each direction. Start from edges of diagram and progress toward the work site as shown.

Outline work site with delineation devices.

Commence work.



* Sign is optional if an arrow board is being used.

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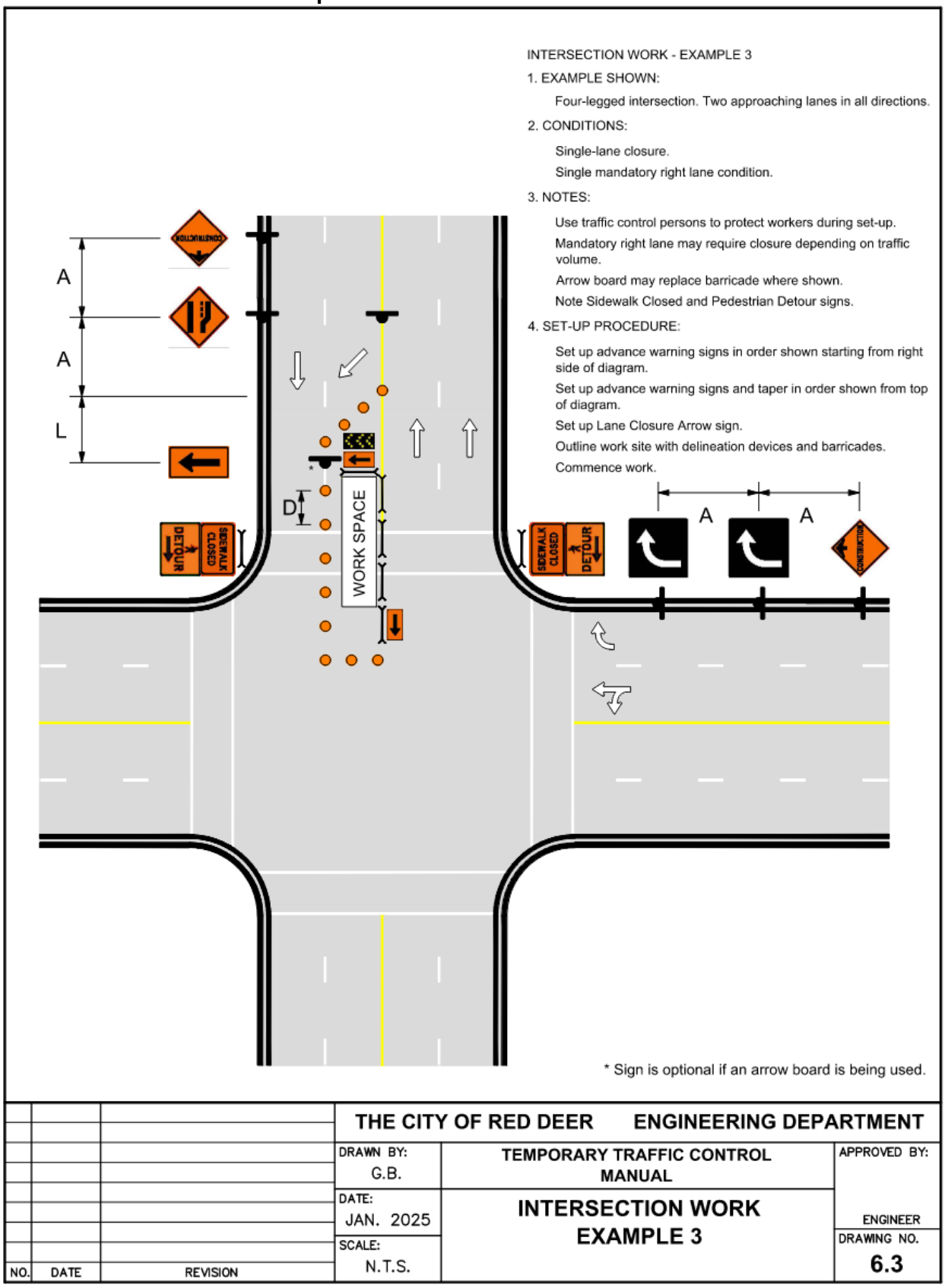
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY:
			DATE: JAN. 2025	INTERSECTION WORK EXAMPLE 2	ENGINEER
			SCALE: N.T.S.		DRAWING NO. 6.2

6.3 Intersection Work – Example 3



6.4 Intersection Work – Example 4

INTERSECTION WORK - EXAMPLE 4

1. EXAMPLE SHOWN:

Four-legged intersection. Two approaching lanes in all directions.

2. CONDITIONS:

Single mandatory left-lane condition.

Single mandatory right-lane condition.

3. NOTES:

Use traffic control persons to protect workers during set-up.

Mandatory left and right lanes may require closure depending on traffic volume.

Note Sidewalk Closed and Pedestrian Detour signs.

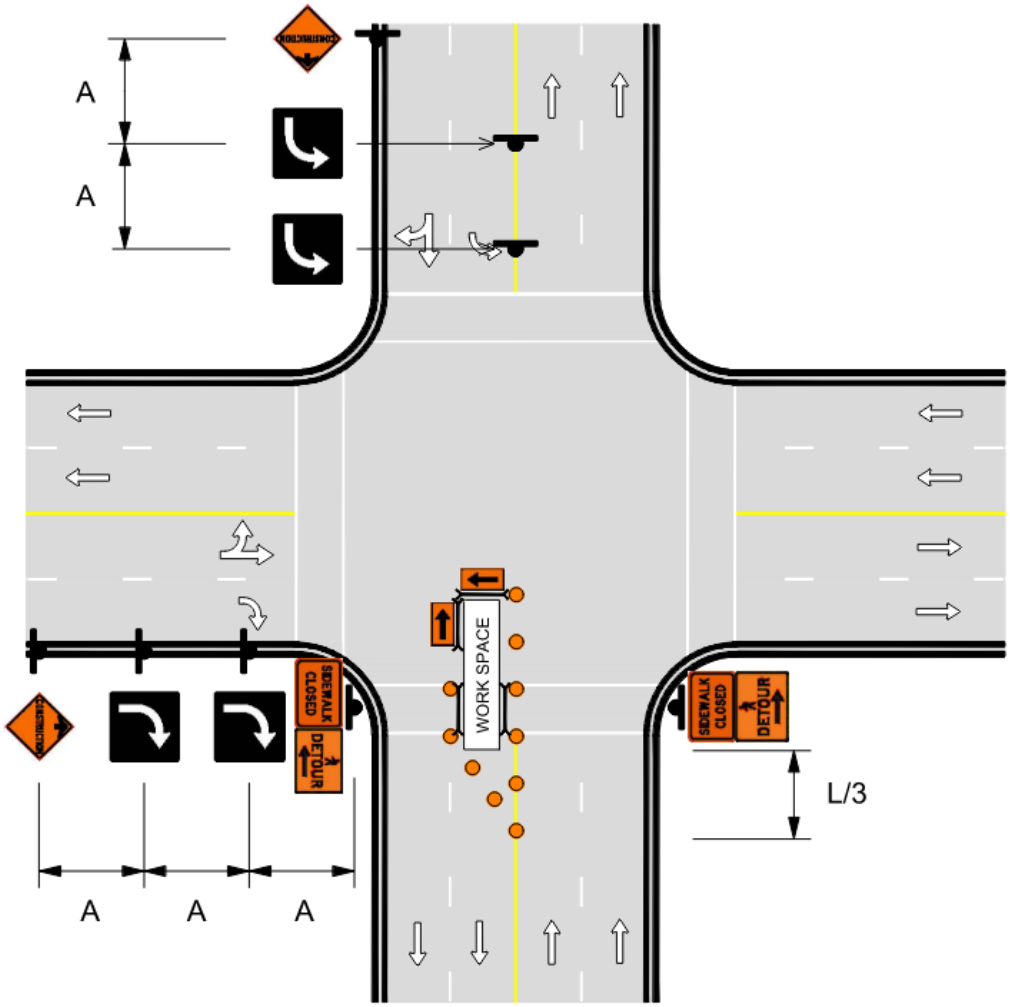
4. SET-UP PROCEDURE:

Set up advance warning sign and mandatory left-lane condition signs in order shown at top of diagram.

Set up advance warning sign and mandatory right-lane condition signs in order shown at left side of diagram.

Outline work site with delineation devices and barricades.

Commence work.



NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	INTERSECTION WORK EXAMPLE 4	DRAWING NO. 6.4
			SCALE: N.T.S.		

6.5 Intersection Work – Example 5

INTERSECTION WORK - EXAMPLE 5

1. EXAMPLE SHOWN:

Four-legged intersection. Two approaching lanes in all directions.

2. CONDITIONS:

Two lanes closed in one direction.

Single-lane closure in opposing direction.

3. NOTES:

Use traffic control persons to protect workers during set-up.

May require left turn prohibition. Mandatory right lane may require closure depending on traffic volume.

Arrow board may replace barricade where shown.

Note Sidewalk Closed and Pedestrian Detour signs.

