TOURISM SIGNING

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**KEYWORDS**

ROAD SIGN, ROAD MARKING, REGULATORY, WARNING

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CHAPTER 4:
TOURISM SIGNING

4.1 INTRODUCTION

4.1.1 General

1 Chapter 1, Volume 2 explains the objectives of Volume 2 and how the various chapters should be read in conjunction with their respective chapters in Volumes 1 and 4. This chapter on Tourism Signing is intended to supplement Section 4.9 of Chapter 4 in Volume 1 which explains the principles affecting tourism and tourism signing. None of those principles will be repeated here, except for clarification purposes. This chapter applies to tourism signing both in the rural and urban environments, as the principles are similar in the context of the overall application of signing principles within the road network. However, some details and typical applications appropriate to tourism signing in urban areas, and how these fit in to the overall destination signing in urban areas, are described in Chapter 9: Urban Guidance Signing.

2 At all times throughout the assessment and implementation of tourism signs, the practitioner should remember that tourism signs are “supplementary” signs and are not designed to replace the primary guidance system. The tourist signs are designed to assist the motorist and should not be seen as advertising signs.

3 The primary direction signs system on the road network throughout South Africa is a system that promotes the principles of conformity, accuracy, uniformity, consistency and continuity. This system needs to be checked and put in place before consideration is given to the implementation of supplementary signs such as tourism signs and local direction signs. In many instances, a lack of effectiveness of the primary system has led to demands for tourism signs reaching unmanageable proportions. Hence, an improved primary guidance system can do much to prevent unnecessary demands for tourism signs and, frequently, advertising signs from resulting in a potential detriment to the environment. Unless the rule of consistency is applied rigorously, the practitioner will have difficulty in managing the complete signs system.

4.1.2 How to Use This Chapter

1 It must be emphasised that the implementation of tourism signs, in the overall context of road signing principles, is a complex and sensitive issue. The implementation of the principles contained in Volume 1, Section 4.9 (Subsection 4.9.4), together with the application procedures outlined in this chapter, are not always straightforward. Hence, it is recommended that the practitioner obtains a sound knowledge of the guiding principles contained in Volume 1, Section 4.9 before entering the implementation stages (see also Table 4.2).

2 This chapter describes implementation procedures, where a step-by-step method is described to guide the practitioner through the integration of tourism signs into the guidance system and the management of demands from facility owners. This procedure is designed to allow the practitioner to choose an application nearest to his/her own situation, and thereafter a preferred approach can be chosen in a logical sequence, dependent on time, funds and resource availability. There are checklists from past experiences to offer guidance and explain the implications behind adopting certain methods, together with examples in the form of placing sequences.

4.1.3 Structure of Tourism Organisations

1 Tourism organisations play an important role in the management, marketing and co-ordination of tourist information, including that given by tourism signs, from a national level down to local and even individual facility levels. The effective structuring of these organisations and how this structure is integrated with tourism and road departments in all spheres of government sets the basis for an integrated approach to the provision, marketing, enhancement, and last but not least, the signing of tourism facilities on the road network.

2 Different levels of tourism organisation are illustrated in Figures 4.1 and 4.2. The functions of these organisations differ within the different levels but as far as tourism signing is concerned common functions of each organisation can be described as follows:

(a) to liaise with all role players to identify the need for tourism signing in the relevant area of jurisdiction;
(b) to develop an understanding of and to incorporate guidance signing principles into criteria developed for the signing of tourism facilities;
(c) to initiate the process of preparing a tourism signing plan for the area under their jurisdiction;
(d) to actively participate, at appropriate levels, in tourism communities comprising tourism, roads and other relevant officials, to consider and process applications for tourism signs.

3 In Figure 4.1 a typical structure is given for the activities of a Provincial Tourism Organisation (in the example Gauteng and its established Regional Tourism Organisations are used).

4 The processing of applications for tourism signs is not handled by the organisations directly but by a Regional Tourism Liaison Committee (RTLC). This Committee should comprise representatives from the Regional Tourism Organisation, the relevant Road or Local Authority (at whatever level of official such Authority deems relevant) and Local Tourism Organisations in the region. For practical reasons the representative of an LTO in whose area an applicant resides should attend meetings when such applications are dealt with, but need not attend all meetings of the RTLC. In addition, representatives of SATOUR, the Automobile Association, the Provincial Tourism Organisation, FEDHASA and the National Department of Transport may have a standing invitation to attend, or may be requested to attend when a specific application requires their input on a question of standards or grading (AA, SATOUR or FEDHASA) or related interest (NDOT). The application process is covered in more detail in Section 4.2.

(continued on page 4.1.4)
Fig 4.1  Structur of Tourism Organisations and Committees
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Fig 4.2
Typical Example of Structured Approach to Tourism Organisations
4.1.4 Layout and Cross-referencing to Other Chapters

1. This chapter is linked with the other sections within the SARTSM by the following division of aspects relating to tourism signing:
   (a) Volume 1: Planning and principles;
   (b) Volume 2: Implementation and warrants (application);
   (c) Volume 4: Dimensional detail and signface components.

2. Hence, while Volume 1 establishes the underlying principles, this chapter in Volume 2 describes the application of those principles, together with practical approaches and situations likely to occur.

4.1.5 Road Traffic Sign Colour Indication

1. The chapters of Volume 2 of the South African Road Traffic Signs Manual (SARTSM) are not prepared in colour. Relevant examples used to illustrate appropriate signs, signals and markings are shaded in a black and white coding which is illustrated below.

2. The basic principles of the road traffic sign colour coding system are shown, in colour, in the SADC-RTSM Volume 1, Chapter 1, Section 1.4, and in the Contents sections of relevant Volume 1 and 4 Chapters.
4.2 IMPLEMENTATION OF TOURISM SIGNS

4.2.1 General

1 For the principles of Tourism Signing, reference is made to Volume 1, Section 4.9. The following section deals with the Tourism Signing Process and methods of managing tourism sign applications.

2 A decision as to whether to erect a tourism sign, or not, will almost certainly result from one of three circumstances:

(a) a written request for a tourism sign from the operator of a tourist facility submitted through a regional or area tourism committee; or

(b) an investigation of all tourist facilities within a defined area, whether undertaken by a road or local authority, or by an appointed agent; or

(c) the policy of a road authority.

3 As a result of the growth in demand for tourism signs the major road authorities have experienced difficulty processing applications satisfactorily. To overcome this problem and because of the supplementary role of TOURISM signs in the final stages of a journey, it is recommended that applications for tourist signs be processed at a regional and local level. If the tourism regions of a province are large it may be necessary to further sub-divide a region into manageable areas. In such an instance applications should preferably be processed at the area and local levels, with overall co-ordination coming from the region. In this way the parties involved will become more aware of the functioning of tourism signing in their area and of the need to maintain measures of control. This activity will also better equip those involved in the processing of applications to think and act pro-actively or collectively, when such actions may be in the better interests of quality guidance signing.

4 The processing of applications for tourism signs should be carried out by a Regional Tourism Liaison Committee (RTLC) and by Local Tourism Organisations (LTOs). Membership of the RTLC should include representatives of the Regional Tourism Organisation (RTO), the relevant Road and/or Local Authority for the region and the Local Tourism Organisations in the region. Whilst Local Tourism Organisations may vary widely in their membership (because they can be made up of public officials or they can be voluntarily constituted by business interests), LTO’s should be responsible for assessing the compliance of individual applicants with relevant warrants and for reporting their findings to the RTLC. The LTO in an urban area may commonly be the local Tourist Association. In a rural environment the LTO may be a management committee made up of representatives of existing tourist facilities in the area, if tourism is well developed, or even of a local community committee where tourist activities are just starting to develop.

5 A Regional Tourism Liaison Committee may thus have several potential LTO member representatives. However, all LTO representatives do not need to attend all meetings since, normally, members should attend in order to report on applications being processed.

6 In addition to the membership mentioned it is desirable the RTLC’s invite attendance by representatives of organisations such as SATOUR, the Provincial Tourism Organisation (PTO); the Automobile Association and FEDHASA in order to promote awareness beyond strictly regional levels and to maintain contact with organisations responsible for developing standards and warrants at a national level. When a National Route passes through a region it will be desirable to have representation on the RTLC from the National Department of Transport.

4.2.2 Guidance Sign Information “Layers”

1 TOURISM signs are just one sub-group within the major GUIDANCE sign class. The function of TOURISM signs is supplementary to the primary DIRECTION sign sub-group and their application is most commonly carried out at a local level in the road network. In the context of tourism signs, a “tourist” is considered to be a person travelling to or for pleasure in the broadest sense. Tourist destinations which may warrant inclusion on a TOURISM sign therefore include tourist attractions of all sorts, from large to very small, and any services which motorists may strategically need along the way. In urban environments particularly, but not exclusively, another group of destinations has been recognised as being similarly supplementary to the DIRECTION sign system at a local level, but which are not considered to fall within the terms of reference of tourist destinations. These destinations, when warranted, should be signed using LOCAL DIRECTION signs as described in Chapter 9: Urban Guidance Signing.

2 When considering applications for TOURISM signs account should be taken of the total guidance system in the area, particularly when considering the provision of tourism signs on numbered metropolitan, regional, provincial or national routes. Information available to tourists comes from two basic sources:

(a) information sources outside the direct road environment; and

(b) information received within the road environment.

