

## A4.5 DIRECTIONAL GUIDE SIGNS

### A4.5.1 Destinations, Directions, Routes and Distances

Directional guide signage is comprised of four components, the:

- Destination
- Direction
- Route
- Distance.

The combination of signs at each decision point on the roadway, be it an interchange or an intersection, must convey these four pieces of information in a consistent manner. New destination information should not be introduced nor should it be dropped out of sequence. Supplemental guide signing, such as service signs, should be used sparingly. Decision points on the roadway should be introduced far enough in advance that the driver has ample time to react.

#### The Destination

Destination signs are typically erected in advance of a major decision point such as an interchange or intersection. Since the primary purpose of guide signing is to provide direction to specific destinations to motorists unfamiliar with the area, the hierarchy of destinations is an important factor. It is not possible to indicate all destinations on all intersecting routes, so to provide the optimum guidance to the motorist, a hierarchy of traffic generators has been established throughout the province. This has regard to the nature of the traffic on each particular section of highway. Community size, geographical location and relationship to the highway network were considered in establishing the hierarchy. The elements of this hierarchy in order of rank are as follows:

1. **Destinations** - these are the major traffic generators, terminal points or nodes along a particular route. They are typically centres which are of importance or interest to the majority of motorists and usually are separated by a considerable distance.
2. **Key Points** - these are the traffic generators which rank next in importance and are intermediate to the destinations on the highway system. They are of importance or interest to a large proportion of the motorists.
3. **Next Communities** - these are communities or centres that are incorporated or have a population in excess of 100 and are located along or near the highway. These centres are generally of importance to a smaller proportion of the motorists.
4. **Other Places** - these are communities with a population of less than 100, lakes, camps, certain industrial sites, and other small places that generate trips. These places are generally of local interest and important to a small proportion of motorists.

The provincial practice for guide signing on rural highways has been established in relation to the various functions of the provincial highways (i.e. one and two digit highways serve inter-provincial and inter-regional demands and three digit highways serve local travel demands).

Typically, on higher classes of highways (one and two digit highways), Destinations and Key Points are signed along the route and motorists receive direction and distance information to these destinations at each major junction and along the route itself. On

lower classes of collector, three digit highways most trips are local and it is usually sufficient to provide motorists with the information about direction and distance to the next community. There is usually no need to sign for distant destinations along collector routes.

The Destination and Keypoint Table provided in Appendix A identifies each of the Destinations and Keypoints in the province. Table A.1 also provides the names of communities that should be used in conjunction with placing Destination and Key Point information on guide signs.

The next community, key point and destination philosophy is typically applied only in the rural context. In large urban centres having an arterial street system accessing the highway, the destination placed on the sign is typically the next cross street (i.e. McKnight Boulevard, 34 Street, etc.). At major junctions within the urban area where two highways intersect, directions may be provided to both a cross street destination and a community destination (i.e. 67 Street/Stettler). Care is used in placing the information on the sign so it does not appear the road name for the next cross street is located at the community destination.

### **Direction**

The direction to destinations is shown using arrows. Freeway and major roadways have large signs that need to be read at high speeds, and consequently larger tapered shafted arrows are used. For intersections, straight shafted arrows are used on direction signs. For more details regarding the size and shape of arrows, refer to Section A4.3.8.

### **Route**

In the application of the guide sign system, Route Markers are used to delineate each

route and changes in route. The size and style of Route Markers are explained in Section A4.4.

On freeways and major highways, specialized signing should be used due to the driver's ability to absorb and comprehend a finite amount of information in a short period of time. It is usual in these situations to combine the Route Marker Shield with the Advance Guide Sign and the Exit Direction Sign so that both the destination and route appear on one sign. This is typically accomplished by incorporating a cut-out shield or shields to indicate the route on the Directional Guide Sign. In Alberta, the Route Markers are white signs with black messages. Trailblazers are not used on these guide signs.

### **Distance**

The last piece of information to be conveyed at an interchange or intersection is the distance to the destination provided on the Destination Distance Sign. This information is typically given after the interchange or intersection to provide the driver with confirmation that the correct route has been selected. On minor roadways this information is combined with the destination and direction information.

Interchange signing for rural and urban locations are similar other than spacing in an urban setting may be closer. In order to display consistent messages to drivers, interchange guide signing should be similar for similar types of interchanges. Drawings TCS-A4-500 to 502 and TCS-A4-505 to TCS-A4-507 show typical layouts for rural and urban interchanges. For unique ramp layouts discretion and judgment will be required to adequately sign the destinations along the highways intersecting at that interchange.

### A4.5.2 Advance Guide Signs

Advance Guide Signs are placed prior to an interchange to provide information about the routes and destinations at that interchange.

Advance Guide Signs are typically made up of three components:

- A Route Marker Shield showing the route of the interchange access road.
- The destination or destinations served by that interchange.
- The distance to that interchange.

The message on the sign is white on a green background. Layout details for an Advance Guide Sign can be found in Figure 3.7. A typical Advance Guide Sign is shown in Figure 5.1.

**Figure 5.1 – Advance Guide Sign with Highway Route Marker**



Advance Guide Signs may be posted on the side of the freeway or on overhead structures.

The primary Advance Guide Sign should be placed at a distance of one kilometre prior to the exit gore. If the interchange is a major junction point having multiple lanes, another Advance Guide Sign may be placed at two kilometres from the gore. In any event, or in cases where it is not possible to place the sign at the one or two kilometres points, distances should be shown to the nearest 0.5 km. In the special case of left exists, the Advance Guide

Signs should be placed at one and two kilometres in advance of the exit gore on any multilane highway.

When overhead signing is justified, such as at interchanges with traffic at or near capacity or when there is a complex interchange layout, the overhead sign should be placed one kilometre prior to the gore. If this cannot be achieved due to close interchange spacing, the actual placement of overhead signs will be dependent upon a number of factors such as the design speed of the road, sight distance restrictions and the complexity of the interchange layout. The minimum distance requirements for placement, using basic principles, is found in Section A4.2.3. The designer should strive for optimal distance to allow for driver reaction and maneuver time, while maintaining adequate spacing of information along the route.

An example of how these signs should be placed is provided for rural and urban interchanges in Drawings TCS-A4-500 to 502 and TCS-A4-505 to 507.

### A4.5.3 Interchange Sequence Signs

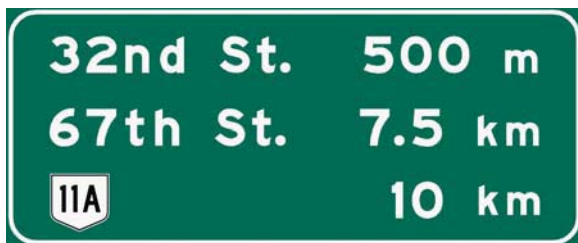
In urban areas when there are multiple interchanges in close proximity, Interchange Sequence Signs are used to show the next two or three interchanges and their locations along a particular route. This gives the driver advance information of how many exits until the desired one and the travel distance to each destination. The distances indicated on the signs shall follow the following guidelines:

- For a distance over 10 km, it shall be given to the nearest whole number (i.e. 12 km).
- If the distance is less than 10 km then it shall be given to the nearest 0.5 of a kilometre (i.e. 3.5 km).

- If the distance is less than one kilometre it shall be given to the nearest 100 m (i.e. 500 m).

An Interchange Sequence Sign has white font on a green background. An example of a typical Interchange Sequence Sign is shown in Figure 5.2.

**Figure 5.2 – Interchange Sequence Sign**



Typically, Interchange Sequence Signs should be used along the entire length of a freeway or highway section rather than only at isolated interchanges. Interchange Sequence Signs are intended to supplement the overhead or ground mounted directional signs along the highway. They are typically placed upstream of the on-ramp and downstream of the off-ramp, approximately midway between interchanges.

Drawing TCS-A4-509 details where these signs should be placed for signing a group of interchanges.

#### **A4.5.4 Exit Direction Sign on Freeways**

The Exit Direction Sign repeats the route and/or destination information provided on the Advance Guide Sign or Interchange Sequence Sign, to give assurance to the driver that the exit is the one being sought.

There are typically two directions of travel for a driver exiting at an interchange onto an intersecting roadway, and it is important to

clearly and consistently mark which exit is which to avoid confusion and assist the driver in making the correct choice.

The Exit Direction Sign typically contains the following pieces of information:

- The route number (or numbers if more than one).
- The cardinal direction (in capitals).
- The names of destinations (with the first letter capital).
- An applicable upward sloping tapered arrow.

A typical Exit Direction Sign is shown in Figure 5.3.

**Figure 5.3 – Exit Direction Sign**



There are two basic lane configurations that provide decisions that have to be made by the driver. These are:

- Single Exit Interchange, with two directions from one ramp.
- Multi-Exit Interchange, with two ramps, with one beyond an overpass.

Refer to Drawings TCS-A4-500 to 502 and TCS-A4-505 to 507 for details of the positioning of these different types of exit direction signs.

Exit Direction Signs can be either ground mounted or overhead. Ground mounted signs should be used in the majority of rural interchanges and the position should be



dependent on whether the exit ramp can be seen from the freeway approaches. The Exit Direction Sign should be placed either at the beginning of the deceleration lane or 100 m to 300 m from the gore. Overhead Exit Direction Signs should be located close to the gore point and above the appropriate lane. The decision to place guide signs overhead or ground mount is outlined in A4.3.11.1. Sign configurations using Exit Directional Signs for multi-exit interchanges is illustrated in Drawings TCS-A4-500 and 503 as well as TCS-A4-505 and 507.

**A4.5.5 EXIT ONLY Panels on Freeways**

EXIT ONLY panels are used on urban and rural freeways when a lane is dropped at an interchange and the lanes are for exit only. They are used on overhead Exit Direction Signs and Advanced Guide Signs.

There are three types of EXIT ONLY panels typically used in Alberta as seen in Figures 5.4, 5.5, and 5.6. All panels have 5-W series lettering, a white border on a yellow background and are located at the bottom of the guide sign.

**Figure 5.4 – EXIT ONLY Panel on Single Lane**



**Figure 5.5 – EXIT ONLY Panel on Two Lanes**



**Figure 5.6 – EXIT ONLY Panel**



For a single exit only lane adjacent to an optional exit/thru lane approaching a two lane exit ramp, an EXIT ONLY Panel with a downward pointing arrow is placed on the Advance Guide Sign, as shown in Figure 5.7.

**Figure 5.7 – EXIT ONLY - Single Lane Advance Guide Sign**



An EXIT ONLY Panel with two down arrows is used for a double lane exit, where two lanes end at the interchange ramp as shown in Figure 5.8.