4. SET-UP PROCEDURE:

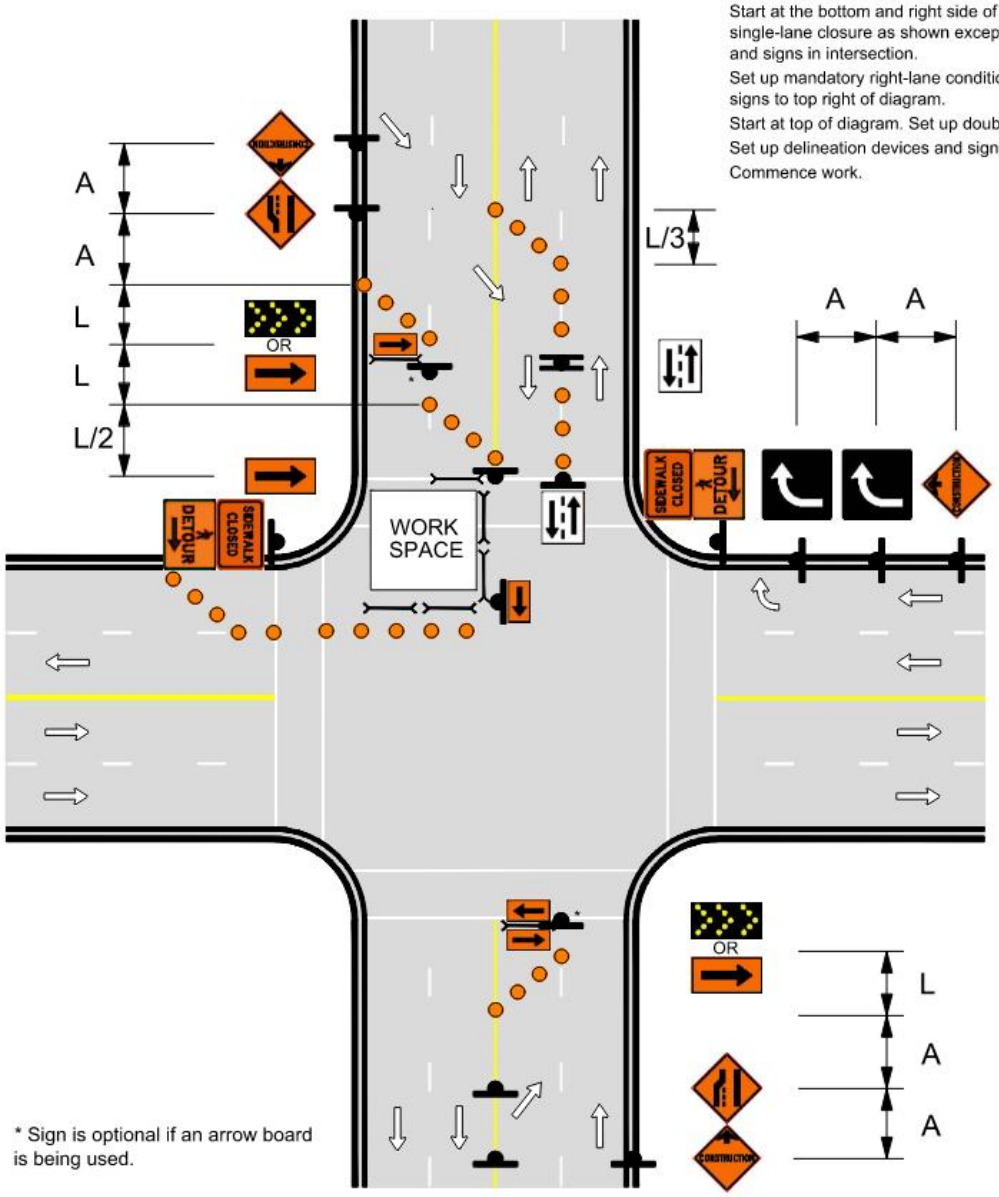
Start at the bottom and right side of the diagram. Set up single-lane closure as shown except for delineation devices and signs in intersection.

Set up mandatory right-lane condition and Two-Way Traffic signs to top right of diagram.

Start at top of diagram. Set up double-lane closure as shown.

Set up delineation devices and signs in intersection.

Commence work.



* Sign is optional if an arrow board is being used.

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			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	INTERSECTION WORK EXAMPLE 5	DRAWING NO. 6.5
			SCALE: N.T.S.		

6.6 Intersection Work – Example 6

INTERSECTION WORK - EXAMPLE 6

1. EXAMPLE SHOWN:

Four-legged intersection. Two approaching lanes in all directions.

2. CONDITIONS:

Two-lanes closed in one direction.

Single-lane closed in two directions.

3. NOTES:

Use traffic control persons to protect workers during set-up.

Arrow board may be used where shown.

Mandatory right lane may require closure depending on traffic volume.

Note Sidewalk Closed and Pedestrian Detour signs.

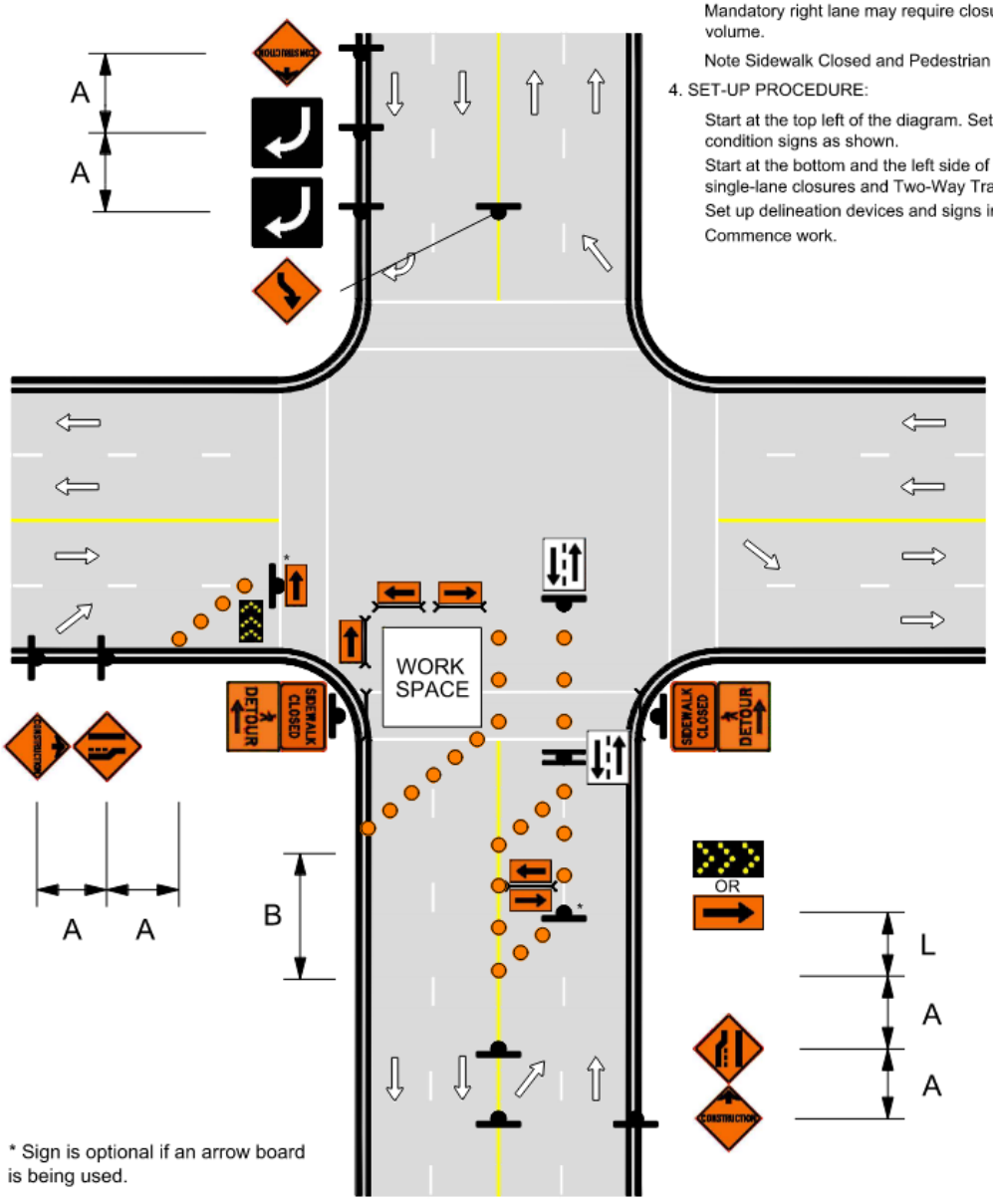
4. SET-UP PROCEDURE:

Start at the top left of the diagram. Set up mandatory right lane condition signs as shown.

Start at the bottom and the left side of the diagram. Set up single-lane closures and Two-Way Traffic signs as shown.

Set up delineation devices and signs in intersection.