3 Information available outside the road environment and used primarily to plan trips, but also carried by tourists on trips, comprises:

(a) maps;

(b) publicity or promotional brochures, whether specific to a facility, or of a more general area application;

(c) newspaper or magazine articles;

(d) radio or television programmes;

(e) video material;

(f) accommodation booking correspondence;

(g) publicity associations;

(h) tourist information centres.

(continued on page 4.2.4)
Fig 4.3
The "Layer" Approach to Guidance
Sign Information
Fig 4.4 Organisational Flowchart for Processing Requests for Tourism Signs
4.2.4

1 Figure 4.4 shows how a Regional Tourism Liaison Committee might approach applications for tourism signs. In due course an RTLC and its LTO’s are likely to build up a library of details covering specific locations within their area of influence. Parts of the application process will thus not need to be repeated with every application for a tourism sign, unless a need arises due to demand, to review the co-ordinated approach for a specific location and to consider the use of either:

(a) a regional or area collective symbol (see symbols GFS A1 to GFS A13 in Subsection 4.3.10); and/or
(b) tourist information lay-byes; and/or

2 When dealing with an application relating to Layers 3 or 4, an RTLC should operate within the scope of the relevant warrants given in Section 4.6, and in addition should consider the relationship to other facilities in order to pro-actively assess the level of co-ordination needed to sign all tourist facilities within an area.

3 Applications for tourism signs will, if approved, rarely require only one sign to be erected. More complete details of a range of typical tourism sign sequences are given in Section 4.7.2.

4 The procedure described in Figure 4.4 assumes that while currently, requests for tourism signs often come directly to the road authority concerned, it is not the role of the road authority to grade the respective tourist attractions, nor monitor their performance in relation to the various warrants, as described in Section 4.6. Hence, Regional Tourism Liaison Committees under the aegis of the Provincial and Regional Tourism Organisations, should design an appropriate standard application form, through which a facility owner may apply for a tourism sign.

5 Three copies of the standard application form should be submitted to the Road Authority (or Local Authority), the relevant Local Tourism Organisation (or Publicity Association), and the Regional Tourism Liaison Committee. Ideally one of these three organisations should act as a “clearing agency” for the region by ensuring that the correct copies get to the correct people.

6 Following the respective investigation processes (described in detail in Subsection 4.2.4), a letter of recommendation can be issued and the sign can be erected.

7 In general payment for the provision of tourism signs is normally dependant on the policy of the road authority. The road authority will, however, normally provide the necessary tourism signs for emergency services such as police stations or government hospitals. All other tourism signs for attractions or services are normally paid for by the owner/operator of the facility. The road authority retains jurisdiction over sign face design and the display or removal of any such signs within the road reserve. Agreement to provide tourism signs shall be subject to the submission of a formal application to a Regional Tourism Liaison Committee, which should include amongst its members representatives from (see Figure 4.4):

(a) the road authority (provincial, metropolitan or local);
(b) any affected local community;
(c) regional tourism organisations (WESTOUR, etc.);
(d) the local tourism organisations or tourist associations;
and on an invited basis, other organisations such as:
(e) the Automobile Association;
(f) SATOUR; and
(g) FEDHASA (the Federated Hospitality Association of South Africa).

The Regional Tourism Liaison Committee may potentially have several LTO members. Subject to local policy all LTO’s need not
4.2.5 IMPLEMENTATION

attend all meetings, but an LTO must be present for applications within its area of representation.

8 Local Tourism Organisations will be responsible for processing the applications, and for co-ordinating the input from the other organisations, in terms of applicable warrants. It will then submit recommendations to the Regional Tourism Liaison Committee as illustrated by the flow chart in Figure 4.4.

9 In processing applications, the regional and local organisations should take the following factors into account for the region or area as a whole:

(a) the overall information demand in the area/environment;
(b) the facility classification;
(c) the facility grading in terms of the warrants; and
(d) the sign type and symbols taking into account the various "layers" of guidance information available (see Figure 4.3).

4.2.4 The Management of Tourism Sign Applications

1 There are various approaches that an RTLC may wish to adopt in managing tourism sign applications. These approaches range from ad-hoc to a pro-active and they may be summarised by presenting their applicability through benefits and disbenefits, together with a checklist and a series of examples. This approach assumes that all the necessary approvals, as shown in Figure 4.4, have been received. The questions given in Figure 4.5 then need to be answered.

2 Question 1. Is the full Route Guidance System (advance and direction signs, route marker, confirmation, suburb and street names) in place (refer to Volume 1, Section 4.7)?

The goal of this question is to establish the status quo of recommended guidance signs i.e., are the correct signs, required by the Guidance Signing Plan, in the correct location, showing the correct information and in an acceptable condition? For example, many applications for tourism signing are due primarily to the lack of sufficient primary guidance information. If this primary information is in place, the demand for supplementary signs can be rationalised more easily. Hence, this question addresses the technical responsibility of the RTLC and forms the basis of managing tourism sign applications.

3 Checklist 1:

(a) Has a destination analysis been performed (refer to Volume 1, Chapter 8)?

This analysis will select appropriate destinations for direction signs along the route, and produce an "ideal system design" to ensure consistency and continuity.

(b) Has a signs inventory been produced?

This assessment aims to ensure that the correct destinations chosen above are placed on the correct sign, in the correct location, that the sign is in an acceptable condition, and that this information is recorded in a retrievable manner;

(c) Has a Guidance Signing Plan been prepared in terms of the guidance signing policy applicable to the region?

This checklist provides guidance to the next step e.g. if no destination analysis has been performed, such an evaluation must proceed before Question 2 can be addressed.

4 Question 2. Can the requested tourism sign be accommodated in the road reserve?

The goal of this question is to assess whether or not there is an available location for a tourism sign, or available space on an existing tourism sign. There may currently be tourism signs occupying the available location, in which case an "overload of information" may arise. In addition, this request for a tourism sign may lead to further requests and the need to adopt an holistic approach might become apparent.

5 Checklist 2:

(a) Is the tourism information correct?
(b) Is the quantity of information acceptable?
(c) Is there an available sign or location to which this information can be added?
(d) Are there other tourism demands at this location or in the area?

This checklist can be used as a guide as to which approach to adopt for the implementation of the tourism sign, i.e. the final step in the methodology.

6 Question 3. Which implementation approach should be adopted?

The goal of this question is to determine the most cost-effective approach to erecting the tourism sign. The two approaches described below make allowance for the simplest case through to a most comprehensive investigation. They are described as "ad-hoc" and "pro-active".

4.2.5 The Ad-hoc Approach

1 This approach involves little or no engagement with the community and could be appropriate for isolated intersections or small areas with little tourist demand or, alternatively, a location having a robust sign guidance system in place, i.e., no Guidance Signing Plan has been prepared.

4.2.6 The Pro-active Approach

1 This approach actively encourages stakeholder participation and could be relevant where there are many tourism demands and in areas where tourism is identified as a major attraction to the area. This is the recommended approach because it permits the full inclusion of all relevant stakeholders and, hence, a longer-term solution is more likely to be both acceptable and sustainable. When a Guidance Signing Plan for the area is already in place, or is in a planning stage, the introduction of tourism signs will likely supplement the primary signs in an acceptable way.

4.2.7 Sign System Quality

1 Detail 4.5.2 in Figure 4.5 shows graphically how the choice of approach can affect the quality of the signing system. While initially the ad-hoc approach (Approach "A") may appear appropriate, and indeed it can provide a fast response, there is the chance of long-term problems arising and the system quality falling over time.
### TABLE 4.1 APPROACH TO MANAGING TOURISM SIGN REQUESTS

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**NOTE:**

"unstable" can be defined as a seemingly stable sign system but with potential to become very unstable, very quickly. The subsequent demand on resources and finances can thus be swift and large, as previous efforts are repeated to try to maintain the status quo.

This would therefore necessitate greater costs at a later stage due to poor sustainability.

2 An approach between “A” and “B” never quite meets tourism demands and thus while it may create expectations, good system quality cannot be achieved. This approach tends to be unproductive while incurring high cost, and is thus not cost-effective and cannot be recommended.

3 The pro-active approach (Approach “B”) is the recommended approach. Although it appears to incur relatively high costs at an early stage, this should be measured against the associated benefits and longer-term sustainability and acceptance. Hence, as this approach progresses (and using the approval process depicted in Figure 4.4) deeper understanding by the tourism stakeholders and RTO’s would lessen the workload on the road authority. Hence, there would be a long-term improvement and subsequent maintenance of the road signing system quality in a cost-effective manner. In addition, the likelihood of conflict would be reduced. For this level of effectiveness to be achieved a primary guidance signing system needs to be in place.

4 **Checklist 3:**

1 The checklist for determining which approach to adopt requires a thorough understanding of the tourism environment (present and future) together with the technical component of the guidance system in place:

   a) What is the potential demand for tourism signing in the region or area? (NB: ad-hoc responses can often stimulate further demands and "special cases" should be avoided);

   b) How organised and representative are the local and regional tourism bodies?
Detail 4.5.1 The Road Authority’s Approach to Managing Requests

Detail 4.5.2 Managing Costs versus System Quality

Fig 4.5 Managing Requests for Tourism Signs
(c) How knowledgeable is the tourism community on guidance signing principles?
(d) Does an area-wide document exist that combines signing principles with tourism needs?
(e) Is there commitment from the road authority and the tourism industry to address the concerns in the long-term?

5 It should be emphasised that the recommended approach is the pro-active one. While it is the most cost-effective, long-term solution, its cost should be proportional to the magnitude of the tourism demands and need not be disproportionately expensive if the tourism stakeholders become involved and accept responsibility for various tasks. The potential effects of the different approaches to the management of tourism sign applications are summarised in Table 4.1.