**Figure 5.8 – EXIT ONLY - Double Lane Advanced Guide Sign**



An EXIT ONLY Panel as shown in Figure 5.9 is used at the bottom of a typical Exit Direction Sign to provide confirmation that a single lane ahead is being dropped.

Figure 5.9 – EXIT ONLY Directional Sign for Single Lane Exit



A similar EXIT ONLY Panel as shown in Figure 5.10 is used when two lanes are being dropped, or where a single lane is dropped and an optional exit/thru lane exists at a dual exit ramp.

Figure 5.10 – EXIT ONLY Directional Sign for Dual Lane Exit



EXIT ONLY Panels are to be placed on the bottom of exit direction or advanced guide signs with arrows centered above the lane or lanes that are being dropped at the interchange ramp. The exception is the Advance Guide Sign for the optional exit/thru lane, in which the sign area may be reduced

by allowing the arrow to point down at the ¼ to ⅓ distance point of the travel lane. The placement of EXIT ONLY Signs is illustrated in Drawing TCS-A4-515 to 517.

**A4.5.6 Major Forks**

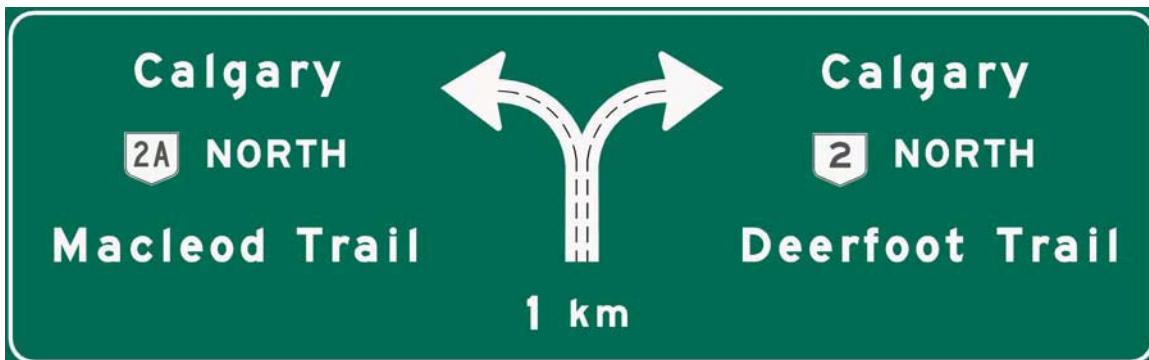
The diagrammatic sign shown in Figure 5.11, may be used at major forks where both highway directions are given equal directional importance. Examples of major forks include:

- Highway 2 northbound approaching Macleod Trail in Calgary.
- Major highway approaching a ring road.

The diagrammatic sign will generally show the highway representation using dashed lines to illustrate the number of lanes and how they split.

Only the advance sign has a diagrammatic representation that informs motorists of the upcoming fork in the highway. Directional Guide Signs placed at the gore point should show down arrows designating each lane and destination. The layout for a major fork can be found in Drawing TSC-A4-508.

Figure 5.11 – Diagrammatic Sign at a Major Fork



### A4.5.7 Exit Gore Signs

Exit Gore Signs are typically placed at the beginning of a physical gore and show the point of departure from the freeway to the interchange ramp.

In Alberta, the ground mounted gore signs show the word "EXIT" and a white arrow on a green background. A typical Exit Gore Sign is shown in Figure 5.12.

Figure 5.12 – Exit Gore Sign



### A4.5.8 Exit Numbering Signs on Freeways

Exit numbering is installed at interchanges and major at-grade intersections along high priority provincial routes such as Highway 2 and Highway 1 as authorized by Alberta Infrastructure and Transportation. Major at-grade intersections are classified as those which facilitate the crossing of an expressway/freeway with another primary or secondary highway (major or minor arterial) where exit signage is existing or warranted. Applying exit numbers can provide a means to identify the location of incidents and emergencies.

Exit Number Tabs consist of a white message on a green background, and are attached to a parent sign (Advance Guide or Exit Directional Sign). An Exit Number Tab is shown in Figure 5.13.

Figure 5.13 – Exit Number Tab



Each expressway/freeway where exit numbering has been provided, has its own system of exit numbers. Where an expressway/freeway originates in Alberta, the westernmost or southernmost terminus should be the beginning point of numbering, with exit numbers increasing in the east direction for east-west expressways/freeways and in the north direction for north-south highways. Exits should be numbered according to the nearest kilometre measured from the start of the expressway/freeway (in Alberta) to the centre of the interchange/intersection.

On sections where two or more expressways/freeways with exit numbers overlap, the numbering for one of the highways should be continuous. The expressway/freeway of highest classification should have continuous numbering. Where the expressways/freeways are of equal classification, the route that was established first or the route that is of higher status should be kept continuous. In the case of Alberta, and the high status of the North-South Trade Corridor, highways that compose the North-South Trade Corridor should be given precedence.

Where several exits are within the same kilometre, a suffix letter (A, B, C, D, E, etc.) is used to mark multi-exit interchanges or multiple interchange exits within the same exit number zone. If used, the suffix letter is displayed with the exit number. The suffix progression follows a consecutive order south to north or west to east without any gaps, beginning with the letter A.

To be considered for exit numbering the expressway/freeway must be sufficiently access controlled. Sufficient access control is defined as a density of 10 interchanges in an 80 km section along the highway under consideration.

Exit Gore Signs used with exit numbering consist of a white message with the exit number as shown in Figure 5.14.

Figure 5.14 – Numbered Exit Gore Sign



Exit Numbering Tabs on guide signs are placed in advance of the exit. There should be a minimum of three signs marking each exit: an Advance Guide Sign, an Exit Direction Sign, and an Exit Gore Sign. Exit Numbering Tabs should be installed on top of existing Advance Guide and Exit Directional Signs to be flush with the vertical edge of the parent sign on whichever side the exit is located. Extruded Aluminum Exit Numbering Tabs should be attached to the parent sign structure according to standard extrude aluminum sign attachment procedures (with bolts and fasteners). Refer to Drawing TCS-A4-520 for

how an interchange should be signed with exit numbers.

### A4.5.9 Bypass Route Signing

Many communities in Alberta are bypassed by a highway or freeway. Two examples of bypass routes are Highway 16 adjacent to Vegreville and Highway 2 adjacent to Red Deer.

Communities that have been bypassed and have only one exit off the highway will be signed similarly to any other community. The through and bypass route are both signed as illustrated in Figure 5.15.

When there is more than one exit to a bypassed community Next Exit Signs will be used. Next Exit Signs are composed of a white message on a green background. The message states the next location (the bypassed community) on the roadway and the number of exits available to reach the location. A Next Exit Sign is illustrated in Figure 5.16. If the bypass route is accessed using interchanges, interchange sequence signs showing the cross-road names and distances (Section A4.5.3) should be used in lieu of Next Exit Signs.

On Alberta highways, there is no distinction placed on the sign regarding which route is the business route.

Figure 5.15 – Bypass Route (Single Exit)





Figure 5.16 – Next Exit Sign



Next Exit Signs are typically placed one kilometre in advance of the first Advance Guide Sign.

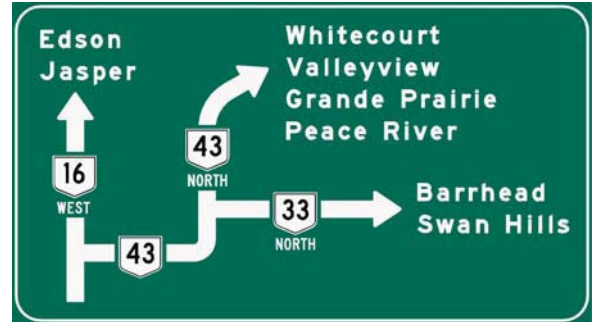
#### A4.5.10 Supplementary Guide Signs

##### A4.5.10.1 Supplementary Directional Signs

There are locations on the highway system where it is desirable to provide the motorist with additional route information. This would include locations where it is necessary to leave the main route to reach a number of indirect major destinations on connecting highways. These signs may also be necessary at locations where additional guidance is required because of the complexity of the intersection or roadway system. Supplementary Guide Signs should be used sparingly as they usually contain a lot of information and must be very large to be read at high speeds.

Diagrammatic representations of the highway system in the vicinity of a major intersection showing the routes to be followed to various Key Points and Destinations is shown in Figure 5.17. The directional information on the supplementary directional sign shall be shown as a white legend on a green background.

Figure 5.17 – Supplementary Directional Sign



Supplementary Guide Signs are to be located not nearer than one kilometre in advance of the intersection or interchange and preceding the normal directional signs. Ideally these signs will be placed on roadside turnouts near the intersection so that drivers may pull over and look at the sign carefully and decide on an appropriate route.

##### A4.5.10.2 Supplementary Destination Signs

Supplementary Destination Signs are informal guides used to advise motorists of the route to be followed to reach a particular Destination or Key Point and which requires the use of a connecting highway link. These signs may be necessary when the particular destination is important but is not located on the highway being travelled on, and it is necessary to use other highways to reach it. When Supplementary Directional Signs are used, Supplementary Destination Signs are not required. A typical Supplementary Destination Sign is shown in Figure 5.18.

Supplementary Destination Signs have white text on a green background. The message on the sign includes the word "TO", the location to be reached and which route must be taken to arrive at the location.

**Figure 5.18 – Supplementary Destination Sign**

Supplementary Destination Signs are located not nearer than one kilometre in advance of the intersection or interchange and preceding the normal directional signs.

#### A4.5.11 Ring Road Signing

A ring road is defined as a circumferential route around a major urban centre. Traffic wishing to bypass the major urban centre can use the ring road to go around the community without having to negotiate local streets. However, traffic whose destination is the urban centre will need to know where to exit the ring road to get to the section of the community that is their destination.

Anthony Henday Drive in Edmonton and Stoney Trail in Calgary are examples of ring roads around major cities.

Guide signing on ring roads around major urban centres needs to be handled differently than other guide signing situations. The major centre is signed, as well as the adjacent communities that can be accessed by highways connected to the ring road.

To determine which communities should appear on the guide signs as an adjacent community, the proximity of the community to the major urban centre must be determined. If the community is within the ring road or

bordering it, then the community shall be included on the guide signs.

When approaching an interchange on the ring road, signs to both the major urban centre and an adjacent community showing both destinations and routes must be present. Ring Road Advance Guide Signs should show both destinations as shown in Figure 5.19.

**Figure 5.19 – Ring Road Advance Guide Sign**

Once at the interchange, a similar ring road exit direction sign with both communities and routes is shown, similar to that in Figure 5.20.

On the exits from the interchange the confirmation signs will be similar to those placed at other interchanges.

**Figure 5.20 – Ring Road Exit Direction Sign**

For ring roads, or circumferential routes, around a community, the cardinal direction placed on the sign is the travel direction the

motorist is driving upon leaving the interchange.