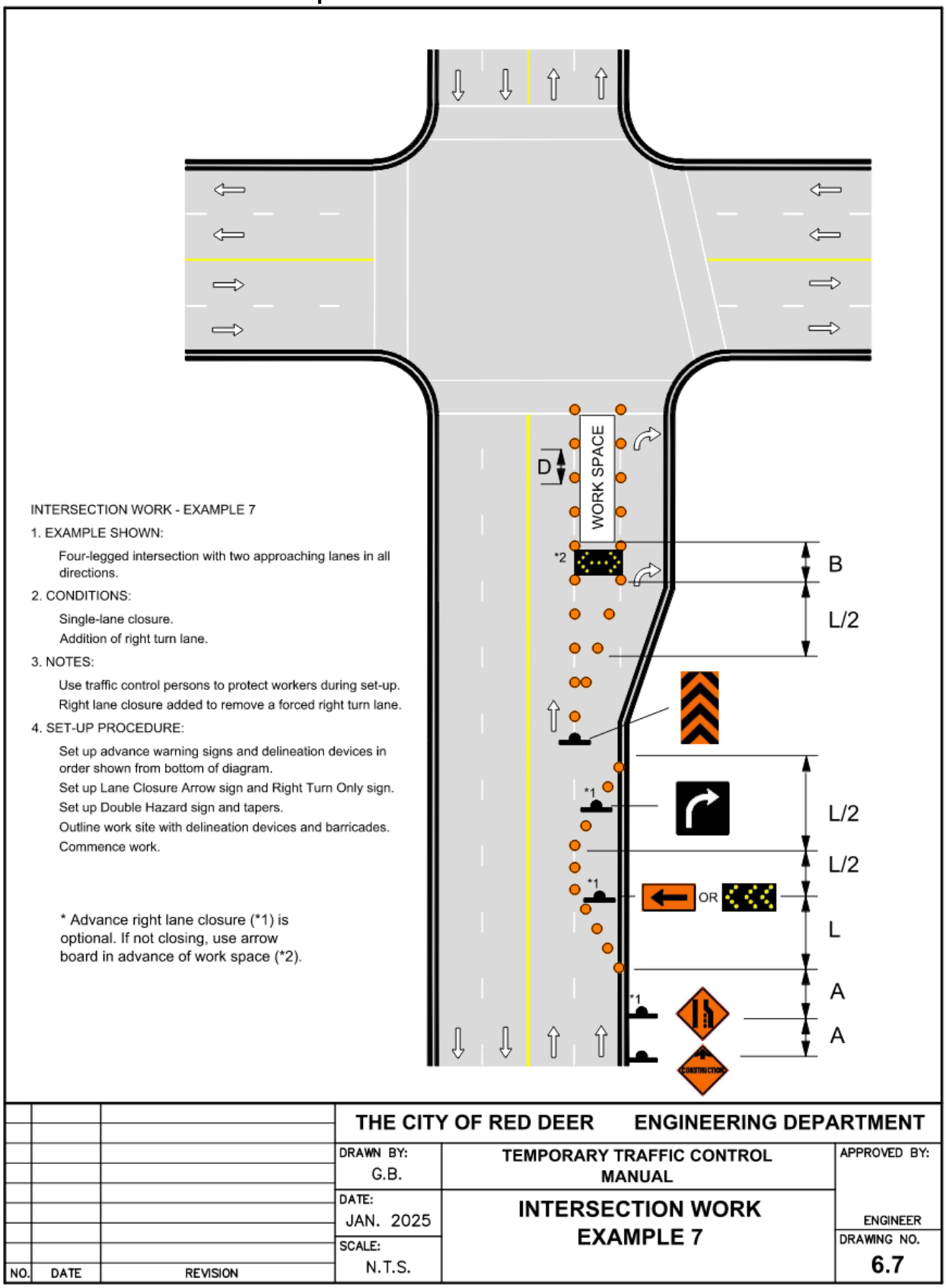
Commence work.



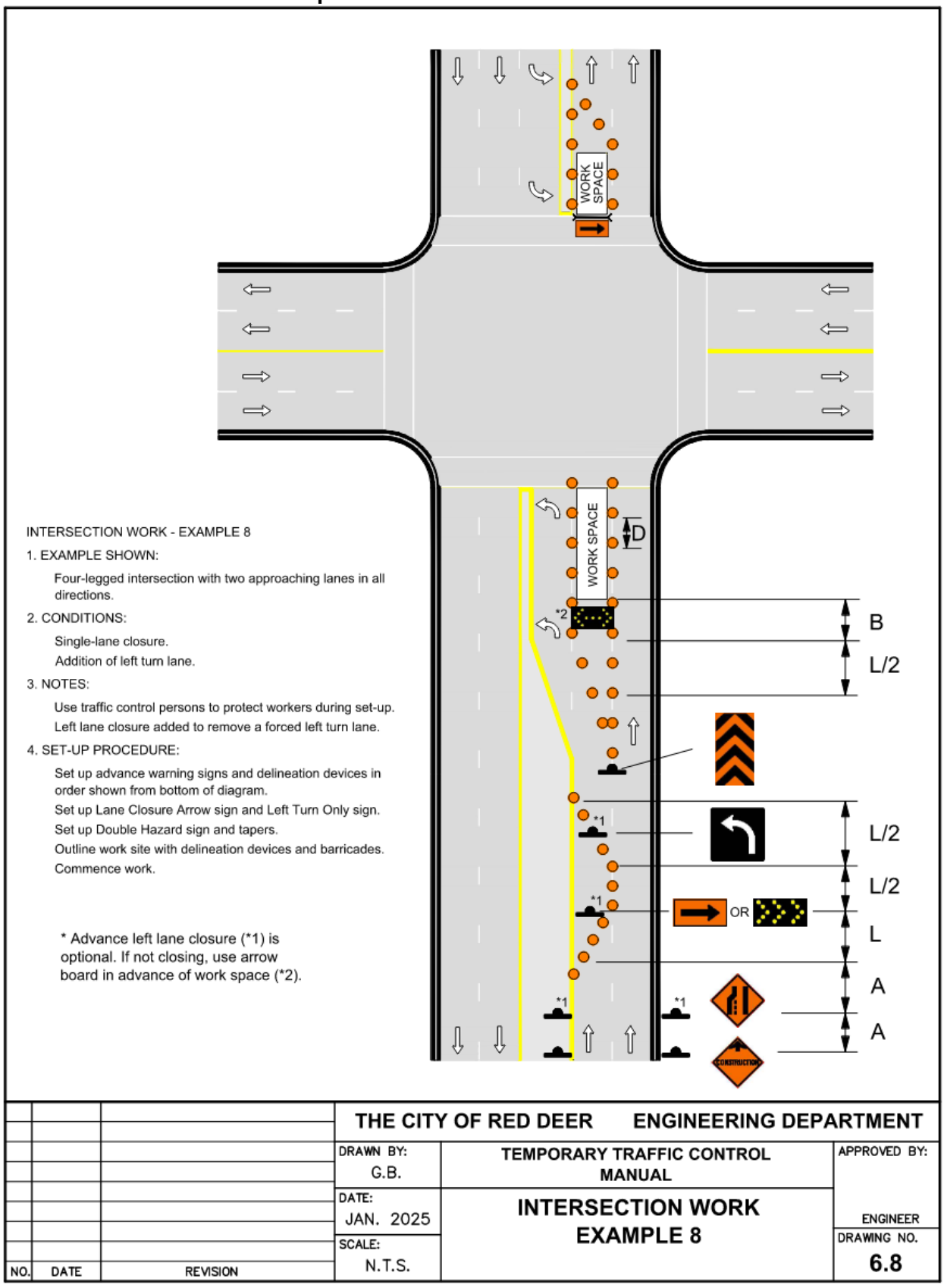
* Sign is optional if an arrow board is being used.

NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	INTERSECTION WORK EXAMPLE 6	DRAWING NO. 6.6
			SCALE: N.T.S.		