4.2.8 Classification of Tourism Destinations

1 In order to successfully implement tourism signs it is recommended that the structured approach described in this section be followed. It is necessary also to have available a well-structured classification of tourist destinations so that applications from facility operators can be assessed in a standard way in terms of a range of recognised types of activity, attraction or service. Classifying applications in this way, according to destination type, will also make it possible for the relevant tourism committee and the road authority, to allocate the appropriate symbol for use on approved signs.

2 It is possible that an applicant, or the assessing official, may feel that there is more than one option for classification. In general it is recommended that, wherever possible, the most generic classification be used since this is likely to result in the use of a more easily recognisable tourism symbol on the sign. In this context, if a facility offers more than one activity, attraction or service the applicant should be asked to choose which one is most appropriate for classification purposes.

3 To assist the classification process tourist attractions have been reorganised into generic or "family" groupings. Table 4.2 illustrates this revised classification and the listing of approved symbols covered in Subsection 4.3.10 has been organised into the same groupings.
4.3 RANGE OF APPLICABLE SIGNS AND SYMBOLS

4.3.1 General

1 This section gives examples of each of the various TOURISM signs in the GF number series. These signs comprise part of the GUIDANCE SIGNS class of road traffic signs. In addition details are given, with figures, of the signface design rules applicable to tourism signs since these are commonly not followed correctly by designers and/or manufacturers. Finally the section lists all approved TOURISM SYMBOLS in the various GFS series.

2 TOURISM signs may be used in conjunction with FREEWAY DIRECTION signs, DIRECTION signs and/or LOCAL DIRECTION signs or they may be specified on their own, either at the final turn towards a tourist facility or in advance of this point when there are no other orientational destinations which warrant the provision of a DIRECTION sign. In this manner tourism signs and local direction signs are both supplementary sign systems which may support and amplify the orientational DIRECTION sign system when warranted. Since they are supplementary they should only be provided in accordance with relevant warrants (see Section 4.6 and Chapter 9).

3 The examples of tourism signs given in Figures 4.6 to 4.10 are relevant in rural and urban areas, and for use with direction signs or on their own. Limited details of specific aspects of tourism signing are also covered in the following Volume 2 chapters:

(a) Chapter 5: Freeway Signing;
(b) Chapter 9: Urban Guidance Signing;
(c) Chapter 10: Rural Guidance Signing.

4 In particular Chapter 9: Urban Guidance Signing covers the warrants appropriate to the provision of tourism signs in urban areas, whereas the warrants given in this chapter are relevant to rural and, in many instances, peri-urban areas. Chapter 9 also covers the option to combine the display of supplementary tourism signs and local direction signs, although examples are illustrated in Figure 4.10 for completeness.

5 Details of the positioning of tourism signs are covered in Section 4.7 and in Chapter 9.

4.3.2 Tourism Signface Design Details

1 Figure 4.6 illustrates a representative selection of FREEWAY EXIT signs GF1. This type of sign will only be warranted on a freeway when the exit leads directly to the facility indicated and will not normally be warranted when the intersecting route is a numbered route. Detail 4.6.1 gives examples of single panel GF1 signs indicating tourist attraction and service destinations. The “Kranskop 1-Stop” sign serves as a “final turn” sign, at the point of exit, to a direct access rest-and-service area serving freeway traffic - it would be preceded, at one kilometre from the exit by the similar sign given in Detail 4.6.3. The “Witbank Hospital” example illustrates the unique use of the facility name with a service symbol reserved for hospitals offering 24 hour emergency services. Detail 4.6.2 shows two typical examples of 2-panel GF1 signs with tourist attraction, service, tourist route and accommodation tourist destinations.

2 Detail 4.6.3 gives examples of two maximum display criteria, namely:

(a) a maximum of three panels (or stacks - see Figure 4.11) on any one sign; and
(b) a maximum of three lines of text in one panel;
(c) a maximum of 12 bits of information on any sign or in any sign cluster.

3 In Figure 4.7, the most common two tourism direction signs, ADVANCE TURN sign GF2 and FINAL TURN sign GF3, are illustrated. These signs may be used on any class of at-grade road, in rural or urban areas, according to various rules and warrants. In Detail 4.7.1 the “Platorand” example of a GF2 sign is unusual in that it includes a regional route number indicating that the route serves only tourism destinations of importance. The straight-on example to “uMkhelekhele Waterfall” is also unusual and is only generally specified when the facility is further from the junction than might be expected, or is located on a “dead-end” route. The two “Police” examples illustrate the option to include a distance on such a sign, an important piece of information in an emergency.

4 Detail 4.7.2 shows typical GF3 signs to a tourist attraction, hospital (24 hour emergency service), camping services, with a 3-line panel example and a 2-panel example.

5 The majority of the rest of the range of tourism sign types are given in Figure 4.8. GORE EXIT sign GF4 is appropriate only at a high speed exit to a direct access rest-and-service area, normally from a freeway. LAYBY signs GF5 and GF6 may be used in advance of, and at, a roadside layby. The symbol on the signs may be varied (see Volume 1, Chapter 4). Two examples of tourist destination CONFIRMATION signs GF7 indicate options to indicate a service or a tourist attraction and are normally only warranted when the distance to the facility is further than road users are likely to expect.

6 Sign types GF8 and GF9 deal with sequences of service facilities available at exit points on the road ahead. The GF8 sign shows three exits over a range of 13 kilometres on the perimeter or by-pass of a town. The GF9 signs only show two facilities per sign according to a principle whereby each sign shows the next facility approximately 2 kilometres ahead and the subsequent facility some 40 kilometres to 50 kilometres ahead (see Figures 4.43 to 4.48).

7 TOTEM signs GF10 may be used within a rest-and-service area, or other area such as a large park or game reserve. They should be used in clusters as shown in Figure 4.16. Signs GF11 to GF14 are for use in conjunction with a roadside SOS telephone service. GF15 may be specified to “mark” or identify a free parking area and GF16 similarly may be used to identify a tourist information layby, centre or office.

(continued on page 4.3.7)
4.3.2

Fig 4.6 - Freeway Tourism Advance Exit Signs

Detail 4.6.1 Typical Single-Panel GF1 Signs

Detail 4.6.2 Typical 2-Panel GF1 Signs

Detail 4.6.3 Typical Examples of GF1 Sign Maximum Displays
Fig 4.7 At-Grade Tourism Direction Signs

Detail 4.7.1 GF2 Advance Turn Direction Signs

Detail 4.7.2 GF3 Final Turn Direction Signs
4.3.4 Other Tourism Signs

Fig 4.8 Other Tourism Signs
4.3.5

Fig 4.9  Signs for Numbered Tourist Routes

Detail 4.9.1 Typical Tourism Direction Signs with Tourist Route Numbers (for High Density Tourist Areas)

GF1 Freeway Advance Exit Sign to a Tourist Route

GF2 Advance Turn Sign to a Tourist Route

GF2 2-Panel Advance Turn Sign to a Tourist Route

2xGF2 Advance Turn Signs with 2-Stack/1 Panel/2 Panel Layout

GE18 Tourist Route Confirmation Sign

GE18.1

GE18.2

Direction Tourist Route Marker Sign

GE18.3

GE18.4

Advance Direction Tourist Route Marker Signs

GE18.5

Detail 4.9.2 GE18 Tourist Route Marker Signs
4.3.6 SIGNS AND SYMBOLS

Detail 4.10.1 Tourism Sign / Supplementary Symbol Combination

NOTE:
For further details of Local Direction signs see Volume 1, Chapter 4 and Volume 2, Chapter 9.

Detail 4.10.2 Tourism Sign / Local Direction Sign Combinations

Detail 4.10.3 Tourism Sign Panels / Inset Panels with Direction Signs

Fig 4.10 Tourism Sign Combinations
4.3.3 Sign Dimensions - General

1. This subsection gives details of the dimensions of tourism direction signs and the symbols used on them so that they may be accurately specified and manufactured. The most important signface display dimensioning rules are also detailed in Figures 4.11 to 4.17. Rules governing when a tourism sign may be displayed are given in Volume 1, Chapter 4, in Section 4.9.

2. Tourism signs conform to the basic rectangular shape code of the guidance signs class but are unique in that all turn signs shall have the arrow side edge cut back from top to bottom at a slope of 2 in 5 to create a trapezoidal shape. They are also unique in the use of a brown background colour. Other tourism signs, such as straight-on signs, confirmation signs, exit sequence signs, information boards and parking signs are rectangular. "Totem" signs used within rest and service areas are square.

3. Tourism signs are STACK-TYPE signs and a separate STACK shall be provided for each direction which requires a tourism sign at the junction ahead. (The exit point of a freeway off-ramp is considered as one junction, and the ramp terminal with the intersecting cross-road as a second and separate junction. A freeway advance exit tourism sign shall therefore only comprise one STACK oriented to the left.)

4. A tourism STACK-TYPE sign may be arranged in up to three PANELS, each separated from the other by an internal border line. When a tourism sign cluster comprises more than one STACK the total number of STACKS and/or PANELS shall be limited to three (see Figure 4.11).

5. Tourism signface design is based on bold SYMBOLS to transfer the required message to road users. Designers should refer to Volume 1 for tourism sign design principles, restrictions and limitations.