For exit numbering on ring roads the starting location will be at the interchange closest to the 6:00 clock position and will then proceed clockwise. The numbers established for the exit will be the measured distance around the ring road in a clockwise direction, measured to the nearest km. An example of typical exit numbering scheme is shown in Drawing TCS-A4-525 at the end of this section.

Placement of ring road signs will be similar to that on other highways. Refer to Drawings TCS-A4-530 to TCS-A4-540 for the location of these signs and examples of interchange signing involving adjacent communities.

#### A4.5.12 Destination Direction Signs for Intersections

Destination Direction Signs are used on all provincial roadways in Alberta to provide the name and direction to community destinations along the route.

Messages should be restricted to a maximum of three destinations, each being either the destination in each direction (the destination at the end of the control section may not always be a city) or, on certain occasions, the key point. Destinations should be shown in the order of straight ahead, left turn destination and right turn destination as shown in Figures 5.21 to 5.22. A white horizontal bar of half the thickness of the border shall be placed between the different direction legends. The Direction Guide Sign will indicate the direction to the first Destination in each direction.

Figure 5.21 – Destination Directional Sign



Figure 5.22 – Double Destination Directional Sign



Figure 5.23 – Triple Destination Directional Sign



Normally only one destination for any direction will be shown but in special circumstances, two destinations in one direction may be required. These special circumstances include offset intersections of a continuous highway and locations where a community, which is not a destination as defined previously, is located very near the intersection. If two Next Communities are within 10 km to each other an extra Next Community may be added to the sign, thus

allowing a maximum of four place names on one structure. At complex locations where more than four place names are necessary in advance of an intersection, an additional structure should be used, or use of a Supplementary Guide Sign can be considered (See Section A4.5.10, Supplementary Guide Signs for all roadways).

A white separator bar is not required when indicating two destinations in the same direction.

Directional Guide Signs are only placed on one and two digit highways where they have at-grade intersections which join with one, two and triple digit highways. Guide signs for the intersection of two three digit highways is outlined in Section A4.5.14.

Drawings TCS-A4-405 to TCS-A4-425, illustrate the placement of Directional Guide Signs at various at-grade intersection configurations.

**A4.5.13 Destination Distance Signs**

Destination Distance Signs are used in conjunction with the Directional Guide Signs, and provide confirmation to the driver that the correct route has been selected and the distance to the selected destination. Destinations shown on Directional Guide Signs must be shown on Confirmation Distance Signs along that route until the community has been reached.

Confirmation Distance Signs should also be erected at intervals of not more than 30 to 50 km where there is a long distance between major intersections. When intermediate installations occur, they are accompanied by the following sequence of signs to remind them of the route, distance to communities, and speed limit:

- Confirmation Route Marker/ Trailblazer
- Destination Distance Sign
- Speed Limit Sign.

Confirmation Route Marker Assemblies, using the signs in the order above, are placed near the corporate limits when exiting a community, if no major intersections exist in this area.

Typically, up to three destinations may be placed on a Destination Distance Sign. These are, in order from the top to the bottom of the sign, the Next Community along the route is placed on the sign first followed by the next Key Point and the Destination community that is at the terminal of the route. The distance should be provided to the nearest kilometre.

Examples of Destination Distance Signs are illustrated in Figures 5.24 to 5.26.

**Figure 5.24 – Single Destination Distance Sign**



**Figure 5.25 – Double Destination Distance Sign**



**Figure 5.26 – Triple Destination Distance Sign**





Where the distance to more than three communities is needed a second sign should be erected which may show up to three additional communities. A second sign should only be erected if there are more communities near by that classify as a Next Community or if they are a larger community just beyond a smaller community. For example, the second sign may be used to indicate places on a major connecting route. Again, continuity of signing must be established so that all of these communities may be reached by following the highway signing and the names of the communities are continued along the route and not simply dropped off or added.

Refer to Drawing TCS-A4-300 for sign installation location and to Drawings TCS-A4-405 to TCS-A4-430 for intersection placement.

#### A4.5.14 Combination Directional/Distance Signs at Minor Intersections

Combination Directional/Distance Signs are typically used in lieu of separate Directional and Distance Signs. The junction of two triple digit highways uses a single sign with both direction and distance included in the message, as illustrated in Figure 5.27 to 5.29.

In situations where there are centres which do not qualify as a Next Community, but which need to be signed, a Combination Directional/Distance Sign is also used. Where a centre is located off the highway but is not a Next Community, within the definition, a Combination Directional/Distance Sign may be erected in advance of the appropriate turnoff. These signs shall not be used to indicate a centre beyond another primary highway. A Combination Directional/Distance Sign may also be required where a Next Community is served by an access road.

An example of how these signs are used is provided in Drawing TCS-A4-545. Communities between two major highways will be signed from each highway in each direction approaching the access road. However, communities beyond the furthest highway will not be signed from the nearest one.

A white horizontal bar of half the thickness of the border shall be placed between the different direction legends.

Figure 5.27 – Single Combination Directional/Distance Sign



Figure 5.28 – Double Combination Directional/Distance Sign



Figure 5.29 – Triple Combination Directional/Distance Sign



#### A4.5.15 Kilometre Markers for Remote Highways

Kilometre Markers are permitted on highways located in remote areas of the province where the number of significant crossroads averages less than one access every 10 km for a minimum distance of 100 km. Significant crossroads consist of numbered highways,

township roads, range roads and local named roads.

The markers begin with kilometre “0” at the most westerly limit for west-east routes and begin at the most southerly limit for south-north routes. Kilometre markings increase with increasing chainage along the highway. Motorists in the opposite direction will see the kilometre markings displayed in descending order. Refer to Drawing TCS-A4-450 at the end of this section for description details.

Kilometre markings shall be applied to substantial lengths of highway rather than several short sections. Substantial lengths means distances of not less than 100 km where the markers fully cover the length of highway between major highway junctions or major population centres.

Kilometre Markers will be installed on a request basis only. Any local government or private business organization may request authorization to install Kilometre Markers on the highway. An organization or private industry will require authorization from Alberta Infrastructure and Transportation to install Kilometre Markers on a remote highway.

Kilometre Markers are placed at the edge of the highway to assist motorists in determining their location, and provide a means to identify the location of incidents and emergencies. Using Kilometre Markers, motorists are able to determine relative positions along the highway for checking their travel progress.

Where the significant crossroad count is greater than one access per 10 km on average, Rural Address Signs will be used instead of Kilometre Markers. Rural Address Signs are preferred over Kilometre Markers as they not

only provide useful references along the route, but also serve to show rural addresses for locating businesses.

Kilometre Markers are placed every four kilometres along the route. The marker may be adjusted by moving a maximum of 200 m in either direction along the highway to clear any obstacles, without incurring any correction to the kilometre postings. In the event, that a marker must be moved more than 200 m, the Kilometre Marker may be moved to the next or preceding kilometre posting, or the Kilometre Marker can be omitted. Kilometre Marker spacing may be increased to two kilometre intervals in locations having complex vertical or horizontal alignments.

For two-lane undivided highways, the kilometre marker posts are placed on the right side of highway in the direction of increasing kilometres with back to back signs placed on a single post. For divided highways, the signs are placed on the right side of the travel lane for both directions of travel. An example of these signs is illustrated in Drawing TCS-A4-550.

#### **A4.5.16 Miscellaneous Guide Signs**

Miscellaneous signs that may be placed along the provincial highway right-of-way include:

- Corporate Limit Signs
- Lake and River Identification Signs
- County and Municipal, District Boundary Signs
- Industrial and Technical Park Signs
- Fingerboards.

##### **A4.5.16.1 Corporate Limit Signs**

The corporate limits of a municipality may be identified using a Corporate Limits Sign. The Cooperate Boundary Marker Sign ID-205 shall have a border, the city name and

“CORPORATE LIMITS” in black on a white background as seen in Figure 5.30. This sign is used to show the location of the corporate limits belonging to a urban municipality.

Figure 5.30 – Corporate Boundary Marker



A sign indicating the corporate limits of a municipality is installed at each location at which the municipal boundary intersects a highway route. The sign shall be installed facing motorists approaching the municipality.

#### A4.5.16.2 Lake and River Identification

Lakes and rivers visible from the highway are identified by Lake and River Identification Signs. The Lake and River Identification Signs may be installed to identify lakes and rivers of historic, geographic or economic interest and which are visible from the road on which the sign is placed.

In rural areas where many lakes in the province include developed recreational and unincorporated residential areas that generate substantial amounts of traffic, the department will provide directional signs to these lakes when requested to do so based on the volumes of traffic generated.

The River and Lake Identification Signs shall have the name of the lake or river in white on a green background as in Figures 5.31 and 5.32.

Figure 5.31 – River Identification Sign



Figure 5.32 – Lake Identification Sign



Lake and River Identification Signs will be erected for all rivers and streams officially designated by Alberta Environment (Sustainable Resources & Development) and shall be placed in accordance with the following:

- Where a road crosses a river the sign shall be placed approximately 20 m in advance of the crossing location facing approaching traffic.
- Where a river runs parallel to but is not crossed by the road, signs may be installed on a single support, back-to-back, on the same side of the road as the river.
- Where a lake is adjacent to a road, signs may be installed on a single support back-to-back on the same side of the road as the lake.

Lakes that generate large volumes of traffic will get one directional sign installed for each direction of travel in advance of the main access road turnoff.

In those instances where the highway closely parallels the lake or a town, village, provincial park or other similar development is located adjacent to the lake the signing for these developments usually is sufficient to direct motorists to the area and may eliminate the need for any additional signs.

**A4.5.16.3 County and Municipal District Boundary**

The signs for County and Municipal District Boundaries have black text and border on a white background. The first line of the message indicates whether the boundary is for a County or a Municipal District (M.D.). The second line of message indicates the name of the County or M.D. boundary. A line divides the first line of message from the second as shown in Figures 5.33 and 5.34. These signs are used to show the location of the County or M.D. boundary.

**Figure 5.33 – County Boundary Sign**



**Figure 5.34 – Municipal District Boundary Sign**



The County and Municipal District Boundary signs shall be installed at each location at where a boundary of a County or M.D. interests a highway route. The sign shall be installed facing motorists approaching the County or M.D.

**A4.5.16.4 Guide Signs for Large Trip Generators**

The department will consider requests for directional signs for large developments or groups of developments such as large industrial plants, industrial parks, mobile home parks, and socio-recreational facilities such as public sports facilities that generate sufficient volumes of traffic to justify the sign request. These will be standard guide signs having white text on a green background, and the message may be incorporated into other signing systems on the highway. Refer to Figure 5.35 for a typical Industrial and Technical Park Sign.