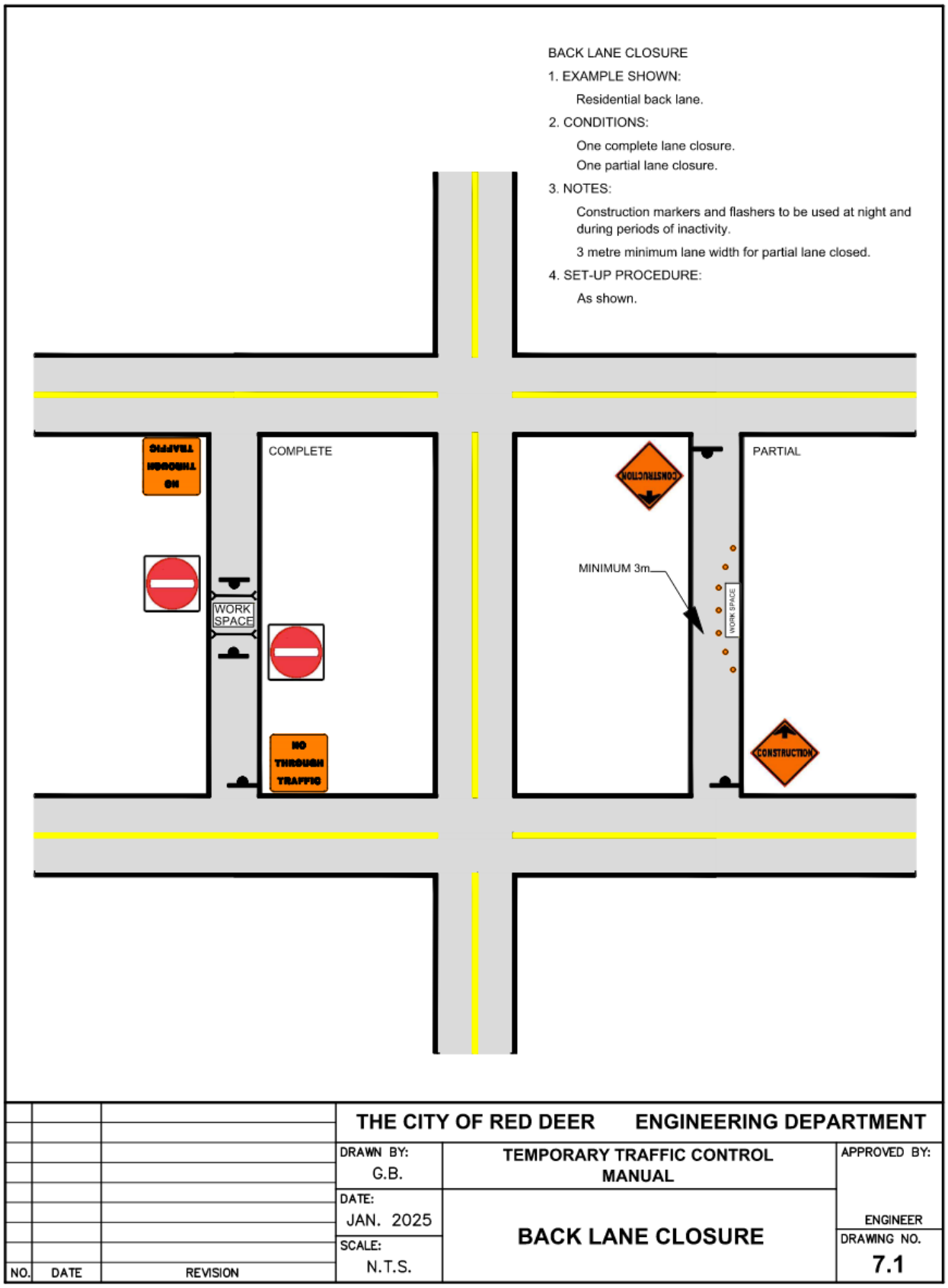
6.7 Intersection Work – Example 7



6.8 Intersection Work – Example 8



7.1 Back Lane Closure



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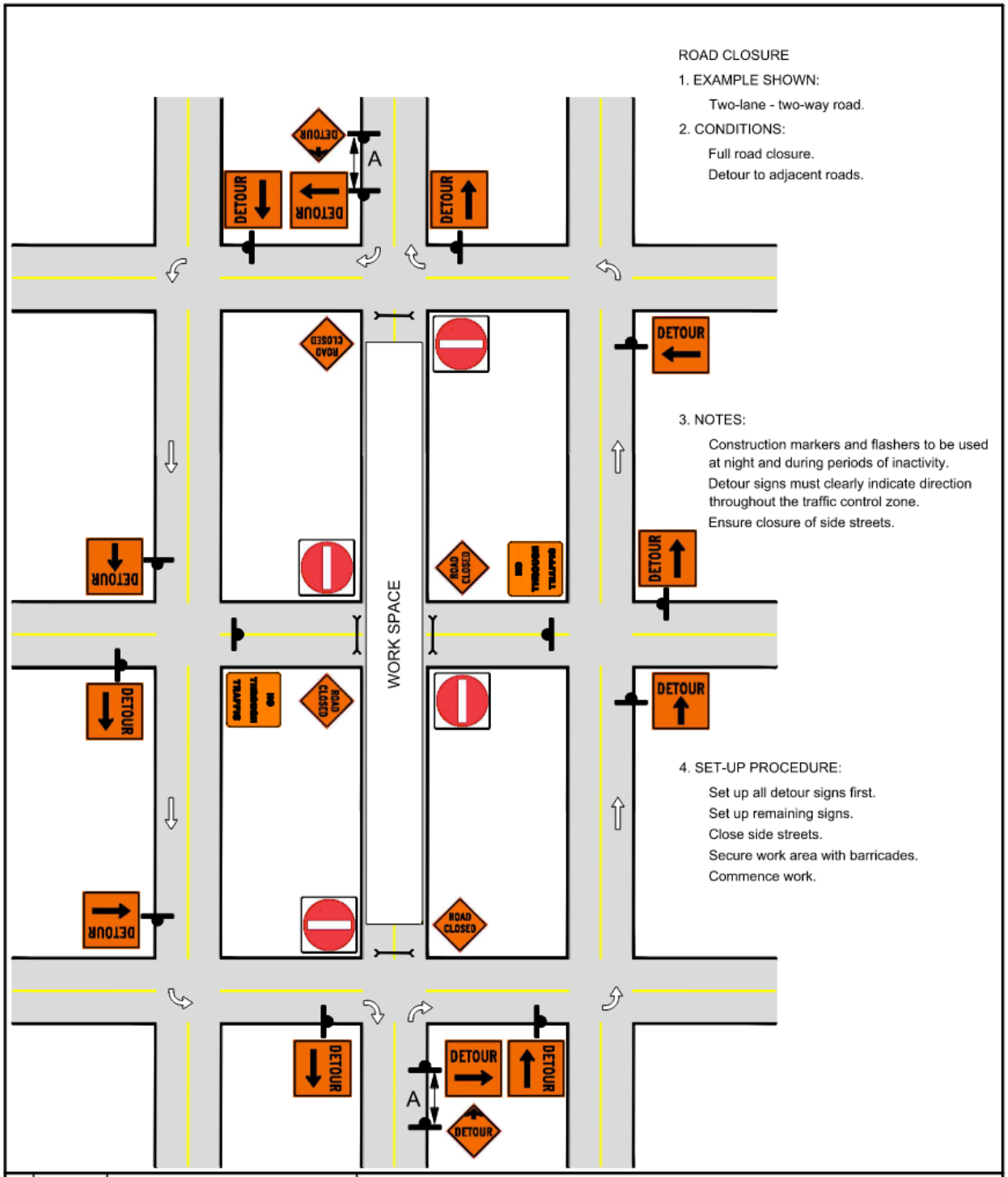
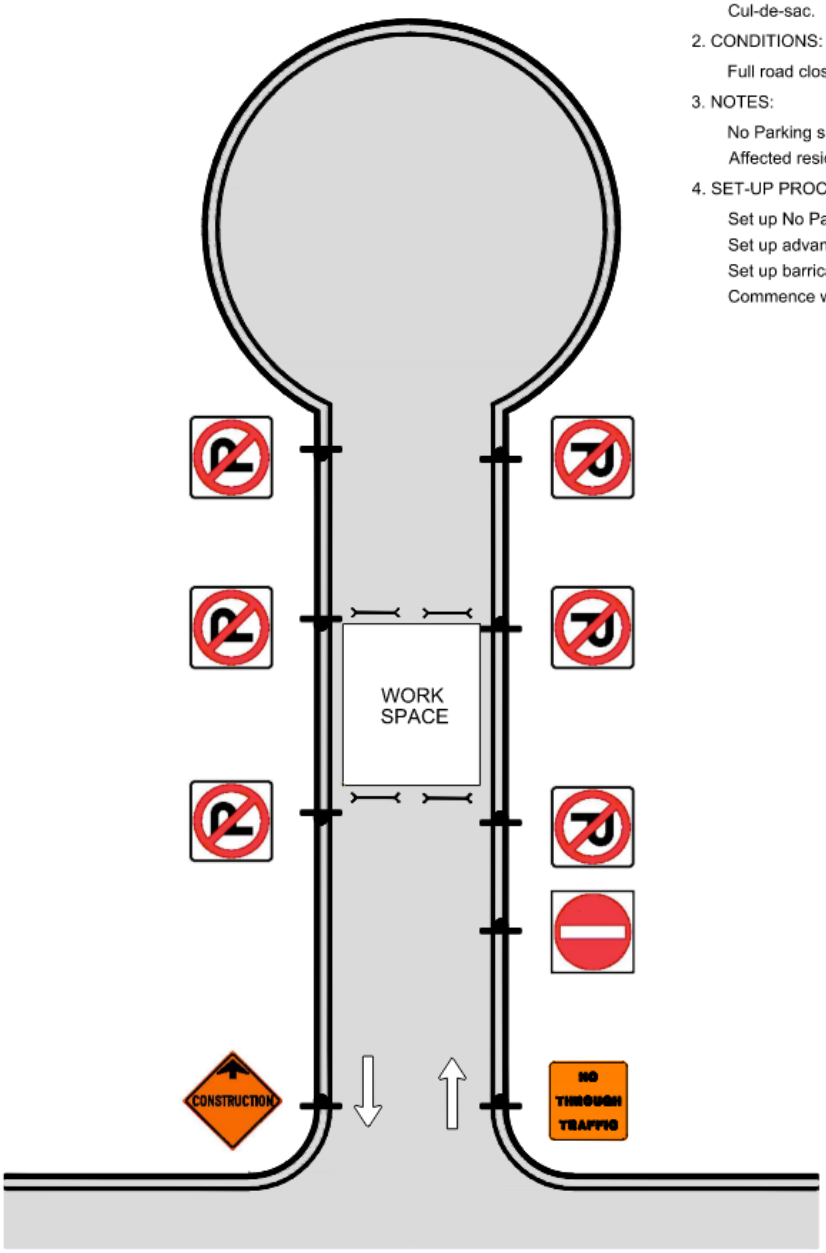
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	BACK LANE CLOSURE	DRAWING NO. 7.1
			SCALE: N.T.S.		

7.2 Road Closure



			THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY:
			DATE: JAN. 2025	ROAD CLOSURE	ENGINEER
			SCALE: N.T.S.		DRAWING NO. 7.2
NO.	DATE	REVISION			

7.3 Cul-De-Sac Closure



CUL-DE-SAC CLOSURE

1. EXAMPLE SHOWN:
   Cul-de-sac.
2. CONDITIONS:
   Full road closure.
3. NOTES:
   No Parking signs may be required.
   Affected residents must be notified in advance.
4. SET-UP PROCEDURE:
   Set up No Parking Zone in advance.
   Set up advance warning and No Through Traffic signs.
   Set up barricades.
   Commence work.

NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	CUL-DE-SAC CLOSURE	DRAWING NO. 7.3
			SCALE: N.T.S.		

8.1 Sidewalk Closure – Midblock (Active Site)

SIDEWALK CLOSURE - MIDBLOCK (ACTIVE SITE)

1. EXAMPLE SHOWN:

   Pedestrian detour.