6. Symbols other than those detailed in this Manual shall not be used without the prior consent of the Road Traffic Signs Technical Committee. Wherever possible the facility type requiring signing should be classified into one of the "generic" groups (see Subsection 4.3.10). If the need arises for a symbol which is not detailed in this Chapter, or cannot be covered by the principle indicated above, the designer or manufacturer shall make this need known, with a sketch proposal, to:

   The Secretary,
   Route Numbering and Road Traffic Signs Sub-Committee,
   c/o Department of Transport,
   Private Bag X193,
   Pretoria,
   0001.

4.3.4 Sign Sizing

1. Dimensional details of tourism signs are based on the factor "d". This factor represents one seventh ($\frac{1}{7}$) of the height of the upper case DIN 1451 Part 2 lettering specified for the principle message on the signface and is equal to the stroke width of this lettering. Once the letter height appropriate to the amount of message to be displayed has been selected the sign height can be determined, and the sign length may be found from a combination of spacings based on the factor "d" plus the length of the message to be displayed. Sign sizes for the full range of letter sizes available may thus be determined from one detail.

2. The selection of an appropriate letter size is based on the number of "bits" of information required on the signface, the approach speed of traffic and the lateral distance from the drivers eye to the sign, (see Volume 1, Chapter 4 for full details of letter size determination).

3. All arrows and symbols used on tourism signs are also specified in terms of factor "d". In a limited number of cases the sign design requires letters, symbols or other components in more than one size on the signface. In these cases the secondary factor size is represented by a variation of "d" such as "d2" or "d3".

4. It should be noted that the vertical spacings between components and the horizontal spacings between certain components are not the same as on direction signs. The spacings used on tourism signs are to a lower standard than direction sign standards, consistent with the supplementary role of tourism signs and with the desired objective to limit overall sizes of tourism signs. Letter spacings remain standard.

5. Sizing a sign around the stroke width factor "d" may result in a vertical sign height which is not a multiple of 200 mm. Since the construction of guidance signs from standard 200 mm planks is common with some authorities, this will result in a need to "round-up" the sign height to a multiple of 200 mm. The extra dimension

(continued on page 4.3.10)
Notes on Figures 4.11 and 4.12

The details in Figures 4.11 and 4.12 illustrate BASIC RULES which apply universally to TOURISM signs. Other RULES dealing with text, symbols, and sign dimensions are covered on following pages.

**Rule F1:**
Tourist facilities shall be classified for signface design into one of the following groups (see Table 4.2):
(a) tourist attraction;
(b) tourist service;
(c) accommodation;
(d) off-road;
(e) part-time;
(f) temporary.

**Rule F2:**
The background colour of TOURISM signs shall be BROWN, and text and symbols shall follow normal DIRECTION sign conventions.

**Rule F3:**
TOURISM Direction signs for full-time facilities shall be stack-type signs, and for part-time facilities shall be fingerboard signs.

**Rule F4:**
TOURISM signs shall be rectangular in shape and all signs indicating a turn to the right or left shall have a sloping side "pointing" in the direction of turn.

**Rule F5:**
TOURISM Direction sign stacks may be divided into a maximum of three panels.

**Rule F6:**
A TOURISM sign cluster may comprise 2 or 3 signs, SUBJECT to an overall total of 3 stacks and/or panels.

AND

F6.1 right turn stacks shall be placed above left turn stacks;
F6.2 a straight on stack shall be placed above any right and/or left turn stacks;
F6.3 multi-stack signs shall be mounted on common supports with a small vertical separation and should preferably be of equal length even if this increases the length of one or more stack.

**Rule F7:**
Due to the sloping side shape, Stack-Type TOURISM Direction signs need not display an arrow. FREEWAY TOURISM signs GF1 shall have only one stack and shall not display an arrow. It is, however, recommended that arrows be used on ADVANCE TURN GF2 signs and FINAL TURN GF3 signs.

**Rule F8:**
In the context of all other signface rules, all aspects of signface design shall be undertaken so as to minimise the areas of TOURISM signs.

**Rule F9:**
Basic internal signface spacing standards shall be at least 20% less than for DIRECTION signface design.

---

**Fig 4.11 Illustration of Basic Tourism Signface Rules - 1**
Rule F10:
All TOURISM Direction signs shall be designed and manufactured using DIN 1451 Part 2 lettering and shall be dimensioned in terms of the factor “d”, where “d” is the DIN letter stroke width, and the standard DIN letter height is 7“d”.

AND

F10.1 in line with Rule F9, basic internal spacing standards, given in multiples of factor “d”, shall be less than those used on DIRECTION signs;
F10.2 stack and panel heights are dictated by the 15“d” standard symbol height;
F10.3 all TOURISM SYMBOLS shall be specified in terms of factor “d”, within a range of nominal standard widths and height (see Figure 4.13);
F10.4 stack and panel heights are specified as multiples of factor “d”, SUBJECT to whether the sign construction uses standardised horizontal planks;

Rule F11:
The TOURISM Direction sign system shall be symbol based i.e. the main message comes from the symbol.

AND

F11.1 any text message used on a TOURISM Direction signs shall be limited to the “primary name” of a tourist attraction i.e. “Tsitsikamma” is the primary name for the “Tsitsikamma National Park” and the symbol used means “National Park”; a primary name thus qualifies the message of the symbol by making it specific to a particular facility;
F11.1.1 a primary name may be used as part of a tourist attraction or accommodation message, and may be used for a 24 hour emergency service hospital, and for rest and service areas SUBJECT to compliance with warrants;
F11.3 a tourist attraction symbol may be used on its own;
F11.4 only approved symbols listed in Subsection 4.3.10 shall be used on TOURISM signs;
F11.5 if an approved symbol is not available for a tourist attraction, a primary name may be used on its own.

Rule F12:
Different classes of facility shall be indicated in different panels, and different types of facility within one class shall be indicated in different panels so that the most important attraction is in the top panel, BUT so that sign length is otherwise minimised, SUBJECT to the maximum given in Rule F6 of 3 stacks and/or panels.

AND

F12.1 different facilities shall be placed in panels such that tourist attractions are above accommodation or service and accommodation is above service;
F12.2 up to 3 primary names of facilities of the same type may be indicated in one stack or panel SUBJECT to Rule F13.

Rule F13:
The maximum number of “bits” of information on a TOURISM Direction sign or sign cluster should be 12 “bits”.

Rule F14:
A tourist destination may be displayed on a BROWN stack or insert panel on a DIRECTION sign when the tourist destination is the only destination or where there is not enough space to locate the sign safely.
4.3.10 Signs and Symbols

(continued from page 4.3.7)

should be distributed evenly through the vertical spaces. "Rounding-down" is not recommended with tourism signs since the inter-line spaces are a minimum in terms of the reduced standards adopted, unless the symbol being used is less than 15 "d" in height and there is only one line of text in the stack or panel.

For complete details of all aspects of guidance sign face design refer to Volumes 1 and 4. Volume 4, in particular, includes many more dimensional details than covered by the illustration of signface display rules in this section.

4.3.5 Sign Text

1. Tourism sign displays include a symbol plus a primary name for tourist attraction facilities, and certain accommodation signs. In order to obtain maximum benefit from the use of the symbol therefore, every effort should be made to limit the text displayed on tourism signs to the minimum consistent with getting the required message over to road users.

2. Service facility signs display only symbols, with the exception of hospitals with 24 hour emergency services, and Glass 3 rest and service areas, which also display the primary name of the facility.

3. Basic tourism sign displays, as illustrated in Figure 4.11, can carry one or two lines of text without an increase in sign size. When the primary name of a facility is in two parts, or is long but capable of being hyphenated, it is highly recommended that the name be displayed in the two lines available. Although this is not the style of display used for direction signs, it is once again consistent with the supplementary role of tourism signs that this method be used to limit sign length. When the name of a facility is displayed in this manner the text shall be justified to the right of the sign to differentiate the display from that of two names of two separate facilities, which shall be displayed in the normal left justified manner (see Figures 4.15 and 4.16).

4. As implied the term "primary name" of a tourism facility is that part of the name of the facility which CANNOT be represented by the symbol used on the sign. This name will identify a particular facility from another of the same type. The display of all other superficial text should be avoided.

5. When the primary name requires only one line it shall be centred vertically on the stack or panel. Indication of a route number, distance or supplementary symbols in addition to the facility name this is an acceptable variant (see Figures 4.6 to 4.10).

6. Occasionally two names to be displayed on a tourism sign may be of considerably different lengths. This will result in a very unbalanced signface layout. The possibility to centre a shorter message over, or under, a longer message may be considered.

7. The lettering used on tourism signs should normally be DIN 1451 Part 2, Style "B". Style "A" may be used when space is severely limited and speeds are not high.

4.3.6 Symbols

1. Only approved symbols given in Subsection 4.3.10, as amended from time to time, shall be used on tourism signs. Direction sign symbols shall not be used on tourism signs.

2. If a tourism sign display includes a symbol plus a primary name the symbol shall always precede the primary name irrespective of the direction indicated by the sign, EXCEPT when supplementary symbols are used (see Figure 4.14).

3. Approved symbols have been designed within a range of basic sizes with a nominal height of 15d and nominal widths of 25d, 15d and 11d. Many symbols, however, vary from these nominal dimensions either vertically or horizontally, or occasionally in both dimensions. The dimensioned sign examples all illustrate one or other, or several, of these nominal sizes. All symbols are centred vertically on the stack or panel, and stack or panel heights are fixed as a multiple value of factor "d", irrespective of the actual vertical dimensions of the particular symbol(s) in use, or the text displayed, UNLESS noted otherwise. Vertical centre marks are indicated with each symbol for this purpose. The range of vertical symbol dimension varies from 20d (Police symbol) to 7d (Bus symbol). When a Police symbol is specified, the stack or panel height is not normally increased. In this case the vertical spaces are reduced. Examples of this principle are illustrated in Figure 4.13.