**Figure 5.35 – Industrial Technical Park Sign**



Directional Signs should be placed prior to the access of the facility. If the facility is not on the highway, directional signs may be required to direct motorists. The type of facility should be checked against the guidelines for Motorists Facility and Service Signage in Section A4.6 of this manual to determine which type of signs should be used.

**A4.5.16.5 Fingerboards**

Fingerboards combine both direction and name of a facility into one sign. Black on white fingerboards are only used to indicate the direction to rural churches, cemeteries, municipal landfill sites and waste transfer stations. A typical fingerboard is shown below in Figure 5.36.



Figure 5.36 – Fingerboard Sign



No more than three fingerboards should be installed on any one post.

Community Halls use fingerboards having a green background and white message to show the direction and distance to the facility. These signs are placed in advance of the access road to the highway in each approach direction to the access. An example of a Community Hall Directional Sign is shown in Figure 5.37.

Figure 5.37 – Community Hall Directional Sign

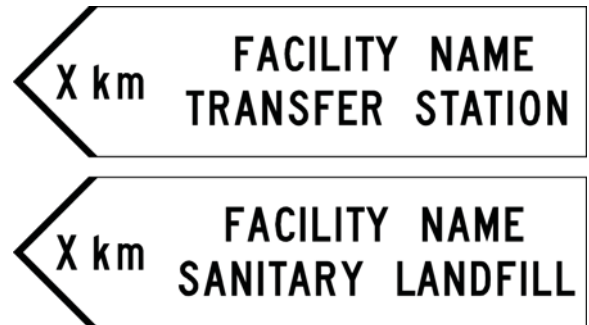


#### A4.5.16.6 Sanitary Landfill/Waste Transfer Sign

A rural transfer station is a facility where solid waste materials, including yard waste, demolition materials, and household refuse, are transferred from small vehicles to large trucks for efficient transport to landfills, recycling centers, and other disposal sites.

A Sanitary Landfill or Waste Transfer Station Sign (see Figure 5.38) is installed on provincial highways to guide motorists to these rural community facility sites for the disposal of their waste materials.

Figure 5.38 – Sanitary Landfill/Waste Transfer Sign



The standard size of a fingerboard sign is variable width and 600 mm height.

The facility name on the sign can be either the name of the private owner or municipality, or it could be a special name in likeness to some local geographic feature or nearby settlement.

The distance to the facility from the highway may be included on the sign as shown, rounded to the nearest kilometre.

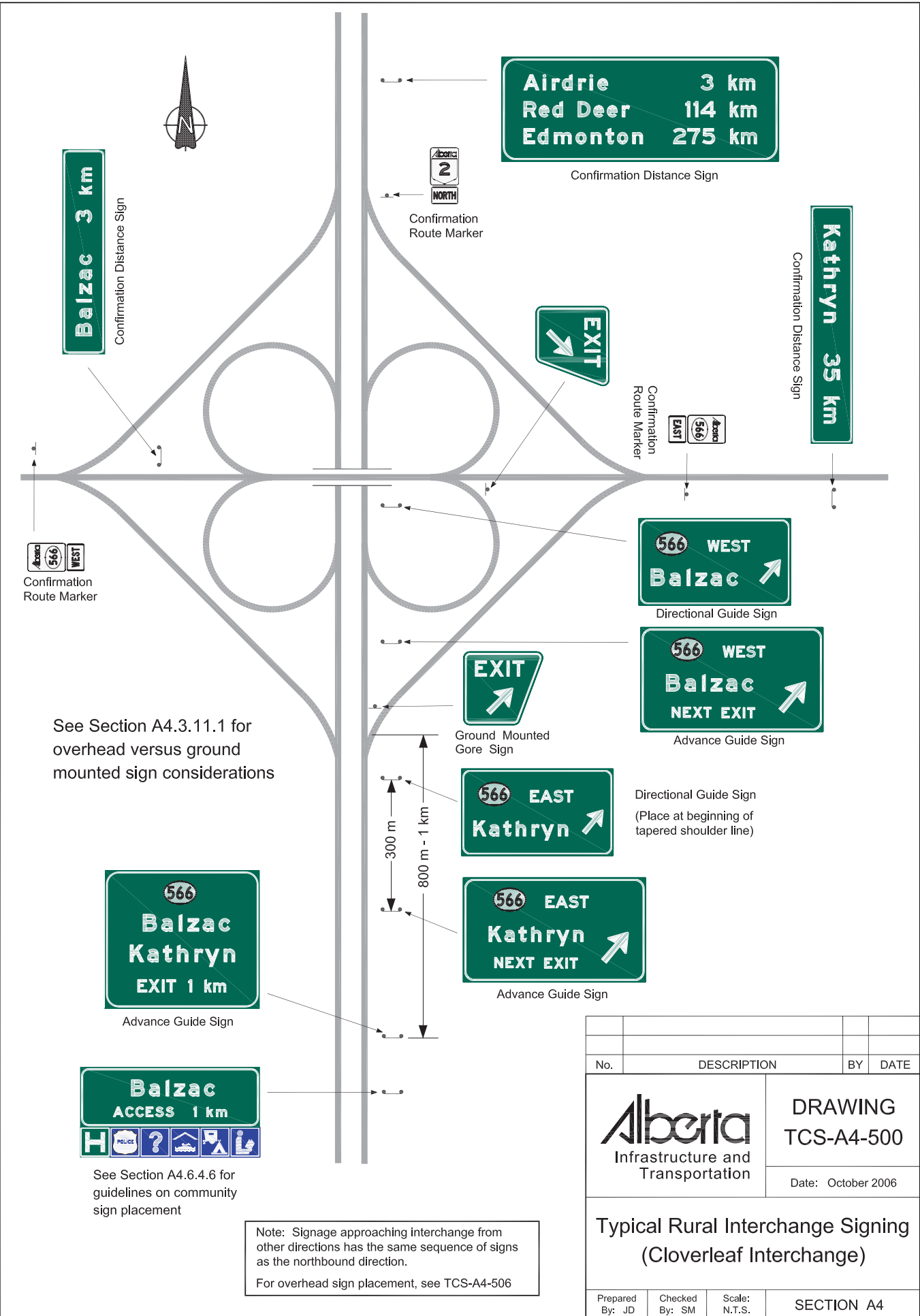
The facility should be accessible from the provincial highway and located within a reasonable distance from that highway (preferably, not exceeding 25 kilometres).

Where the facility can be accessed from more than one highway, signs should only be placed at the nearest highway access.

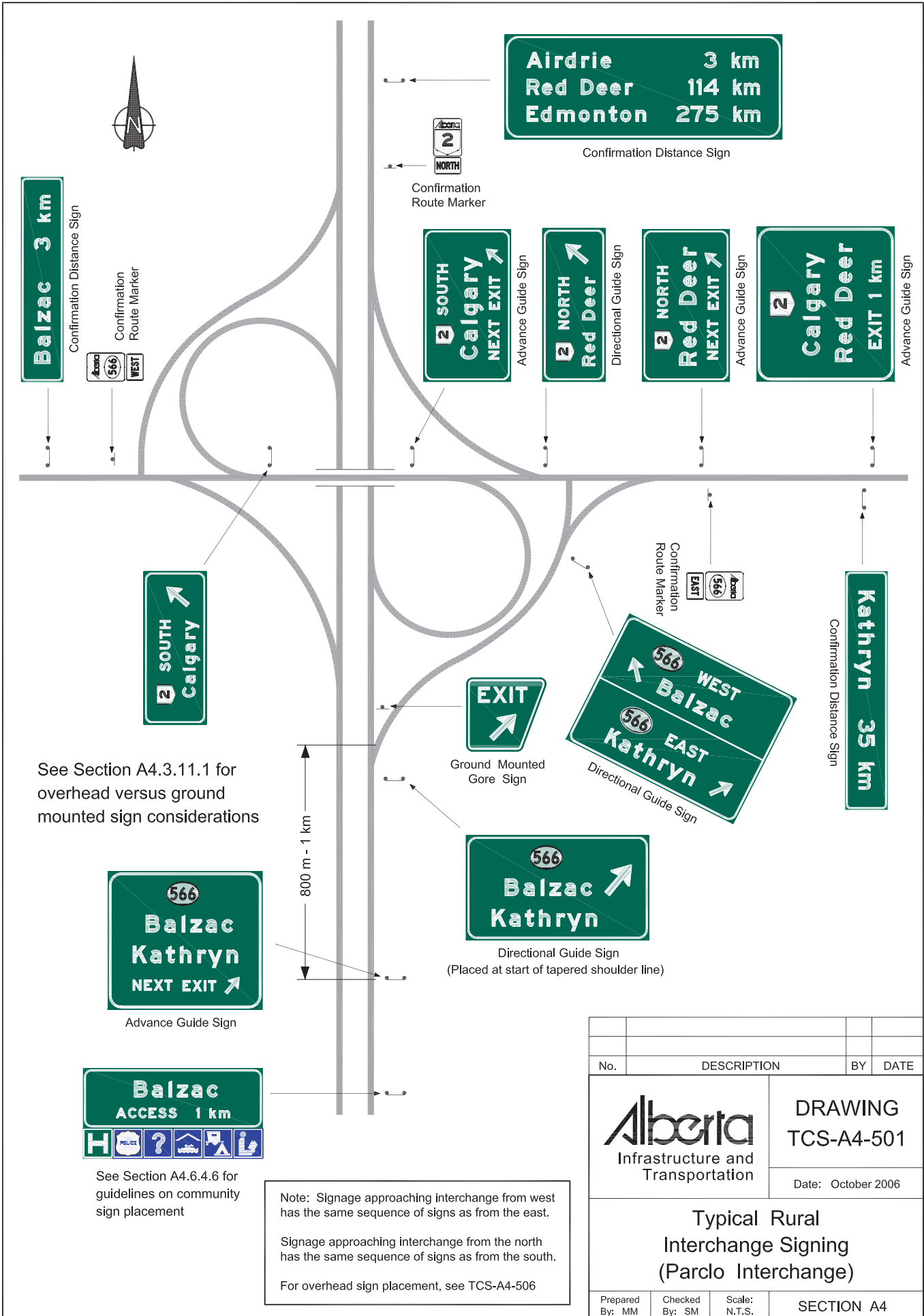
Fingerboard signs should be placed within the highway right-of-way. Only one sign should be placed per direction of travel on the highway. The signs should be placed 150 to 250 m in advance of the access, or at the start of the taper if one exists.

A development permit is required to have one of these types of signs installed next to the highway. The facility owner is required to contact the Alberta Infrastructure and Transportation District Office to obtain authorization for installing a sign.