2. CONDITIONS:

   Pedestrians must be physically separated from vehicular traffic and the work site.

3. NOTES:

   Note barricades to physically separate pedestrians from the work site.

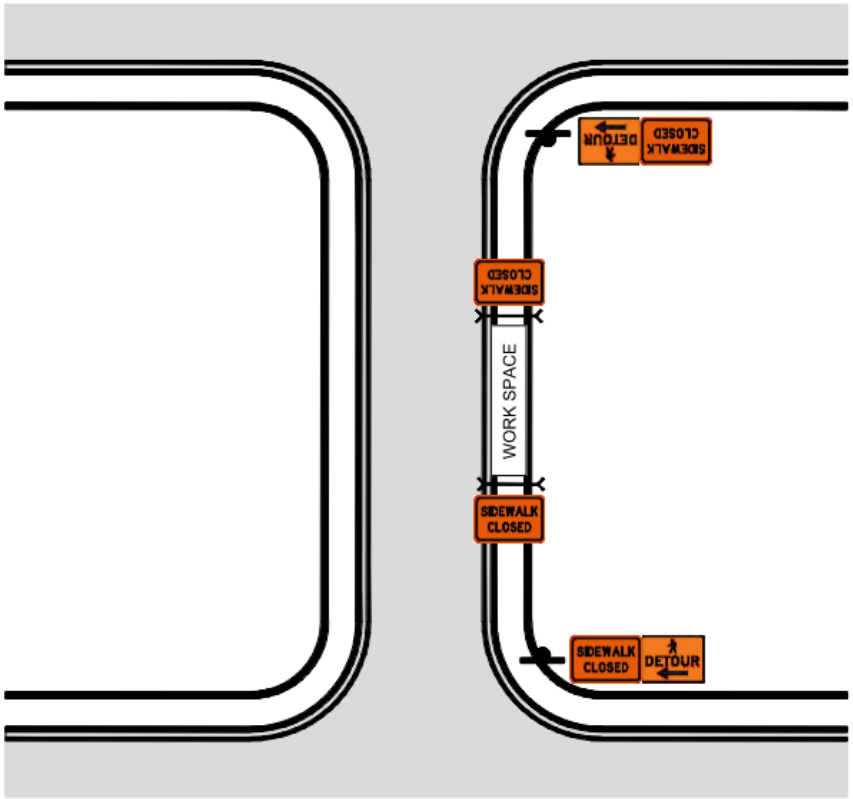
   Sidewalk Closed and Pedestrian Detour signs direct pedestrians to alternative sidewalk.

   Ensure the alternative sidewalk is open to pedestrians for the duration of the sidewalk closure.

4. SET-UP PROCEDURE:

   Set up Sidewalk Closed and Pedestrian Detour signs and barricade work site.

   Commence work.



NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SIDEWALK CLOSURE - MIDBLOCK (ACTIVE SITE)	DRAWING NO. 8.1
			SCALE: N.T.S.		

8.2 Sidewalk Closure – Midblock (Idle Site)

SIDEWALK CLOSURE - MIDBLOCK (IDLE SITE)

1. EXAMPLE SHOWN:

   Pedestrian detour on roadway.

2. CONDITIONS:

   Pedestrians must be physically separated from vehicular traffic and the work site.

3. NOTES:

   Note barricades to physically separate pedestrians from the work site.

   Curb ramps from the sidewalk to the roadway are required for wheelchair access.

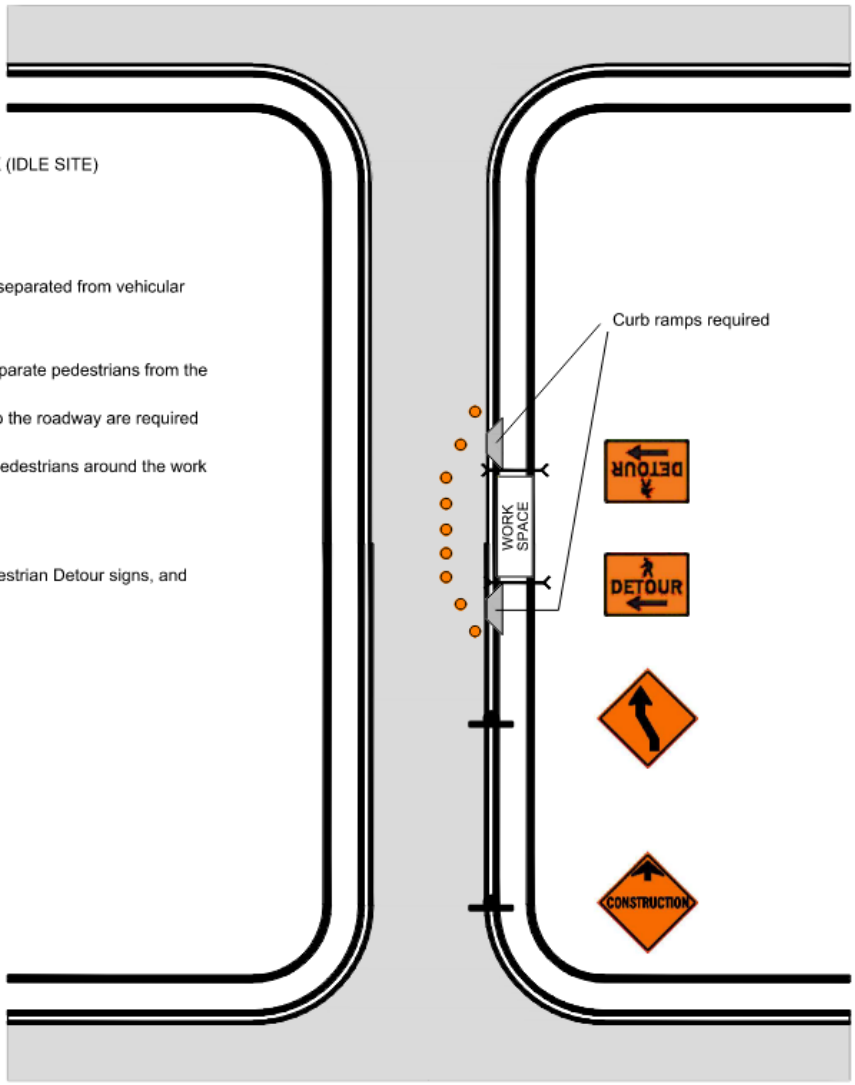
   Pedestrian Detour signs guide pedestrians around the work site.

4. SET-UP PROCEDURE:

   Set up advance warning signs.

   Set up delineation devices, Pedestrian Detour signs, and barricade work site.

   Commence work.



NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SIDEWALK CLOSURE - MIDBLOCK (IDLE SITE)	DRAWING NO. 8.2
			SCALE: N.T.S.		

8.3 Sidewalk Closure – Intersection Corner (Active Site)

SIDEWALK WORK - INTERSECTION CORNER (ACTIVE SITE)

1. EXAMPLE SHOWN:

   Four-legged intersection with sidewalks. Two approaching lanes in all directions.

2. CONDITIONS:

   Pedestrians must be physically separated from the work site.

3. NOTES:

   Note barricades to physically separate pedestrians from the work site.

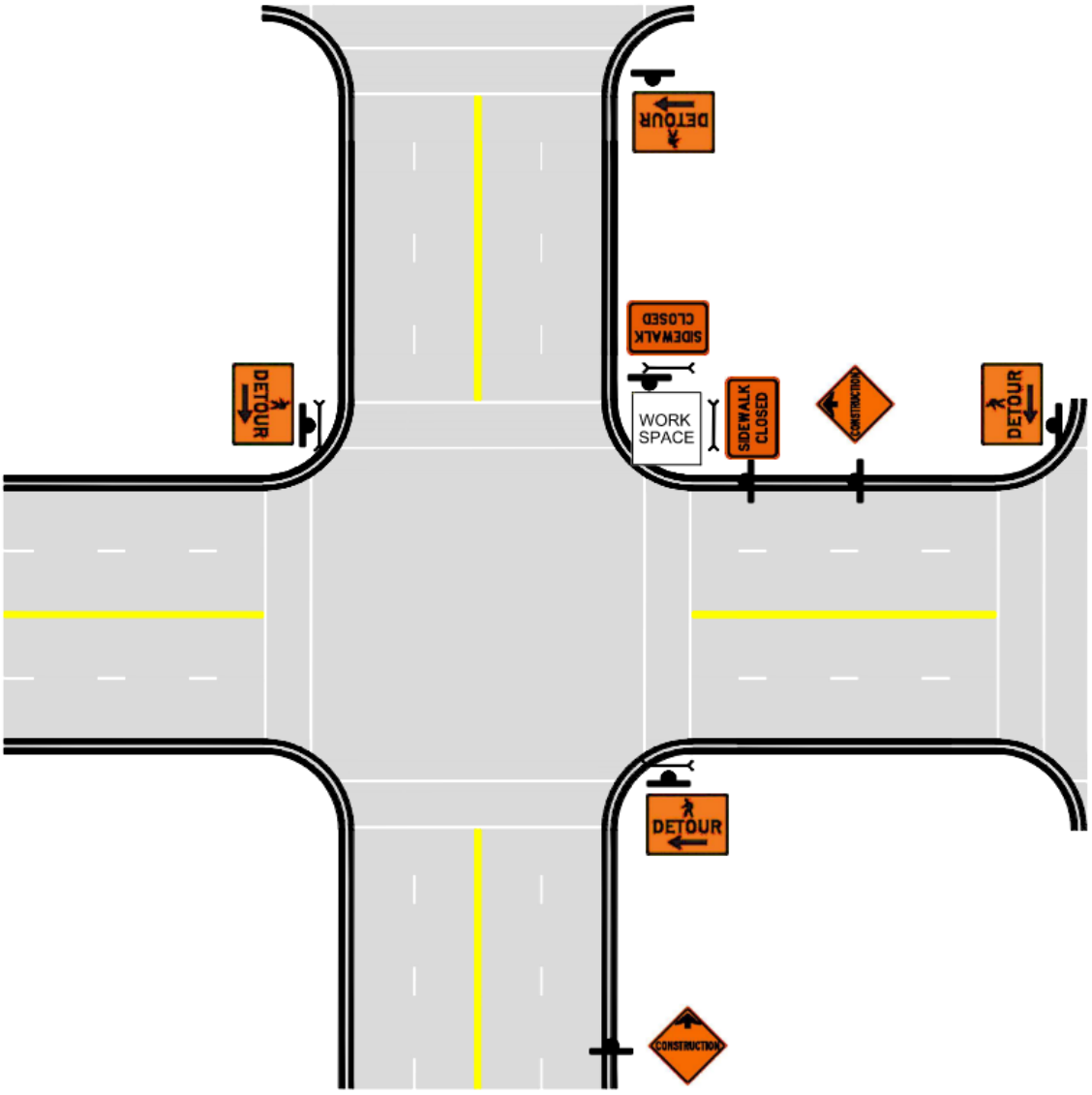
   Pedestrian Detour signs direct pedestrians to alternative sidewalk.