4. Sign dimensions will vary horizontally according to the symbol, or symbols, specified. As the actual symbol width is greater or less than the nominal sizes shown on the dimensioned examples so will the final sign length become greater or less. The standard spacing between symbols, or between symbols and text, should be maintained irrespective of the variation in actual symbol width, UNLESS noted otherwise. Horizontal centre marks are indicated with each symbol to assist accurate positioning and the correct vertical application of symbols. This latter aspect may be difficult with circular symbols and symbols which are not symmetrical. Actual symbols widths range from 25d to 7d (Workshop symbol). Examples of horizontal symbol spacings are given in Figure 4.13.

5. A few symbols project outside the boundaries of their height and width "grid" by small amounts. These projections are taken up in the surrounding spaces and do not affect the function of centre marks.

6. The tourism sign symbols detailed in Volume 4 are drawn to a scale of 1 in 5 for "d" = 40 mm, or in other words for a sign letter size of 280 mm/200 mm. The symbols are superimposed on a grid of 4 mm x 4 mm squares so that "d" equals two grid squares. If the tourism sign display includes three or more lines of text the symbol may be increased in size to maintain its proportion with the overall sign size. The symbol is specified by "d*", where "d*" is normally the next largest standard value of "d" (see Figures 4.15 and 4.16 - Rule D19).

7. In order to prepare a full size symbol the detail given may be enlarged photographically, by projection, or by drawing. In each case the grid should be such that the line centres are a distance of one half (1/2) "d" apart, where "d" is the stroke width of the letter size with which the symbol is to be used. (continued on page 4.3.16)
Notes on Figures 4.13 and 4.14

The details given in Figures 4.13 to 4.17 deal with a wide range of DISPLAY RULES relevant to the use of symbols, and symbols and text on TOURISM signs. These rules should be considered as an extension of the BASIC RULES covered by Figures 4.11 and 4.12.

It should be noted that Basic Rule F10 states that all TOURISM Direction signs shall be dimensioned in terms of factor “d”, where “d” is the DIN 1451 letter stroke width.

TOURISM Direction sign symbols are numbered in a GFS series, and are classified into the same groupings as tourist destinations. The symbols are further divided into generic sub-sets. Each tourist attraction sub-set is provided with a generic symbol (see Table 4.2 and Subsection 4.3.10)

(For clarity of illustration there is an element of repetition of detail between the two sets of figures. Whilst generally, symbol rules are covered by Figures 4.13 and 4.14, and text rules by Figures 4.15 and 4.16, users of this chapter should familiarise themselves with all rules.)

Rule Fd1:
TOURISM sign symbols shall be centred vertically in a stack or panel, irrespective of actual symbol size, and they shall be separated from text or another symbol by a 4“d” space. (To assist this process, both on drawings and at time of manufacture, all symbols are drawn to scale, with vertical and horizontal centring marks, in Volume 4, Chapter 7.)

Rule Fd2:
All TOURISM sign symbols shall be prepared around the concept of a “box” of standard nominal height of 15“d” and of one of the standard nominal widths, 25“d”, 15“d” or 11“d”. (When submitting designs of new symbols, designers must attempt to make their symbols “touch the sides” of the box SUBJECT to reasonable proportions. This process will simplify drawing and manufacture.)

Rule Fd3:
When symbols are less than the nominal 15“d” height a stack or panel shall not be reduced in height - the range in height of existing symbols is from 7“d” to 20“d” (see Figure 4.12 for standard stack and panel heights of one, two and three stack/panel signs):

AND

Fd3.1 stack and panel lengths shall be reduced in length when symbols are less than nominal length;

Fd3.2 when a symbol has a particularly elongated or pointed shape the pointed extremity may be permitted to extend outside the basic “box” in order not to prejudice good target value for the rest of the symbol.

Fig 4.13
Illustration of Tourism Signface
Symbol/Text Rules - 1
Rule Fd4:
When a full size symbol is used (see Rule F8), it shall always precede the primary name text, whether the sign is directing drivers to the right, left, or straight on.

AND

Fd4.1 if a TOURIST Route Number is to be displayed on the sign it shall precede any full size symbol;

Fd4.2 if a symbol design implies a sense of direction the symbol should be rotated to face in the same direction as the turn arrow on the sign, UNLESS the symbol is the facility operators' LOGO.

Rule Fd5:
A standard stack or panel displaying a symbol designed within the nominal size range can support two lines of text without an increase in stack or panel height (see further rules on the use of text on TOURISM Direction signs).

Rule Fd6:
If a stack or panel displays three lines of text, the symbol preceding these lines of text shall be increased in size so that the 15"d • for the symbol equals 15"d + 10 mm", (or 15 times "d" for the next larger standard letter size).

Rule Fd7:
Supplementary symbols may be used in place of full size symbols on accommodation class signs to limit signface area, and in addition on other signs, SUBJECT to compliance with Level 3 Warrants (see Section 4.6):

AND

Fd7.1 supplementary symbols shall be reduced in size so that the 15"d • for the symbol equals 15"d/2";

Fd7.2 when used, supplementary symbols shall be located below the primary name, in the position reserved for a second line of text.

Rule Fd8:
A tourist service stack or panel shall not display more than 5 service symbols;

AND

Fd8.1 SUBJECT to the influence of other rules, if a service stack displaying only symbols will otherwise exceed 4 m in length, such a stack should be altered to contain two panels;

Fd8.2 multiple service symbols shall be arranged in a stack or panel in order of sub-sets i.e. B1 to B7.

Rule Fd9:
Wherever possible, generic symbols should be used in preference to individual symbols.

Rule Fd10:
The above rules for symbol display on stacks and panels shall also apply to the display of symbols on GF17 fingerboard signs, EXCEPT that symbols shall not be used on temporary fingerboard signs TGF17.

Fig 4.14 Illustration of Tourism Signface Symbol/Text Rules - 2
Notes for Figures 4.15 and 4.16:
The details given in Figures 4.13 to 4.17 deal with a wide range of DISPLAY RULES relevant to the use of symbols, and symbols and text on TOURISM signs. These rules should be considered as an extension of the BASIC RULES covered by Figures 4.11 and 4.12.

It should be noted that Basic Rule F10 states that all TOURISM Direction signs shall be dimensioned in terms of factor “d”, where “d” is the stroke width of a DIN 1451 Part 2 letter. DIN 1451 lettering is fully proportional and it is normal design practice to dimension a word in the BASIC LETTER HEIGHT of 112 mm (uppercase size) from tables, and then for the required letter size by multiplying by a factor. The factor can be obtained by dividing the required uppercase letter size by 112 mm i.e. 210 mm divided by 112 mm gives a factor of 1.875 for 210 mm x 150 mm lettering. Tables of letter widths and spacings are given in Volume 4, Chapter 11.

(For clarity of illustration there is an element of repetition of detail between the two sets of figures. Whilst generally, symbol rules are covered by Figures 4.13 and 4.14, and text rules by Figures 4.15 and 4.16, users of this chapter should familiarise themselves with all rules.)

Rule Fd11:
Any text used to indicate a destination name in the display on a TOURISM Direction sign shall be provided in DIN 1451 Part 2 lettering, either in Style “B”, or in Style “A”. The latter is a condensed letter style.

Rule Fd12:
The minimum horizontal spacing between words, and between words and other signface components such as arrows and symbols, and any of these components and the inner edge of a vertical border line shall be 4"d”.

Rule Fd13:
The minimum vertical spacing between lines of text, and between lines of text and the inner edge of a horizontal border line shall be 3"d” (for details of symbol spacings refer to the examples in Figures 4.13 and 4.14).

Rule Fd14:
Because TOURISM sign symbols are sized to support two lines of text, it is cost effective and therefore recommended, to use two lines of text wherever possible, to limit sign length, SUBJECT to the effects of other rules:

AND

Fd14.1 if a tourist destination name is long and can be hyphenated, or has two or more words, the text should be split to minimise sign length;

Fd14.2 when a name is split into two lines the lower row of text should preferably be shorter than the upper row and the text should be right justified;

Fd14.3 if it is not practical to have the lower row shorter then the text should be left justified.

NOTE:
Although reducing sign area will save cost and reduce environmental intrusion, certain word groups may be considered better than others i.e. “Gold Reef” rather than “Reef City” and “Safari Lodge” rather than “Zululand Safari”. This factor may influence a final decision on signface layout.

Fig 4.15
Illustration of Tourism Signface
Symbol/Text Rules - 3
Rule Fd15:
When a symbol supports two or three different names of the same type of facility i.e. beaches, then the rows of text shall be left justified, and the destinations should be ordered so that the first, or the first to have a change of direction, is at the top, and so on: SUBJECT to right destinations always being above left destinations on FREEWAY Advance Exit sign GF1.

Rule Fd16:
FREEWAY Advance Exit sign GF1 shall display an Interchange Number when the freeway concerned has numbered interchanges.

Rule Fd17:
If a road serving only a tourist destination has a route number this number may be displayed on the tourism sign.

Rule Fd18:
On multiple stack or panel signs, for aesthetic appearance (which may improve reading times), it is recommended that in certain instances symbols be lined up vertically, and text be justified vertically across stack and/or panel borders; this may result in larger than minimum spacings.