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No.	DESCRIPTION	BY	DATE
		DRAWING TCS-A4-500	
		Date: October 2006	
<b>Typical Rural Interchange Signing (Cloverleaf Interchange)</b>			
Prepared By: JD	Checked By: SM	Scale: N.T.S.	SECTION A4



See Section A4.3.11.1 for overhead versus ground mounted sign considerations

800 m - 1 km

Directional Guide Sign  
(Placed at start of tapered shoulder line)

See Section A4.6.4.6 for guidelines on community sign placement

Note: Signage approaching interchange from west has the same sequence of signs as from the east.  
Signage approaching interchange from the north has the same sequence of signs as from the south.  
For overhead sign placement, see TCS-A4-506

No.	DESCRIPTION	BY	DATE
		DRAWING TCS-A4-501	
		Date: October 2006	
<b>Typical Rural Interchange Signing (Parclo Interchange)</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	SECTION A4





See Section A4.3.11.1 for overhead versus ground mounted sign considerations

**Balzac 3 km**  
Confirmation Distance Sign

Confirmation Route Marker  
Alberta 566 WEST

Confirmation Route Marker  
Alberta 2 NORTH

**Airdrie 3 km**  
**Red Deer 114 km**  
**Edmonton 275 km**  
Confirmation Distance Sign

**2 NORTH**  
**Red Deer**  
Directional Guide Sign

**2 NORTH**  
**Red Deer**  
**NEXT EXIT**  
Advance Guide Sign

**2**  
**Calgary**  
**Red Deer**  
**EXIT 1 km**  
Advance Guide Sign

**2 SOUTH**  
**Calgary**  
Directional Guide Sign

**2 SOUTH**  
**Calgary**  
**NEXT LEFT**  
Advance Guide Sign

Confirmation Route Marker  
Alberta 566 EAST

**EXIT**  
Ground Mounted Gore Sign

**566 WEST**  
**Balzac**  
**566 EAST**  
**Kathryn**  
Directional Guide Sign

**Kathryn 35 km**  
Confirmation Distance Sign

**Calgary 15 km**  
Confirmation Distance Sign

800 m - 1 km

**566**  
**Balzac**  
**Kathryn**  
Directional Guide Sign  
(Placed at start of tapered shoulder line)

**566**  
**Balzac**  
**Kathryn**  
**NEXT EXIT**  
Advance Guide Sign

**Balzac**  
**ACCESS 1 km**  
Community Sign

See Section A4.6.4.6 for guidelines on community sign placement

Note: Signage approaching interchange from the west has the same sequence of signs as from the east.

Signage approaching interchange from the north has the same sequence of signs as from the south.

For overhead sign placement, see TCS-A4-505.

No.	DESCRIPTION	BY	DATE
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**Alberta**  
Infrastructure and Transportation

**DRAWING**  
**TCS-A4-502**

Date: October 2006

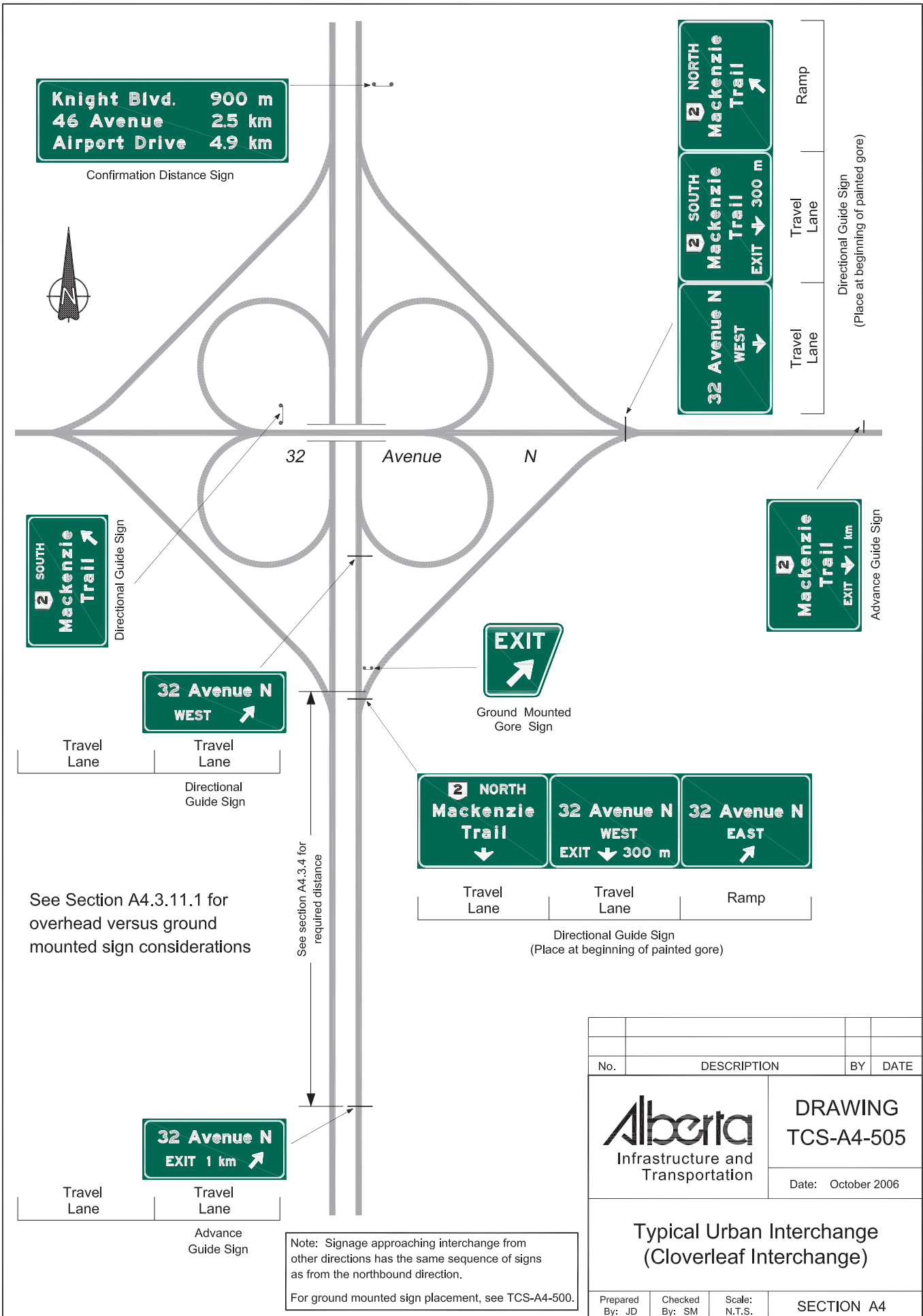
**Typical Rural Interchange Signing**  
**(Diamond Interchange)**

Prepared By: MM

Checked By: SM

Scale: N.T.S.

**SECTION A4**



**Knight Blvd. 900 m**  
**46 Avenue 2.5 km**  
**Airport Drive 4.9 km**

Confirmation Distance Sign

**2 NORTH**  
**Mackenzie Trail**

Ramp

**2 SOUTH**  
**Mackenzie Trail**  
**EXIT → 300 m**

Travel Lane

**32 Avenue N**  
**WEST**

Travel Lane

Directional Guide Sign  
 (Place at beginning of painted gore)

32 Avenue N

**2 SOUTH**  
**Mackenzie Trail**

Directional Guide Sign

**32 Avenue N**  
**WEST**

Travel Lane

Travel Lane

Directional Guide Sign

**EXIT**

Ground Mounted Gore Sign

**2**  
**Mackenzie Trail**  
**EXIT ↓ 1 km**

Advance Guide Sign

**2 NORTH**  
**Mackenzie Trail**

Travel Lane

**32 Avenue N**  
**WEST**  
**EXIT ↓ 300 m**

Travel Lane

**32 Avenue N**  
**EAST**

Ramp

Directional Guide Sign  
 (Place at beginning of painted gore)

See Section A4.3.11.1 for overhead versus ground mounted sign considerations

See section A4.3.4 for required distance

**32 Avenue N**  
**EXIT 1 km**

Travel Lane

Travel Lane

Advance Guide Sign

Note: Signage approaching interchange from other directions has the same sequence of signs as from the northbound direction.

For ground mounted sign placement, see TCS-A4-500.

No.	DESCRIPTION	BY	DATE
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**Alberta**  
 Infrastructure and Transportation

**DRAWING**  
**TCS-A4-505**

Date: October 2006

**Typical Urban Interchange**  
**(Cloverleaf Interchange)**

Prepared By: JD	Checked By: SM	Scale: N.T.S.	<b>SECTION A4</b>
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**Knicht Blvd. 900 m**  
**46 Avenue 2.5 km**  
**Airport Drive 4.9 km**

Successive Interchange Sign



Confirmation Route Marker

**2 NORTH**  
**Mackenzie Trail**

**2 SOUTH**  
**Mackenzie Trail**  
 EXIT → 300 m

**32 Avenue N**  
**WEST** →

Ramp

Travel Lane

Travel Lane

Directional Guide Sign  
 (Place at beginning of painted gore)

32 Avenue N

**2 SOUTH**  
**Mackenzie Trail**

Directional Guide Sign

**EXIT**  
 ↗

Ground Mounted Gore Sign

See Section A4.3.11.1 for overhead versus ground mounted sign considerations

**32 Avenue N**  
**WEST** ←      **EAST** →

Directional Guide Sign

**2**  
**Mackenzie Trail**  
 EXIT → 1 km

Advance Guide Sign

**2 NORTH**  
**Mackenzie Trail**

**32 Avenue N**

Travel Lane

Travel Lane

Ramp

Directional Guide Sign  
 (Place at beginning of painted gore)

**32 Avenue N**  
 EXIT 1 km ↗

Travel Lane

Travel Lane

Advance Guide Sign

Note: Signage approaching interchange from west has the same sequence of signs as from the east.

Signage approaching interchange from the north has the same sequence of signs as from the south.

For ground mounted sign placement, see TCS-A4-501.

No.	DESCRIPTION	BY	DATE

**Alberta**  
 Infrastructure and  
 Transportation

**DRAWING**  
**TCS-A4-506**

Date: October 2006

**Typical Urban  
 Interchange Signing  
 (Parclo Interchange)**

Prepared By: MM    Checked By: SM    Scale: N.T.S.    **SECTION A4**

**Knight Blvd. 900 m**  
**46 Avenue 2.5 km**  
**Airport Drive 4.9 km**

Confirmation Distance Sign



Directional Guide Sign



Ramp



Travel Lane



Travel Lane

Directional Guide Sign  
(Place at beginning of painted gore)

32 Avenue N



Ground Mounted Gore Sign



Directional Guide Sign



Advance Guide Sign

See Section A4.3.11.1 for overhead versus ground mounted sign considerations

See section A4.3.4 for required distance



Travel Lane

Travel Lane

Ramp

Directional Guide Sign  
(Place at beginning of painted gore)



Advance Guide Sign

Note: Signage approaching interchange from the west has the same sequence of signs as from the east.