   Ensure the alternative sidewalks are open to pedestrians for the duration of the sidewalk closure.

4. SET-UP PROCEDURE:

   Set up Pedestrian Detour signs, advance warning signs, Sidewalk Closed signs and barricade work site.

   Commence work.



NO.	DATE	REVISION	THE CITY OF RED DEER ENGINEERING DEPARTMENT		
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SIDEWALK CLOSURE - INTERSECTION CORNER (ACTIVE SITE)	DRAWING NO. 8.3
			SCALE: N.T.S.		

8.4 Sidewalk Closure – Intersection Corner (Idle Site)

SIDEWALK WORK - INTERSECTION CORNER (IDLE SITE)

1. EXAMPLE SHOWN:

Four-legged intersection with sidewalks. Two approaching lanes in all directions.

2. CONDITIONS:

Pedestrians must be physically separated from vehicular traffic and the work site.

3. NOTES:

Note barricades to physically separate pedestrians from the work site.

Pedestrian Detour signs guide pedestrians around the work site.

Delineation devices may be replaced with fencing or other barriers for added safety if needed.

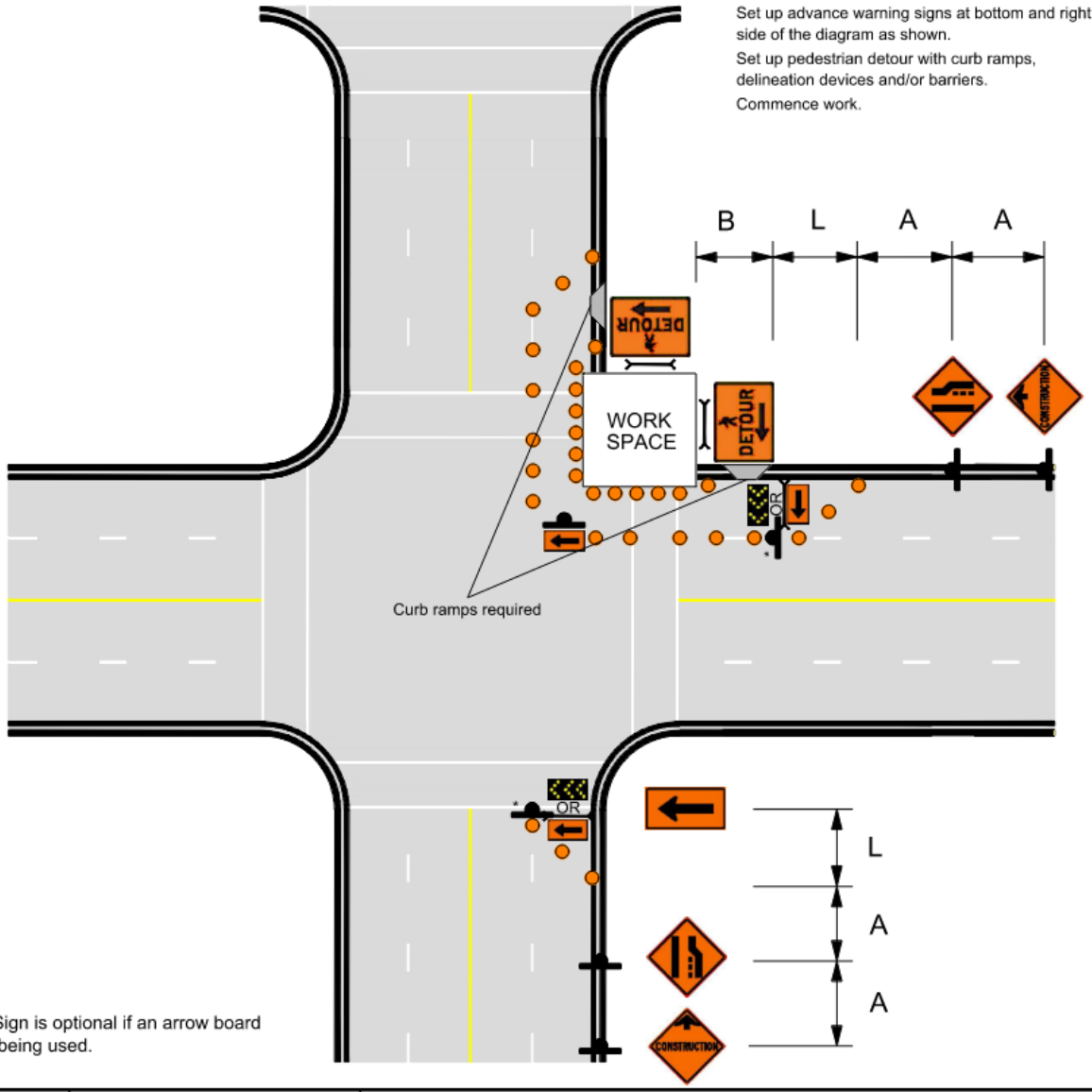
Curb ramps from the sidewalk to the roadway are required for wheelchair access.

4. SET-UP PROCEDURE:

Set up advance warning signs at bottom and right side of the diagram as shown.

Set up pedestrian detour with curb ramps, delineation devices and/or barriers.

Commence work.



* Sign is optional if an arrow board is being used.

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			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	SIDEWALK WORK - INTERSECTION CORNER (IDLE SITE)	DRAWING NO. 8.4
			SCALE: N.T.S.		

8.5 Sidewalk Work – Right Lane Closure

SIDEWALK WORK - RIGHT LANE CLOSURE

1. EXAMPLE SHOWN:

   Four-lane - two-way road with sidewalk.

2. CONDITIONS:

   Pedestrians must be physically separated from vehicular traffic and the work site.

   Pedestrian Detour guides pedestrians into the right lane, closing the right lane to traffic.

   Concrete barriers are required to separate pedestrians and vehicles for long-term closures.

3. NOTES:

   Note barricades to physically separate pedestrians from the work site.

   Delineation devices may be replaced with fencing or other barriers for added safety if needed.

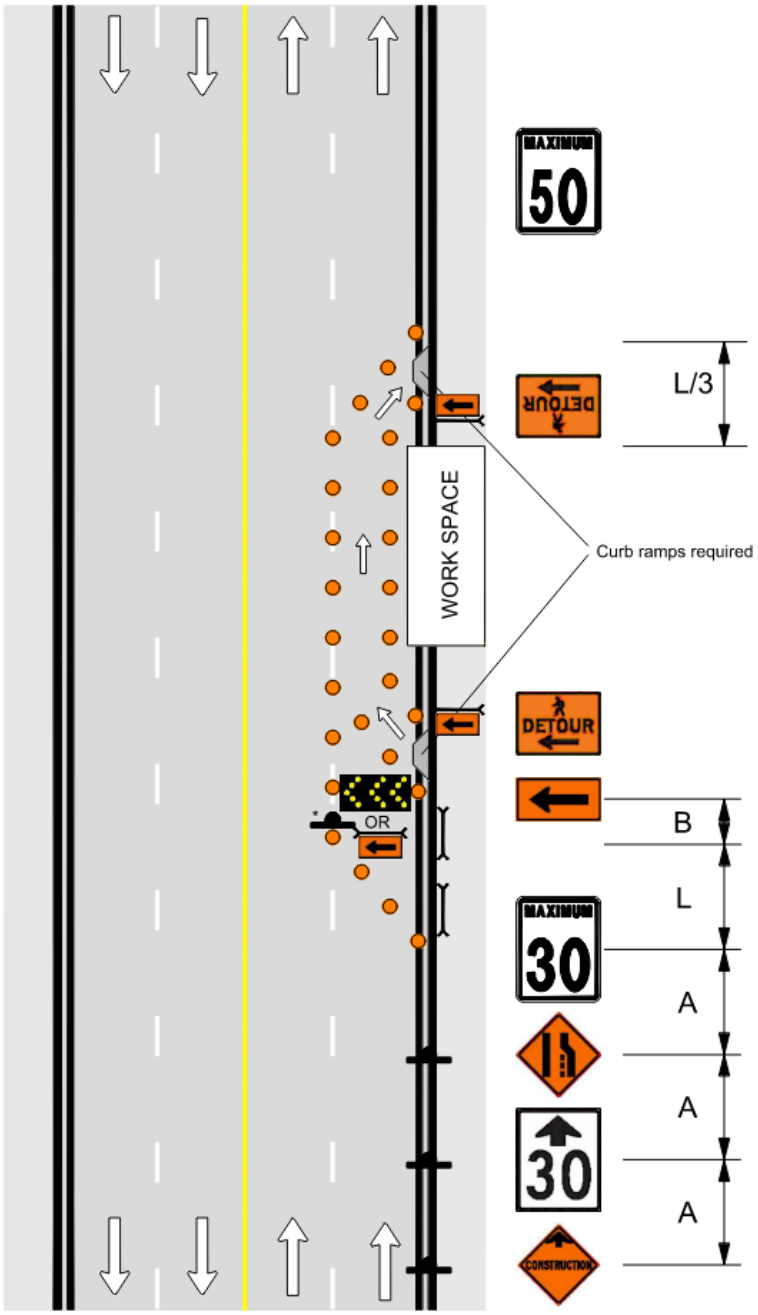
   Curb ramps from the sidewalk to the roadway are required for wheelchair access.