Rule Fd19:
A distance to a tourist facility may only be displayed on a tourism sign when the facility is further from the first, or subsequent "follow-up" signs than might reasonably be expected, or is at the end of a dead-end road; or the sign is an Exit Sequence sign GF8 or GF9 indicating the distance to two or more facilities or sets of facilities:

AND
Fd19.1 when a single distance is displayed on a sign the letters "km" shall follow the numerals;
Fd19.2 when more than one distance is displayed only the numeral shall be displayed;

BUT
Fd19.3 the distance to a facility shall not be displayed on a freeway - the distance to the freeway exit may be displayed on sign GF1 when it is in advance of the exit and when the exit gives direct access to the facility.

Rule Fd20:
Fingerboard sign GF17, used only for Part-time facilities, may be made to standard lengths, and the length of sign messages adjusted to suite by use of letter Styles "A" and "B", as appropriate, with abbreviations if necessary; an appropriate standard sign length can be determined for an area by studying the likely destinations.

Fig 4.16
Illustration of Tourism Signface
Symbol/Text Rules - 4
Fig 4.17  Typical Off-Road Tourism Signs
Values of “d” for the more standard letter sizes are:
\[ d = \begin{cases} 
60 \text{ mm} & \text{for 420 mm/300 mm letters} \\
50 \text{ mm} & \text{for 350 mm/250 mm letters} \\
40 \text{ mm} & \text{for 280 mm/200 mm letters} \\
30 \text{ mm} & \text{for 210 mm/150 mm letters} \\
25 \text{ mm} & \text{for 175 mm/125 mm letters} \\
20 \text{ mm} & \text{for 140 mm/100 mm letters} \\
16 \text{ mm} & \text{for 112 mm/80 mm letters} 
\end{cases} \]

Service facility signs normally use symbols without text. The value of “d” appropriate to the preparation of these symbols may be derived in one of the following ways:

(a) when several symbols are used, by counting the number of “bits” of information and applying the sizing process to determine factor “d” as detailed in Volume 1, Chapter 4;

(b) if a single symbol is used, by treating the sign as a basic tourist attraction sign, with a primary name, and using the value of factor “d” so derived;

(c) if the service symbol display forms one stack, or one panel, of a multi-stack or multi-panel sign the value of factor “d” used should be derived for the full sign display, not for each stack or panel individually.

When a symbol is not symmetrical about its vertical centre-line, and the symbol implies a sense of direction, the symbol should be turned to face in the direction of the arrow or sloped sign edge, as appropriate. This requirement does not apply to “logo” type symbols e.g. the kwaZulu Natal Parks Board rhino, which have a fixed orientation based on their use as “logos”.

Service symbols shall appear in a stack or panel, from left to right, in the following order:

(a) emergency services;
(b) light vehicle services;
(c) truck services;
(d) food services;
(e) general services;

EXCEPT when a hospital emergency service, with its primary name, is displayed, in which case this message should be located to the right of all other service symbols displayed in the line in which it is to appear.

Some tourist attraction/service stack/panel combinations may result in a very unbalanced signface layout. This may commonly happen when there is only one service symbol to be displayed. In such cases the overall sign appearance may be improved by centralising the service symbol in its stack or panel. This treatment need not be followed if additional service symbols are anticipated during the useful life of the sign.

### 4.3.7 Supplementary Symbols

1. Supplementary symbols are half sized symbols which may occupy the position of a line of text with slightly reduced spacings above and below the supplementary symbols. In order to size a supplementary symbol, (where the height of the symbol is commonly 15d●), “d●” should be taken to equal “d”/2.

2. Subject to Level 3 warrant requirements, supplementary symbols may be used as follows:

(a) in place of main symbols, under the primary name of an accommodation facility;

(b) in addition to a main symbol, under the primary name of a tourist attraction facility.

3. The use of supplementary symbols on accommodation facility tourism signs is recommended in order to reduce sign size.

4. The use of supplementary symbols in addition to a main symbol should only occur if there is a very good reason, in the interest of road users, why such supplementary information should be displayed. The use of supplementary symbols should be in conformity with the warrants (see Section 4.6).

### 4.3.8 Arrows

1. Arrows used on tourism signs are standard STACK-TYPE arrows as used on ground-mounted direction signs.

2. For details of STACK-TYPE arrows see Volume 4, Chapter 5.

### 4.3.9 Off-Road Tourism Signs

1. Tourism signs are available for off road applications as follows:

(a) “totem” signs; and

(b) information boards.

2. These off road signs use symbol ranges which are unique to their applications (see Group D1 and Group D2 symbols in Subsection 4.3.10).

3. The use of "Totem" signs within a rest and service area or other large tourist environment is a unique application. "Totem" signs are mounted in clusters and as such are different to other tourism signs (see Figure 4.17).

4. "Totem" signs should not be used alongside an open high speed roadway. Their use may be considered for use within other recreational or park areas where there are many internal facilities and vehicle speeds are low.

5. Information boards may utilise Group D2 symbols in addition to all other available tourism symbols. Group D2 symbols are commonly "logo" symbols appropriate to specific geographical areas or commercial groupings of resorts or facilities.
4.3.10 Symbols for Tourist Attractions

1. All approved tourism sign symbols in the various GFS series are listed below. These will be updated and added to from time to time.

2. Symbols in the GFS A series are provided for tourist attractions. These series have been restructured to assist those working with tourism signs. There are now twelve groupings of analogous attractions. Each group has been allocated a symbol which is illustrated on the first page of the listing and again at the beginning of each group listing.

3. The generic or family symbol may be used on signs to identify collective groups of tourist attractions, commonly either along a tourist route or in a high density tourist area, to be followed on signs at the individual tourist attractions by one of the other symbols in the appropriate group. The use of symbols from other groups is not precluded by this principle but the objective is to develop common tourism themes. The family symbols may alternatively be used for all facilities on a route or in an area.
Tourist Attractions: Group A3 - Resorts Attractions

GFS A3
Generic - Resorts

GFS A3-1
Country Club (Golf major activity)

GFS A3-2
Hot Springs Resort

GFS A3-3
Inland Water Resort

GFS A3-4
Seaside/Beach Resort

GFS A3-5
Berg/Mountain Resort

Tourist Attractions: Group A4 - Scenic Attractions

GFS A4
Generic - Scenic Attractions

GFS A4-1
Nature Reserve

GFS A4-2
Natural Heritage

GFS A4-3
Botanical Garden

GFS A4-4
Gardens (Flower)

GFS A4-5
Waterfall

GFS A4-6
Lake or Dam (no watersport)

GFS A4-7
Caves

GFS A4-8
View Point

GFS A4-9
Forest (Natural)

GFS A4-10
State Forest

GFS A4-11
Mountain / Berg
Tourist Attractions: Group A5 - Sports Attractions

GFS A5
Generic - Sports Attractions

GFS A5-1
Motor Racing Track

GFS A5-2
Golf Course

GFS A5-3
Race Course

GFS A5-4
Equestrian Events

GFS A5-5
Fishing

GFS A5-6
Cricket Field

GFS A5-7
Swimming Pool

GFS A5-8
Sports Stadium

Tourist Attractions: Group A6 - Wildlife Attractions

GFS A6
Generic - Wildlife

GFS A6-1
Conservancy Area

GFS A6-2
Game Reserve

GFS A6-3
Bird Park/Sanctuary

GFS A6-4
Zoo

GFS A6-5
Snake Park

GFS A6-6
Crocodile Park

GFS A6-7
Rhino Park

GFS A6-8
Lion Park
Tourist Attractions: Group A7 - Historic Attractions

- GFS A7
  Generic-Historic

- GFS A7-1
  National Monument

- GFS A7-2
  Museum

- GFS A7-3
  Historic Mine

- GFS A7-4
  Historic Railway

- GFS A7-5
  Historic Battlefield

- GFS A7-6
  Historic Cemetery

- GFS A7-7
  Geological Site

Tourist Attractions: Group A8 - Coastal Attractions

- GFS A8
  Generic-Coastal

- GFS A8-1
  Marine Reserve

- GFS A8-2
  Maritime Museum

- GFS A8-3
  Aquarium

- GFS A8-4
  Whales

- GFS A8-5
  Dolphins

- GFS A8-6
  Lighthouse

- GFS A8-7
  Dockyard

- GFS A8-8
  Boat Launch

- GFS A8-9
  Fishing

- GFS A8-10
  Crayfish

- GFS A8-11
  Oceanarium

- GFS A8-12
  Beach
Tourism Attractions: Group A9 - Arts & Crafts Attractions

- GFS A9: Generic - Arts & Crafts
- GFS A9-1: Painting & Drawing
- GFS A9-2: Pottery
- GFS A9-3: Jewellery
- GFS A9-4: Weaving & Knitting
- GFS A9-5: Leather Work
- GFS A9-6: African Arts & Crafts
- GFS A9-7: Woodwork
- GFS A9-8: Metalwork

Tourism Attractions: Group A10 - Cultural Attractions

- GFS A10: Generic - Cultural
- GFS A10-1: Theatre
- GFS A10-2: Amphitheatre
Tourist Attractions: Group A11 - Adventure Attractions

- GFS A11 Generic - Adventure
- GFS A11-1 Hiking Trail
- GFS A11-2 Horse Trail
- GFS A11-3 4 x 4 Trail
- GFS A11-4 Bike Trail
- GFS A11-5 River Rafting
- GFS A11-6 Scuba Diving
- GFS A11-7 Ballooning

Tourist Attractions: Group A12 - Farming Attractions

- GFS A12 Generic - Farming
- GFS A12-1 Wine Cellar
- GFS A12-2 Wine Route
- GFS A12-3 Showground
- GFS A12-4 Cherry Farm
- GFS A12-5 Ostrich Farm with Riding
- GFS A12-6 Ostrich Farm
- GFS A12-7 Fish Farm
- GFS A12-8 Roadside Stall
- GFS A12-9 Butterfly Farm

Tourist Attractions: Group A13 - General Attractions

- GFS A13 Generic - General Attractions
- GFS A13-1 Animal Theme Park
Tourism Services: Group B1 - Emergency Service

- GFS B1-1 Telephone
- GFS B1-2 Police
- GFS B1-3 Hospital (with name)
- GFS B1-4 First Aid Post
- GFS B1-5 SOS Call Station (sign)
- GFS B1-6 SOS Call Station (Post)
- GFS B1-7 NSRI
- GFS B1-8 Ambulance/Medical Services
- GFS B1-9 Fire Station
- GFS B1-10 Cell Phone Emergency No.