Signage approaching interchange from the north has the same sequence of signs as from the south.

For ground mounted sign placement, see TCS-A4-505.

No.	DESCRIPTION	BY	DATE
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**Alberta**  
 Infrastructure and  
 Transportation

**DRAWING**  
**TCS-A4-507**

Date: October 2006

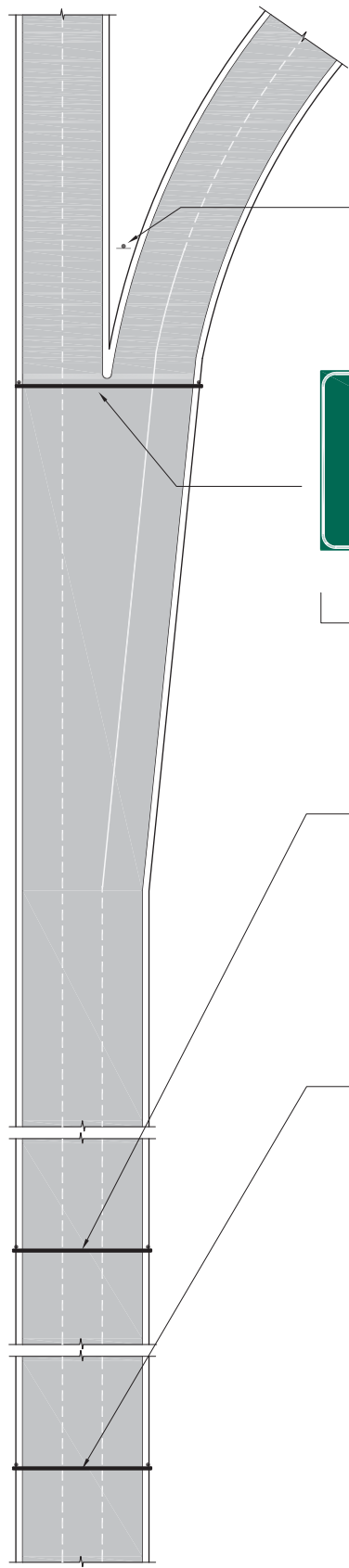
**Typical Urban Interchange Signing**  
**(Diamond Interchange)**

Prepared By: JD

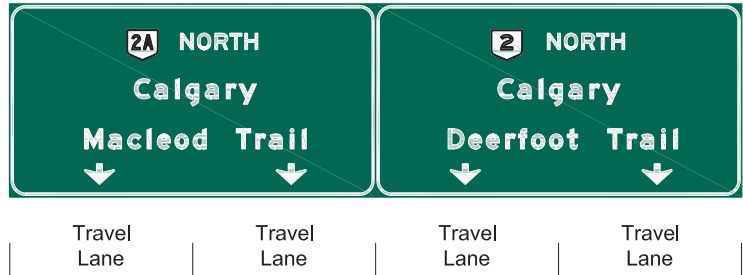
Checked By: SM

Scale: N.T.S.

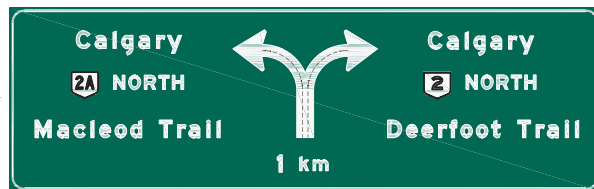
**SECTION A4**



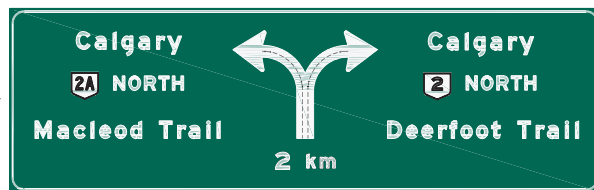
Ground Mounted  
Gore Sign



Directional Guide Sign  
(Place at beginning of painted gore)



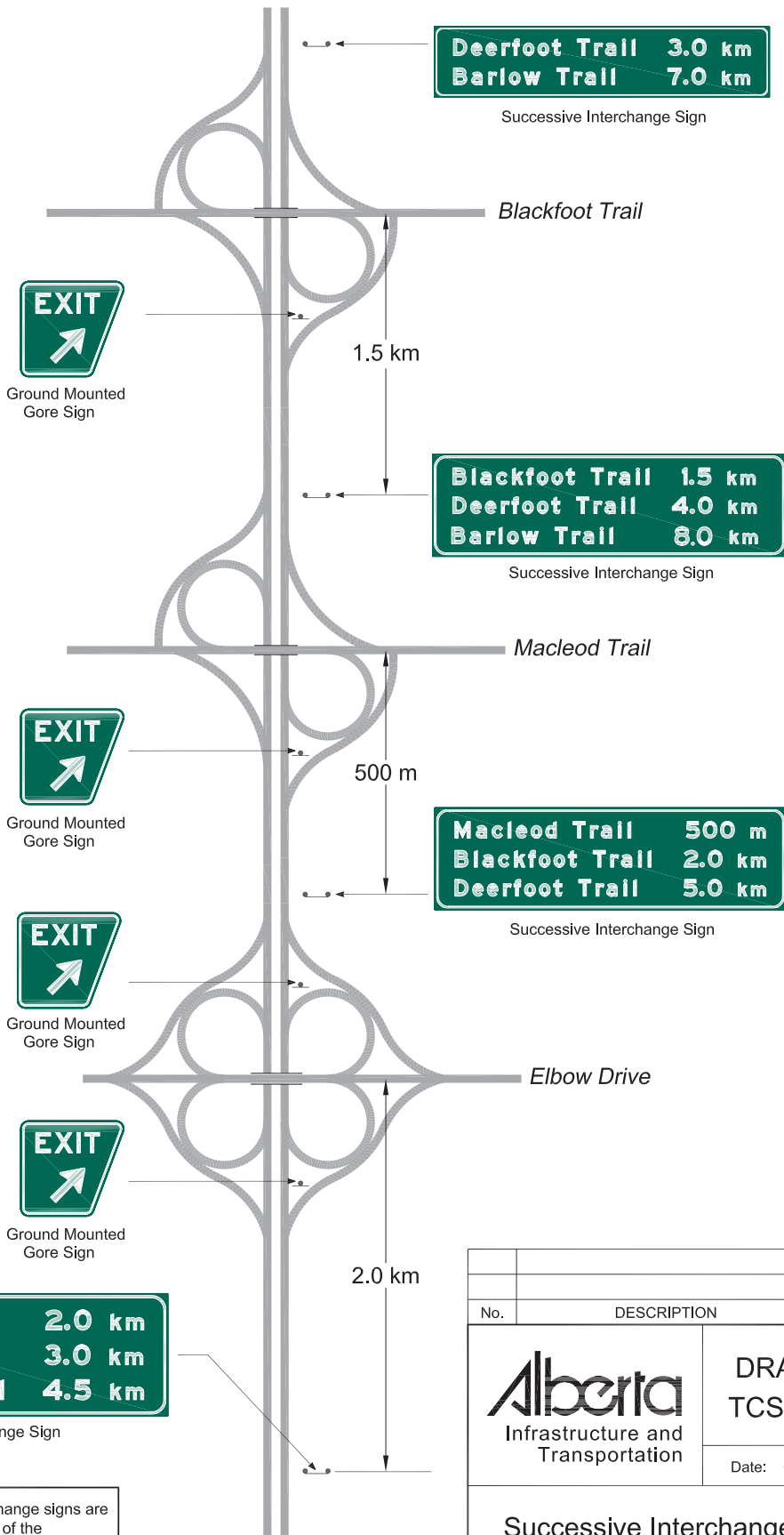
Advance Guide Sign



Advance Guide Sign

No.	DESCRIPTION	BY	DATE
		DRAWING	
		TCS-A4-508	
		Date: October 2006	
<b>Typical Urban Interchange Signing (Major Fork)</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	SECTION A4





**Elbow Drive 2.0 km**  
**Macleod Trail 3.0 km**  
**Blackfoot Trail 4.5 km**

Successive Interchange Sign

Note: Distances on successive interchange signs are measured to the overpass/underpass of the interchange.

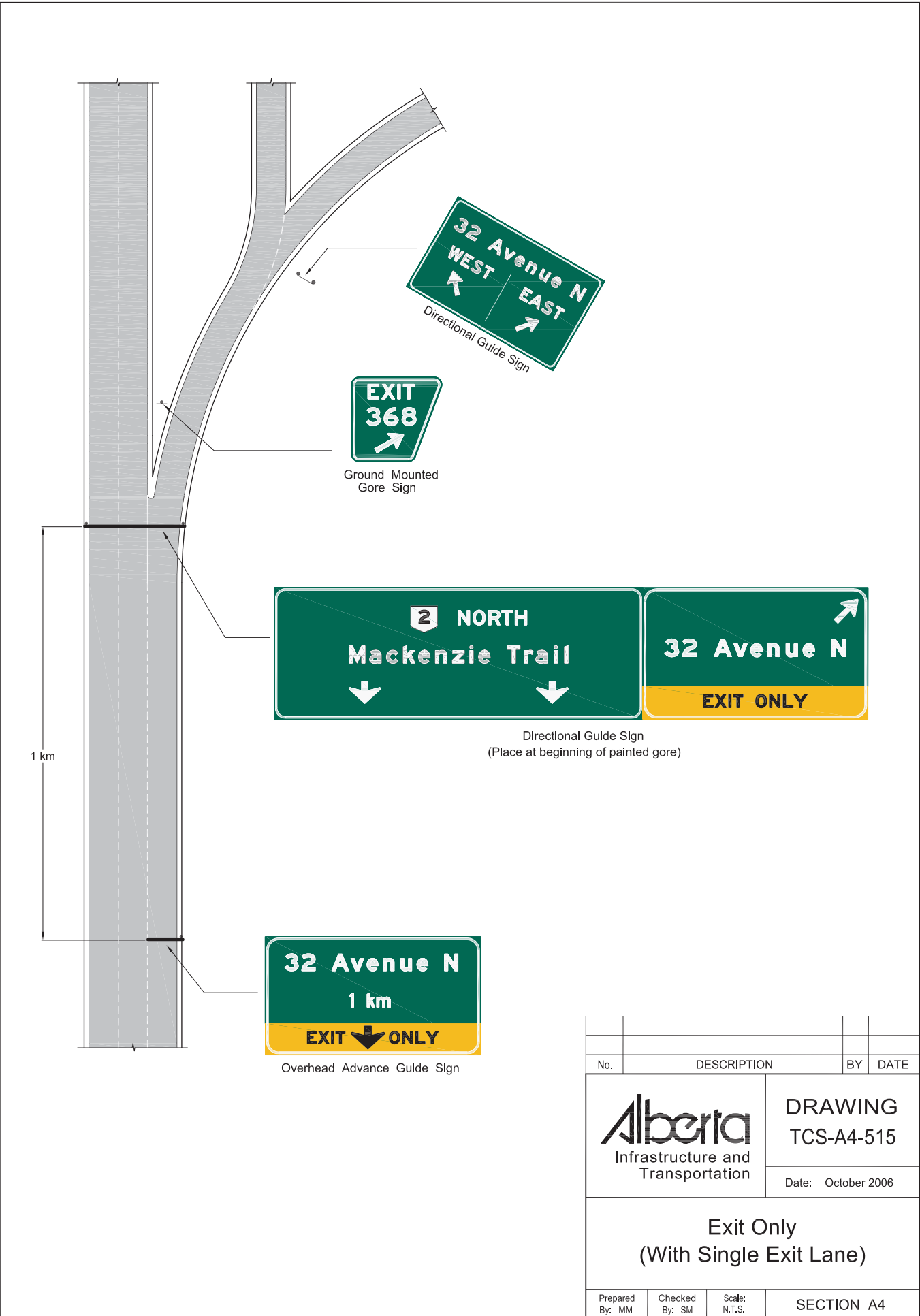
Freeway directional signs (not shown in figure above) are measured to the ramp exit gore.