4. SET-UP PROCEDURE:

   Start at the bottom of diagram. Set up advance warning signs as shown.

   Set up taper and pedestrian detour with curb ramps, delineation devices and/or barriers.

   Commence work.



* Sign is optional if an arrow board is being used.

NO.	DATE	REVISION

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DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
DATE: JAN. 2025	SIDEWALK WORK RIGHT LANE CLOSURE	DRAWING NO. 8.5
SCALE: N.T.S.		

8.6 Sidewalk Work – Partial Sidewalk Closure

SIDEWALK WORK - PARTIAL SIDEWALK CLOSURE

1. EXAMPLE SHOWN:

   Four-lane - two-way road with sidewalk.

2. CONDITIONS:

   Pedestrians must be physically separated from vehicular traffic and the work site.

   Partial sidewalk closure reduces sidewalk width but allows pedestrian access.

3. NOTES:

   Note barricades to physically separate pedestrians from the work site.

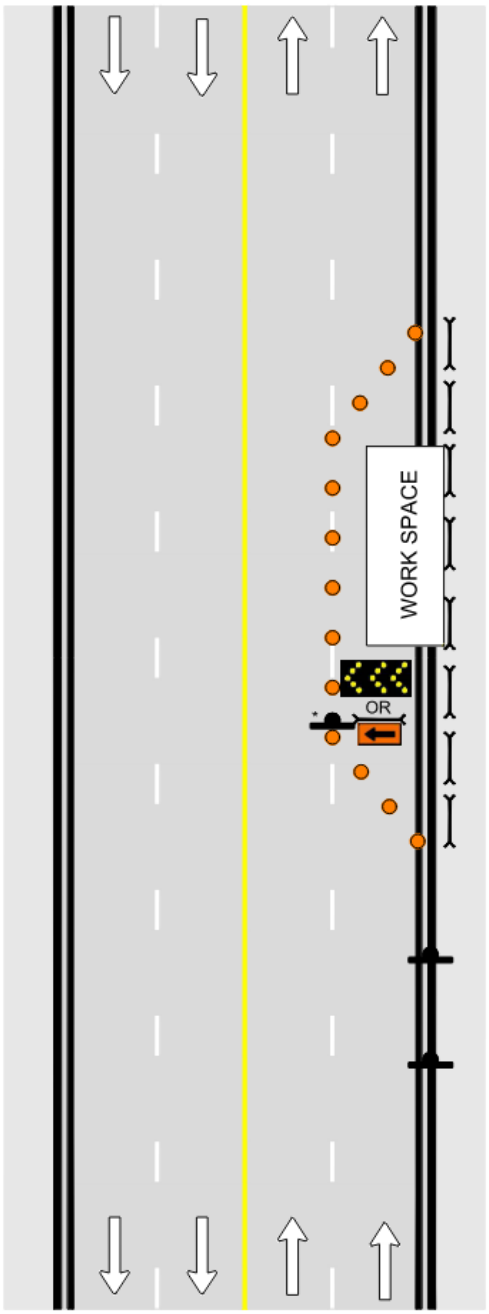
   Minimum remaining sidewalk width must be 1.5 metres.

4. SET-UP PROCEDURE:

   Start at the bottom of diagram. Set up advance warning signs as shown.

   Set up taper and outline work site with delineation devices/barriers.

   Commence work.



* Sign is optional if an arrow board is being used.

NO.	DATE	REVISION

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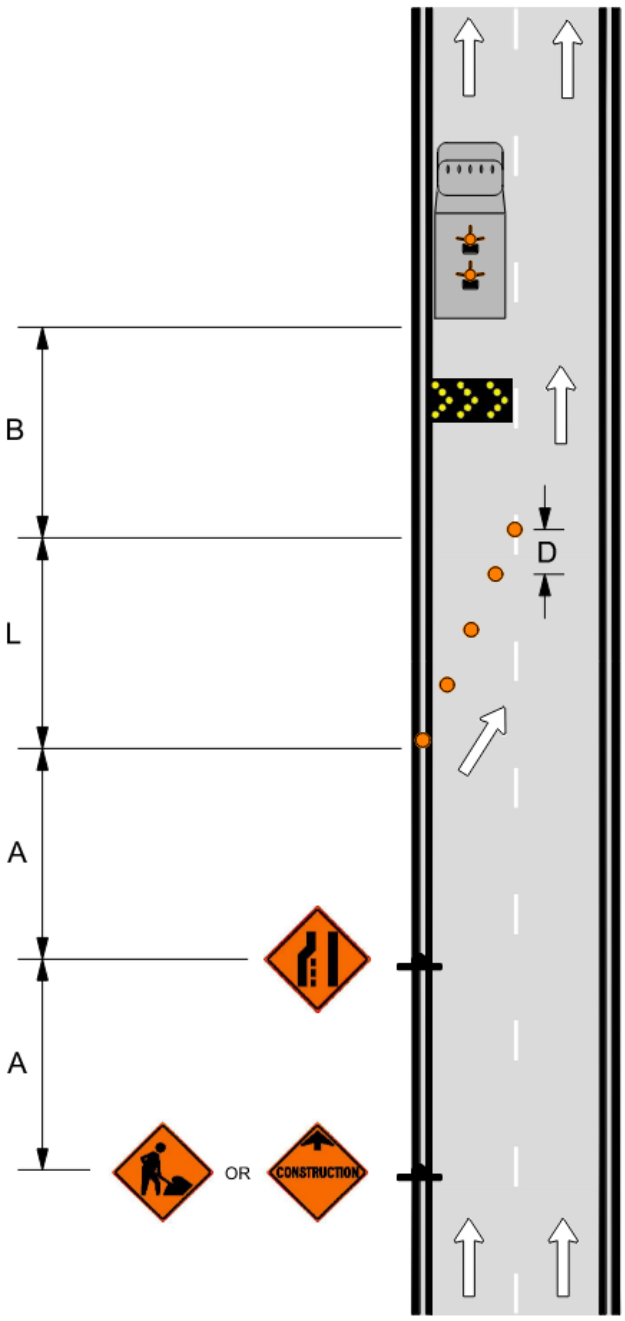
DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
DATE: JAN. 2025	SIDEWALK WORK - PARTIAL SIDEWALK CLOSURE	DRAWING NO. 8.6
SCALE: N.T.S.		

9.1 Moving Jobs



MOVING JOBS

1. EXAMPLE SHOWN:

   Two-lane - one-way road.

2. CONDITIONS:

   Moving jobs are performed at low speeds and may require brief stops lasting only a few minutes.

3. NOTES:

   Delineation devices are not required if the operation does not involve stopping.

   Signs may be omitted for mobile or short-duration work lasting less than 30 minutes, except on roads with speed limits of 70 km/h or more.

   Note use of arrow board.

4. SET-UP PROCEDURE:

   Set up signage and devices as required.

   Commence work.

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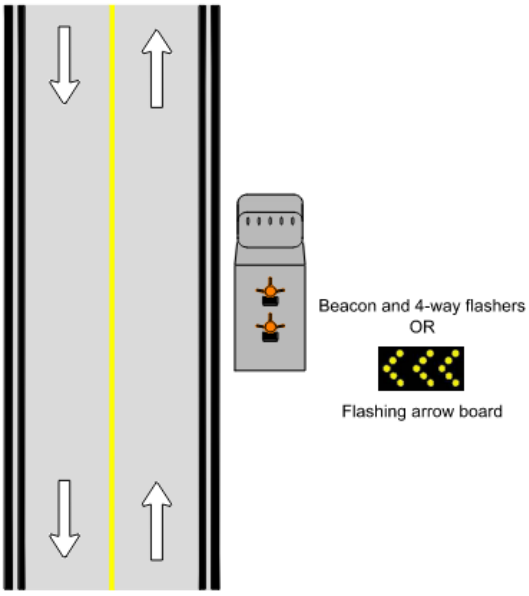
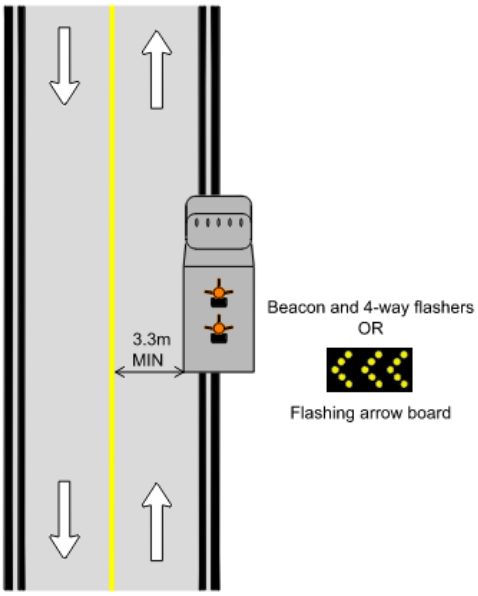
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MOVING JOBS	DRAWING NO. 9.1
			SCALE: N.T.S.		