Tourism Services: Group B2 - Light Vehicle Services

- GFS B2-1 Filling Station & Workshop
- GFS B2-2 Filling Station
- GFS B2-3 Workshop
- GFS B2-4 Tow-in Service

Tourism Services: Group B3 - Truck - Rest and Service

- GFS B3-1 Truck Rest & Service Area

Tourist Services: Group B4 - Food Services

- GFS B4-1 Restaurant
- GFS B4-2 Refreshments
- GFS B4-3 Take-Away
Tourist Services: Group B5 - General Services

- GFS B5-1 Parking Area
- GFS B5-2 Toilets
- GFS B5-3 Shower
- GFS B5-4 Drinking Water
- GFS B5-5 Fireplace
- GFS B5-6 Cooking Facilities
- GFS B5-7 Picnic Area
- GFS B5-8 Tourist Information
- GFS B5-9 Facility for Handicapped
- GFS B5-10 Roadside Stall/Curio Shop
- GFS B5-11 Post Office
- GFS B5-12 Rural Shop/Cafe/Corner Shop

Tourist Services: Group B6 - Rest and Service Areas

- GFS B6-1 Rest Area Class - 1
- GFS B6-2 Rest Area Class - 2
- GFS B6-3 Service Area Class - 3
Tourist Services: Group B7 - Vehicle Class

- GFS B7-1 Motor Cars
- GFS B7-2 Caravans
- GFS B7-3 Buses
- GFS B7-4 Trucks
- GFS B7-5 Delivery Vehicles
- GFS B7-6 Motor Cycles

Accommodation Services: Group C1

- GFS C1-1 Hotel, Boat, Motel, Inn
- GFS C1-2 Chalet/Self-Catering
- GFS C1-3 Caravan Site
- GFS C1-4 Camp Site
- GFS C1-5 Guest House
- GFS C1-6 Bed and Breakfast
- GFS C1-7 Rooms (Bed Only)
- GFS C1-8 Youth Hostel/Centre/Camp
- GFS C1-9 Trail Shelter
- GFS C1-10 Guest Farm
- GFS C1-11 Ethnic (Zulu)
<table>
<thead>
<tr>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFS D1-1</td>
<td>Motor Cars</td>
</tr>
<tr>
<td>GFS D1-2</td>
<td>Caravans</td>
</tr>
<tr>
<td>GFS D1-3</td>
<td>Buses</td>
</tr>
<tr>
<td>GFS D1-4</td>
<td>Trucks</td>
</tr>
<tr>
<td>GFS D1-5</td>
<td>Motor Cycles</td>
</tr>
<tr>
<td>GFS D1-6</td>
<td>Take-Away</td>
</tr>
<tr>
<td>GFS D1-7</td>
<td>Restaurant</td>
</tr>
<tr>
<td>GFS D1-8</td>
<td>Refreshments</td>
</tr>
<tr>
<td>GFS D1-9</td>
<td>Shop</td>
</tr>
<tr>
<td>GFS D1-10</td>
<td>Facility for Handicapped Persons</td>
</tr>
<tr>
<td>GFS D1-11</td>
<td>Toilets</td>
</tr>
<tr>
<td>GFS D1-12</td>
<td>Telephone</td>
</tr>
<tr>
<td>GFS D1-13</td>
<td>Straight-on Arrow</td>
</tr>
<tr>
<td>GFS D1-14</td>
<td>Left/Right Arrow</td>
</tr>
<tr>
<td>GFS D1-15</td>
<td>Diagonal Left/Right Arrow</td>
</tr>
<tr>
<td>GFS D1-16</td>
<td>Advance Left/Right Arrow</td>
</tr>
<tr>
<td>GFS D1-17</td>
<td>Exit (Route Number)</td>
</tr>
<tr>
<td>GFS D1-18</td>
<td>Parking</td>
</tr>
<tr>
<td>GFS D1-19</td>
<td>Filling Station and Workshop</td>
</tr>
<tr>
<td>GFS D1-20</td>
<td>Filling Station</td>
</tr>
<tr>
<td>GFS D1-21</td>
<td>Picnic Area</td>
</tr>
<tr>
<td>GFS D1-22</td>
<td>Tourist Information</td>
</tr>
<tr>
<td>GFS D1-23</td>
<td>Motor Car Wash</td>
</tr>
<tr>
<td>GFS D1-24</td>
<td>Truck Wash</td>
</tr>
<tr>
<td>GFS D1-26</td>
<td>Drinks Water</td>
</tr>
<tr>
<td>GFS D1-27</td>
<td>Cooking Facilities</td>
</tr>
<tr>
<td>GFS D1-28</td>
<td>Shower</td>
</tr>
</tbody>
</table>
Off Road: Tourism Information Boards: Group D2

GFS D2-1
North. &
Central
Drakensberg
Resorts

GFS D2-2
Southern
Drakensberg
Resort

GFS D2-3
Midlands Meander
(Kwazulu-Natal)

GFS D2-4
Highlands Tourism
(Free State)

HIGHLAND TOURISM
4.4 HIGH DENSITY TOURISM AREAS

4.4.1 General

1. This section deals with the management of high density tourism areas. Such an area could be defined as follows: “the complexity of multiple routes and the proliferating demand for individual tourist signs exceeds the capability to supply signs conforming to agreed guidance signing principles (within a definable area).”

2. Consequently, a need may be evident to combine information lay-byes, route guidance information and public information centres to provide a holistic approach that can be fully supportive of promoting tourism in a non-commercial manner within the guidelines of acceptable signing principles.

3. In any area concerned with developing tourism, there will be a maturing process as facility owners become more and more commercial and they seek new ways of attracting visitors. One of those ways will be the request for tourism signs and the road authority must manage those applications in the manner recommended in Section 4.2.3. The following list describes how a tourist area might develop:

   (a) seasonal - once per year;
   (b) restricted hours - variable or limited opening times;
   (c) low density - isolated clusters of attractions;
   (d) medium density - groups of clusters of attractions;
   (e) high density - area-wide attractions.

4. High density of tourist facilities in an area normally generates a high level of demand, from motorists and operators of the facilities, for more guidance signing in the area. In terms of the normal rules applicable to the provision of supplementary tourist direction signs, a potential could exist that any attempt to deal with the demand conventionally, would almost certainly, result in a chaotic number of signs, at considerable expense, and in such a way that by their very numbers, the signs would be ineffective.

5. The challenge therefore is to come up with a systematic guidance sign scheme for a specific area which can satisfy the demands without incurring high costs or creating a chaotic situation. The intention is to develop a generic procedure which can be applicable to any high density tourist area.

4.4.2 Consultative Process

1. Once the basic data on the existing guidance sign system in an area has been obtained, attention should be turned to assessing the tourism signing needs. The first step in this process is to identify a consultative group to allow local participation. A representative Regional Tourism Liaison Committee (see Figure 4.1) for the region should be set up. The principal role players serving on such a consultative committee should be identified and should include:

   (a) the Regional Tourism Organisation in the area;
   (b) a committee representing facility owners and operators forming a Local Tourism Organisation; and
   (c) representatives of the road authority.

2. A meeting should be set up with the above parties to:

   (a) introduce the procedure to be followed in preparing a Tourism Signing Plan for the region;
   (b) discuss goals and objectives;
   (c) develop planning criteria and introduce steps to assess the tourist facilities available via public participation; and
   (d) explain the Motorist Information System, the road sign hierarchy (layering concept), and the function of a Guidance Signing Plan.

3. Various aspects relating to guidance signing principles and policies should be explained to members of the committee. The following points summarise some issues that need to be addressed at such a meeting:

   (a) the principles of navigation and orientation and how these are provided by a network of numbered routes and optimum destinations on direction signs at junctions on these routes;
   (b) the concept of familiar, control and service destinations in relation to the need for more local information at a local level;
   (c) the design criteria by which the information on direction signs is transferred to drivers, namely the size of letters used in relation to vehicles speeds, the consistent positioning of signs, and the limitations on the amount of information which a driver can be expected to take in.

4. It should be made clear that the first objective of an upgrading of the guidance signing in the area would be to ensure that the direction signs required by a Guidance Signing Plan are correctly located and that their messages conform to the results of the network optimisation and destination analysis. In this way basic navigation needs into, and through, the area can be achieved.