No.	DESCRIPTION	BY	DATE
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	<b>DRAWING</b> <b>TCS-A4-509</b>
	Date: October 2006

**Successive Interchange Signs**  
**(Closely Spaced Interchanges)**

Prepared By: MM	Checked By: SM	Scale: N.T.S.	<b>SECTION A4</b>
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1 km



Directional Guide Sign  
(Place at beginning of painted gore)



Overhead Advance Guide Sign

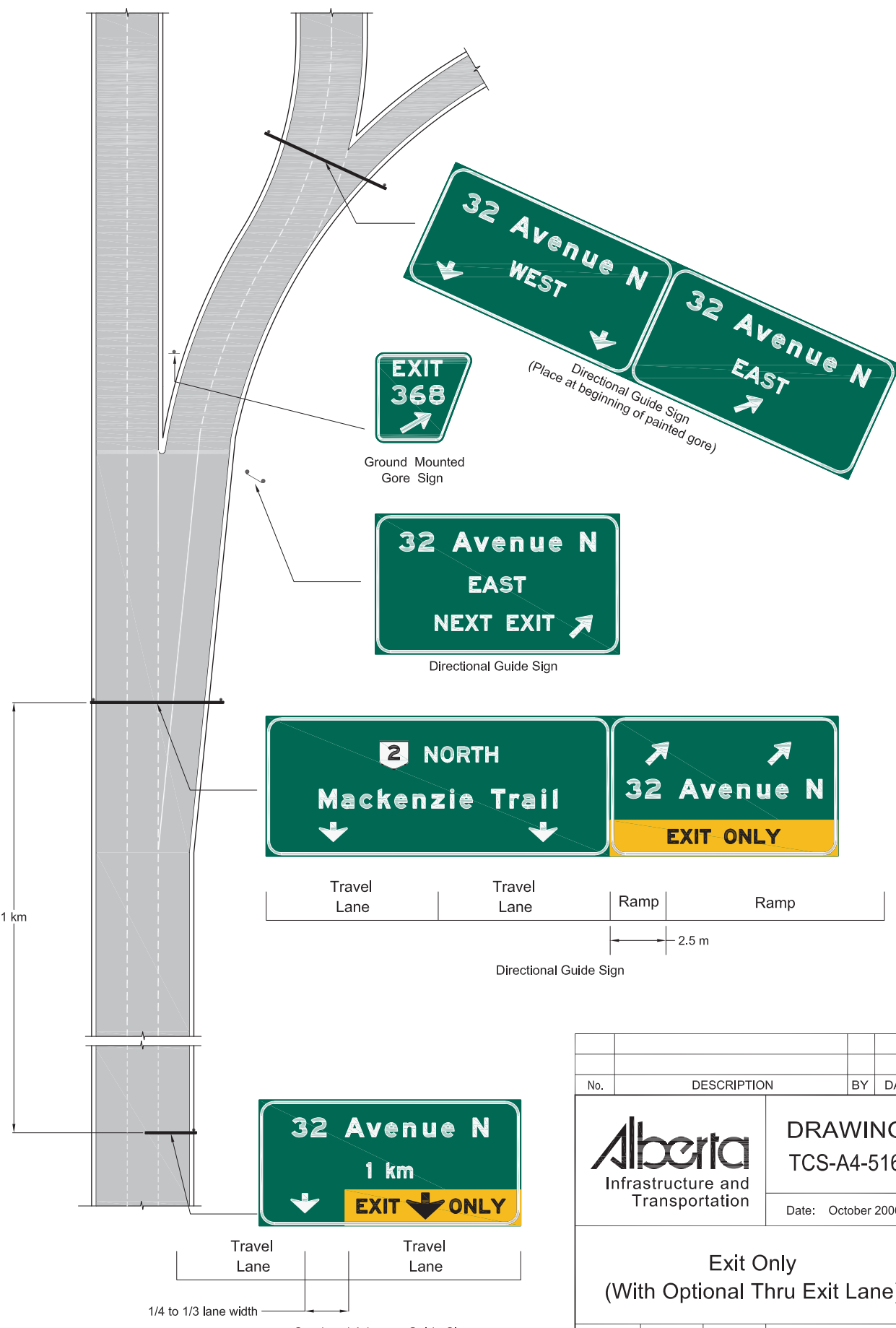


Ground Mounted Gore Sign

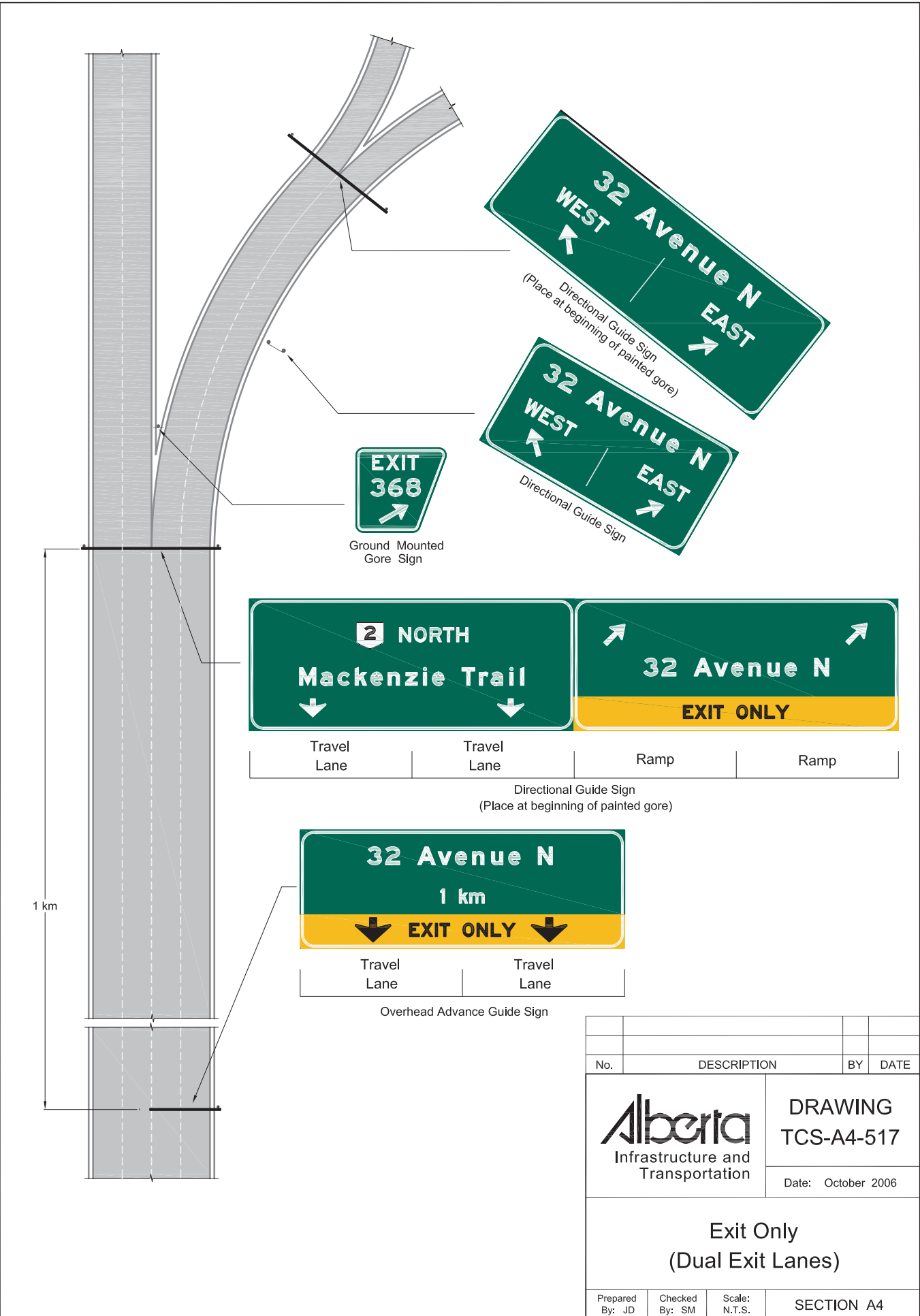


Directional Guide Sign

No.	DESCRIPTION	BY	DATE
			<b>DRAWING</b> TCS-A4-515 Date: October 2006
<b>Exit Only</b> <b>(With Single Exit Lane)</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	SECTION A4



No.	DESCRIPTION	BY	DATE
		DRAWING TCS-A4-516	
		Date: October 2006	
Exit Only (With Optional Thru Exit Lane)			
Prepared By: JD	Checked By: SM	Scale: N.T.S.	SECTION A4