9.2 Mobile Operations – Roadside Work and Shoulder Work





MOBILE OPERATIONS - ROADSIDE WORK AND SHOULDER WORK

1. EXAMPLE SHOWN:

   Two-lane, two-way road.

   Applicable to multi-lane roads.

2. CONDITIONS:

   Work duration: 30 minutes or less. For longer duration work, refer to Drawing No.'s 2.1 - 2.4.

3. NOTES:

   Beacon and 4-way flashers or flashing arrow board must be activated to alert traffic of work ahead.

4. SET-UP PROCEDURE:

   Activate beacon and 4-way flashers or flashing arrow board to alert traffic of work ahead.

   Commence work.

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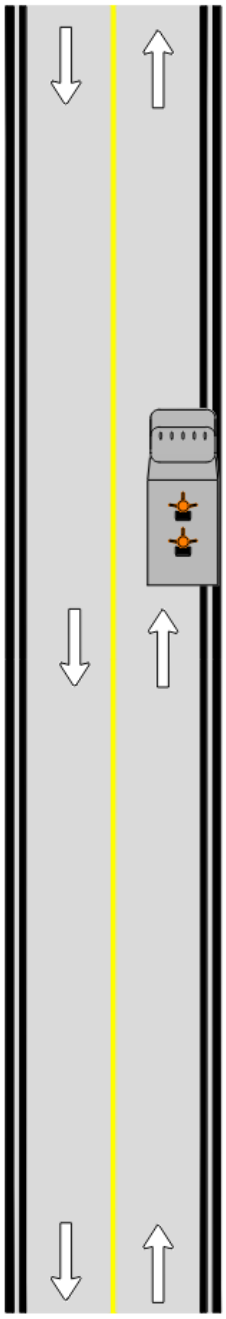
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MOBILE OPERATIONS - ROADSIDE WORK AND SHOULDER WORK	DRAWING NO. 9.2
			SCALE: N.T.S.		

9.3 Mobile Operations on Residential



Beacon and 4-way flashers
OR

Flashing arrow board

MOBILE OPERATIONS ON RESIDENTIAL

1. EXAMPLE SHOWN:

   Residential road.

2. CONDITIONS:

   Work duration: 30 minutes or less.

   Must allow 3.3 metres of space for vehicles to pass.

3. NOTES:

   Beacon and 4-way flashers or flashing arrow board must be activated to alert traffic of work ahead.

4. SET-UP PROCEDURE:

   Activate beacon and 4-way flashers or flashing arrow board to alert traffic of work ahead.

   Commence work.

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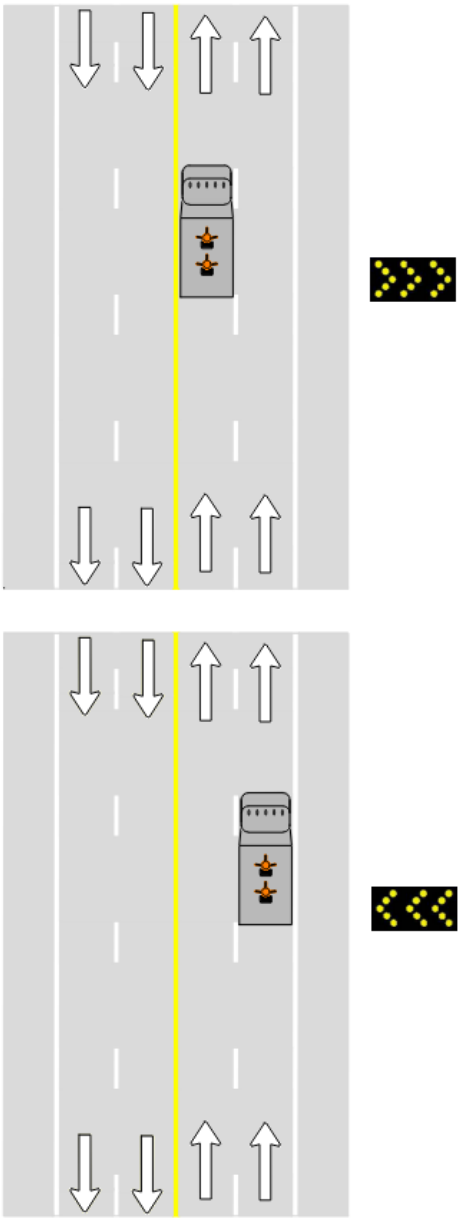
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MOBILE OPERATIONS ON RESIDENTIAL	DRAWING NO. 9.3
			SCALE: N.T.S.		

9.4 Mobile Operations on Collector or Arterial V ≤ 60 km/h



MOBILE OPERATIONS ON COLLECTOR OR ARTERIAL

V ≤ 60 KM/H

1. EXAMPLE SHOWN:

   Two-way - four lane collector or arterial road.

2. CONDITIONS:

   Work duration: 30 minutes or less. For longer duration work, use single lane closure example (Drawing No. 3.2 or 3.3).

   Speed limit: 60 km/h or lower.

3. NOTES:

   Flashing arrow board must be activated to alert traffic of work ahead.

4. SET-UP PROCEDURE:

   Activate flashing arrow board to alert traffic of work ahead.

   Commence work.

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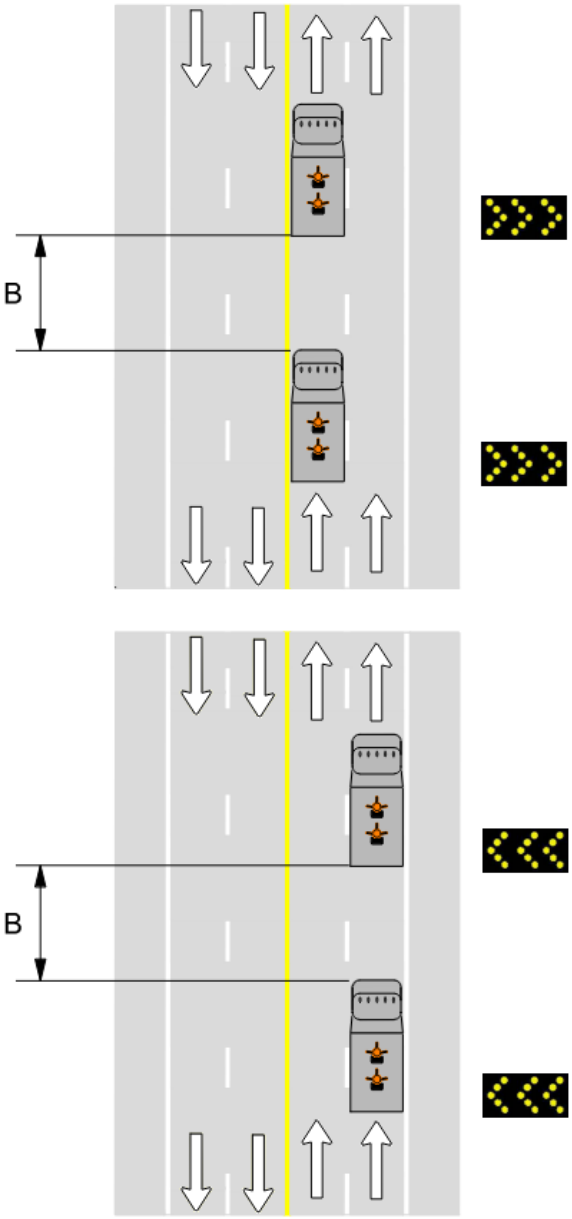
			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MOBILE OPERATIONS ON COLLECTOR OR ARTERIAL V ≤ 60 KM/H	DRAWING NO. 9.4
			SCALE: N.T.S.		

9.5 Mobile Operations on Arterial V ≥ 70 km/h



MOBILE OPERATIONS ON ARTERIAL

V ≥ 70 KM/H

1. EXAMPLE SHOWN:

   Two-way four-lane arterial road.

2. CONDITIONS:

   Work duration: 30 minutes or less. For longer duration work, use single lane closure example (Drawing. No. 3.2 or 3.3).

   Speed limit: 70 km/h or higher.

3. NOTES:

   Buffer vehicle with arrow board required for 70 km/h or higher roads.

   Flashing arrow boards must be activated to alert traffic of work ahead.

4. SET-UP PROCEDURE:

   Activate flashing arrow boards to alert traffic of work ahead.

   Commence work.

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			DRAWN BY: G.B.	TEMPORARY TRAFFIC CONTROL MANUAL	APPROVED BY: ENGINEER
			DATE: JAN. 2025	MOBILE OPERATIONS ON ARTERIAL V ≥ 70 KM/H	DRAWING NO. 9.5
			SCALE: N.T.S.		

References

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The City of Red Deer. (2004). *Public works temporary traffic control manual*.

The City of Red Deer. (2010). *Public works temporary traffic control manual* (Version 2).

Transportation Association of Canada. (2021). *Manual of uniform traffic control devices for Canada* (6th ed.).