No.	DESCRIPTION	BY	DATE

**Alberta**  
Infrastructure and  
Transportation

**DRAWING**  
TCS-A4-520

Date: October 2006

**TYPICAL INTERCHANGE  
SIGNING WITH  
EXIT NUMBERING**

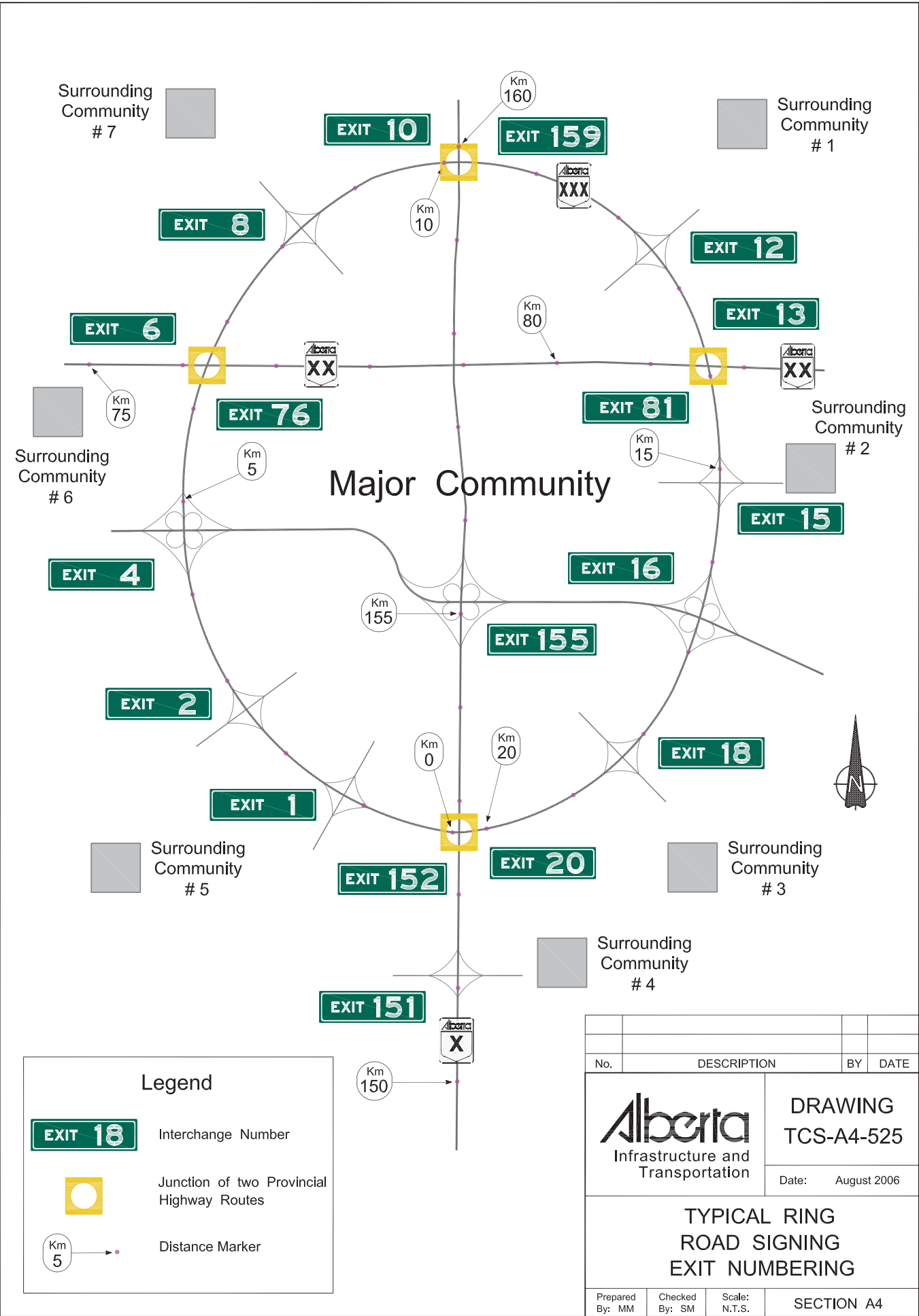
Prepared  
By: MM

Checked  
By: SM



Scale:  
N.T.S.

SECTION A4





**Legend**

- EXIT 18** Interchange Number
-  Junction of two Provincial Highway Routes
-  Distance Marker

No.	DESCRIPTION	BY	DATE
		<b>DRAWING</b> TCS-A4-525 Date: August 2006	
<b>TYPICAL RING ROAD SIGNING EXIT NUMBERING</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	SECTION A4



Confirmation  
Route Marker



Ground Mounted  
Gore Sign



Directional Guide Sign



Ramp



Travel Lane



Travel Lane

Directional Guide Sign  
(Place at beginning of painted gore)

To Edmonton  
←

Sherwood

Park

Freeway

To Sherwood Park  
→



Directional Guide Sign



Ground Mounted  
Gore Sign



Travel Lane

Travel Lane

Ramp

Directional Guide Sign  
(Place at beginning of painted gore)



Advance Guide Sign



Successive Interchange Sign



Successive Interchange Sign

No.	DESCRIPTION	BY	DATE

**Alberta**  
Infrastructure and  
Transportation

**DRAWING**  
TCS-A4-530

Date: October 2006

**TYPICAL RING ROAD  
SIGNING**  
(Cloverleaf Interchange)

Prepared  
By: MM

Checked  
By: SM

Scale:  
N.T.S.

SECTION A4



Directional Guide Sign



Travel Lane

Travel Lane

Ramp

Directional Guide Sign  
(Place at beginning of painted gore)

To Sherwood Park

To Edmonton



Directional Guide Sign



Ground Mounted  
Gore Sign



Travel Lane

Travel Lane

Ramp

Directional Guide Sign  
(Place at beginning of painted gore)



Advance  
Guide Sign



Successive Interchange Sign



Successive Interchange Sign

No.	DESCRIPTION	BY	DATE
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**Alberta**  
Infrastructure and  
Transportation

**DRAWING**  
TCS-A4-535

Date: October 2006

**TYPICAL RING ROAD  
SIGNING  
(Parclo Interchange)**

Prepared By: MM	Checked By: SM	Scale: N.T.S.	<b>SECTION A4</b>
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 Confirmation  
 Route Marker

		
Travel Lane	Travel Lane	Ramp

Directional Guide Sign  
 (Place at beginning of painted gore)

  
 Directional Guide Sign

To Edmonton ←

→ To Sherwood Park

  
 Directional Guide Sign

  
 Ground Mounted  
 Gore Sign

	
Travel Lane	Travel Lane

Directional Guide Sign  
 (Place at beginning of painted gore)

  
 Advance  
 Guide Sign

No.	DESCRIPTION	BY	DATE

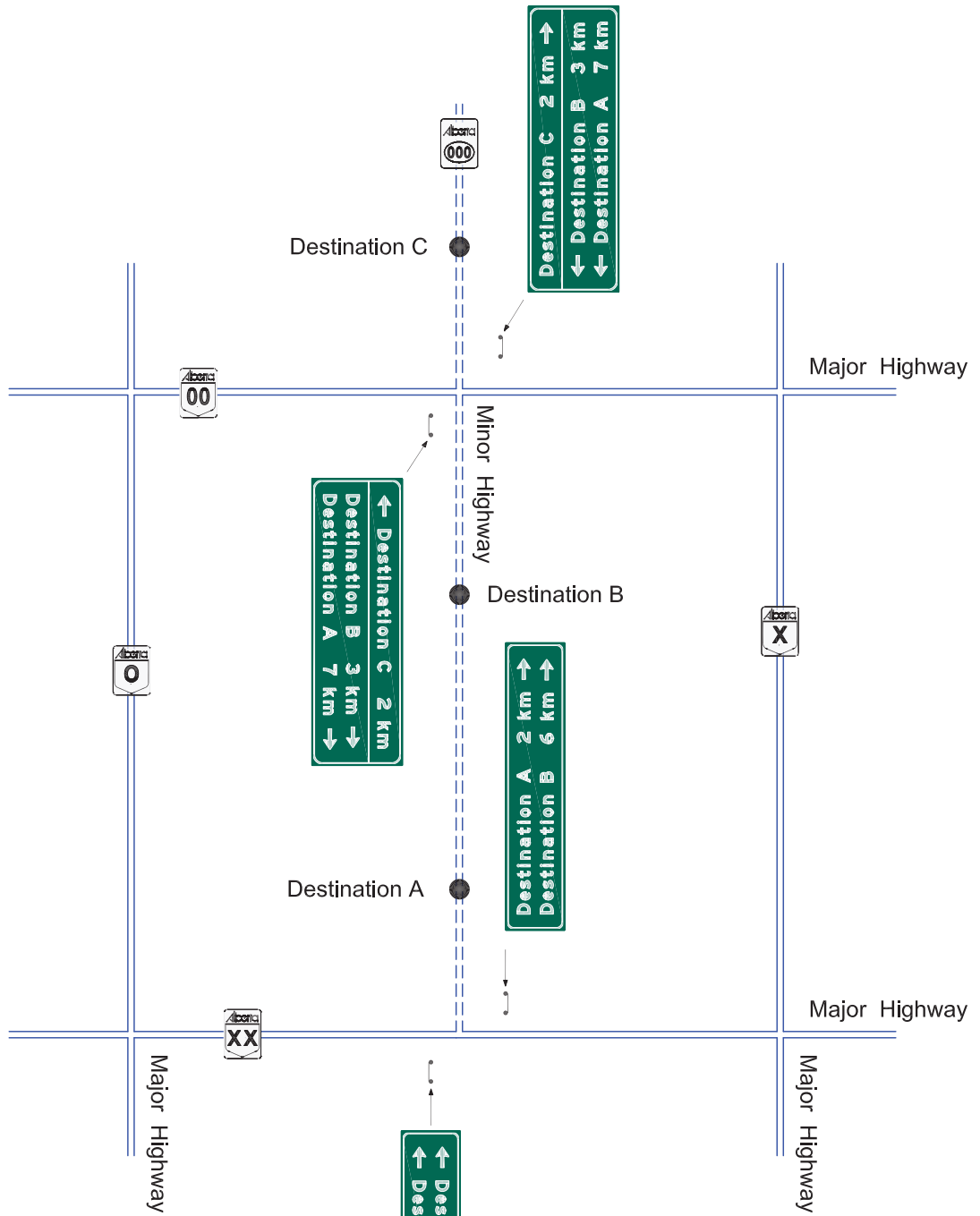



DRAWING  
 TCS-A4-540

Date: October 2006

TYPICAL RING ROAD  
 SIGNING  
 (Diamond Interchange)

Prepared By: MM	Checked By: SM	Scale: N.T.S.	SECTION A4
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No.	DESCRIPTION	BY	DATE
			
	<b>DRAWING</b> <b>TCS-A4-545</b>		
			Date: October 2006
<b>USE OF COMBINATION          DIRECTIONAL / DISTANCE          SIGNS</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	<b>SECTION A4</b>





All dimensions shown are in millimetres except when otherwise noted.

No.	DESCRIPTION	BY	DATE
		<b>DRAWING</b> <b>TCS-A4-550</b>	
		Date: October 2006	
<b>KILOMETRE MARKERS</b>			
Prepared By: MM	Checked By: SM	Scale: N.T.S.	<b>SECTION A4</b>