5. The background to the principles of the supplementary tourist signing system and how such a system might be applied to the area should be explained. In this context the following main points should be noted:

   (a) tourist signs may only be provided from a numbered route at the direct access to a facility, or in advance of a turn onto a lower order road towards a facility, subject to compliance with warrants;
   (b) the amount of information which can be displayed in such circumstances is limited by the same design criteria which apply to direction signs, and because tourist signs are a separate system supplementing the main system, the total amount of information displayed has to be carefully monitored and controlled;
   (c) the demand for tourist signs normally far exceeds the limits of design criteria; and
   (d) the need to develop some unique compromise solution which would satisfy the needs of tourists and facility operators within the technical constraints identified.

(continued on page 4.4.4)
Table 4.3
Tourism Signing –
Operational Principles

<table>
<thead>
<tr>
<th>TOURISM SIGNING PRINCIPLE</th>
<th>VOLUME 1 REFERENCE</th>
<th>POLICY STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tourism signs for the benefit of tourists</td>
<td>4.9.1.2</td>
<td>Tourism signs are provided for the benefit of tourists and should not be construed as advertisements for the facilities concerned.</td>
</tr>
<tr>
<td>2. Pro-active attitude</td>
<td>4.9.1.4</td>
<td>Co-operation with significant role players in a structured way through consultative committee.</td>
</tr>
<tr>
<td>3. Discretion</td>
<td>4.9.1.5</td>
<td>Roads Branch retain discretion on the display or removal of all tourism signs within road reserve.</td>
</tr>
<tr>
<td>4. Cost responsibility</td>
<td>4.9.1.10</td>
<td>Signs to all commercially active centres to be paid for by applicant.</td>
</tr>
<tr>
<td>5. Names and symbols</td>
<td>4.9.1.11</td>
<td>Both to be displayed for Holiday and Recreational, Tourism Attraction and Sports Venues if graded or supported by SATOUR. Service facilities: Symbols only. Accommodation facilities: Symbols, plus names if graded by SATOUR if there are no restrictions on access (eg. children under 14 years not allowed).</td>
</tr>
<tr>
<td>6. Guidance in final stage of trip</td>
<td>4.9.2.1(a)</td>
<td>Basic objective in respect of Holiday and Recreational facilities, Accommodation facilities, Sport Venues and certain Tourism Attractions (ie. all facilities where a measure of advance planning or reservations are necessary to ensure access).</td>
</tr>
<tr>
<td>7. Information on existence of facility</td>
<td>4.9.2.1(b)</td>
<td>Basic objective for all Service Facilities and certain Tourism Attractions (ie. all facilities where advance planning would not be applicable).</td>
</tr>
<tr>
<td>8. Competitive advertising</td>
<td>4.9.2.2(c)</td>
<td>Tourism signface design remains absolute prerogative of road authority and is done to standardised procedures.</td>
</tr>
<tr>
<td>9. Preferred to advertise- ments</td>
<td>4.9.2.2(d)</td>
<td>Tourism signs are erected under specific requirements that other advertisements or obsolete signs relating to same facility and directed at the road user are removed; failing which the approval for the display of the relevant Tourism signs is revoked.</td>
</tr>
<tr>
<td>10. Tourists plan journeys</td>
<td>4.9.3.2</td>
<td>Tourism signs towards Holiday and Recreational facilities, Accommodation facilities, Sports Venues and certain Tourism Attractions are considered based on this hypothesis; Tourism signs to Service facilities and to drop-in Tourism attractions are not based on this hypothesis.</td>
</tr>
<tr>
<td>11. Tourism signs are supplementary to Direction signs</td>
<td>4.9.3.4(e)</td>
<td>Accepted as basic principle.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOURISM SIGNING PRINCIPLE</th>
<th>VOLUME 1 REFERENCE</th>
<th>POLICY STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Obvious access to facility</td>
<td>4.9.4.1(a)</td>
<td>Allow Tourism sign in preference to advertisement.</td>
</tr>
<tr>
<td>13. Tourism signs are supplementary to Direction signs</td>
<td>4.9.4.1(b)</td>
<td>Accepted as basic principle.</td>
</tr>
<tr>
<td>14. Tourism signs from nearest numbered route or from nearest town</td>
<td>4.9.4.1(c)</td>
<td>Accepted as the basic principle for all Tourism signs except for those towards Service facilities and certain Tourism attraction facilities. Should a specific facility be accessible from different directions then Tourism signs may be displayed from the nearest numbered route from each direction, but not from one route leading to another route. If an Accommodation facility is deemed to provide accommodation for the general tourist (ie. drop-in rather than pre-booking) such facilities may be considered as Service facilities and not be treated on the nearest numbered route principle. (Note that such facilities do not qualify for names on Tourism signs: refer to policy numbers 5 and 20.</td>
</tr>
<tr>
<td>15. Limiting distance to display Tourism signs</td>
<td>4.9.4.1(d)</td>
<td>Tourism signs to Holiday and Recreation facilities, Sports Venues and certain Tourism Attraction facilities shall not be displayed from farther than the nearest numbered route or the nearest town that can reasonably be used as the basis for pre-trip planning. Tourism signs towards Rest and Service Areas may be displayed on the main road to which service is targeted, but not from farther than 50km, nor from beyond the nearest town where similar services are being provided, whichever is the nearest.</td>
</tr>
<tr>
<td>16. Limiting distance to display Tourism signs to Service facilities</td>
<td>4.9.4.1(e)</td>
<td>Emergency services: as the needs of road users will best be served. In-trip services: at (or in advance of) the direct access to the road or at a nearby junction to the location of the Service facility (with due regard to the regional availability of similar facilities). Recommended limits: Urban environment - 1km. Rural environment - 5km (more if density of service facilities is very low). Accommodation services: from the nearest street, numbered route, significant intersection or landmark that may be used in en-route directions.</td>
</tr>
<tr>
<td>TOURISM SIGNING PRINCIPLE</td>
<td>VOLUME 1 REFERENCE</td>
<td>POLICY STATEMENT</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>17. Standard of service</td>
<td>4.9.4.1(f)</td>
<td>To be approved by SATOUR or the consultative committee.</td>
</tr>
<tr>
<td>18. Large number of facilities</td>
<td>4.9.4.1(h)</td>
<td>The possibility of a Tourism information Layby, or using a collective name, shall be considered prior to erecting a large or complex Tourism sign (see VOLUME 1, paragraph 4.9.4.1(m) as well).</td>
</tr>
<tr>
<td>19. Tourism signface design</td>
<td>4.9.4.1(i)</td>
<td>Refer to Volume 4, Chapter 5: Guidance signface design.</td>
</tr>
<tr>
<td>20. Use of names and symbols</td>
<td>4.9.4.1(j) 4.9.4.1(k)</td>
<td>Refer to policy number 5 above.</td>
</tr>
<tr>
<td>21. Distance on signface</td>
<td>4.9.4.1(l)</td>
<td>Distance shall be included on signface only if the road leading to a Tourism facility is Class C or lower AND the distance to the final turn exceeds 20km. Distance shall be included on signface only if the road leading to a Service facility exceeds 5km (especially an Emergency service facility).</td>
</tr>
<tr>
<td>22. Discretionary principles</td>
<td>4.9.4.2 4.9.4.3</td>
<td>Discretionary principles included in VOLUME 1 shall be used with extreme caution to ensure that their use does not become so common that the integrity of the Tourism sign system is put in jeopardy. All cases where these discretionary principles are being considered shall be fully motivated and referred to the Director: Transportation Engineering for consideration.</td>
</tr>
<tr>
<td>23. Classification of facilities</td>
<td>4.9.5</td>
<td>Classification of VOLUME 1 is accepted.</td>
</tr>
<tr>
<td>24. Accommodation facilities: Symbols</td>
<td>4.9.5.5</td>
<td>Symbol and Supplementary symbols shall only be provided if the facility does not place a restriction on tourists that may request drop-in accommodation at the facility (eg. children under the age of 14 years).</td>
</tr>
<tr>
<td>25. Special Event facilities</td>
<td>4.9.5.7</td>
<td>Tourism signs for Special Events may be erected provided they are erected as per requirements relating to facilities where pre-trip planning is needed. Note that the Automobile Association is authorised in the Road Traffic Act to display road traffic signs.</td>
</tr>
</tbody>
</table>
(continued from page 4.4.1)

6 Another problem which is likely to occur within a high density tourist area is that the on-going requests for signs from the tourist operators will place a heavy processing burden on the road authority. The process described in Figure 4.4 should be followed so that the provision of signs can be kept under control and so that standards and principles are maintained to the benefit of the environment.

7 The principles dealing with the provision of tourism signs and which remain appropriate in the main to the signing of high density tourism areas, are detailed in Volume 1, Chapter 4, Subsection 4.9 and summarised in Table 4.3.

4.4.3 Inventory of Tourist Facilities and Services

1 An inventory of all the facilities in a study area should be compiled during road logging and/or the photo inventory of existing guidance signs. The route kilometre distance to the turnoff to each facility, and the services provided should be identified. The facilities and services should be recorded in detail on a route-by-route basis (see example in Table 4.4). A public participation questionnaire to assess the facilities as to the nature of services offered and their location, could give useful information for the preparation of a tourism signing plan.

2 The consideration of the full-time facilities normally does not present a significant problem, because in general, they are covered by existing standards and warrants and many are accessed from existing numbered routes.

3 The presence of part-time facilities, mainly accessed from un-numbered routes, however, presents in many areas the essence of the problem of designing a cohesive signing system for a high density tourism area.

4 The practitioner should remember that the unique brown-coloured tourist signing system provides for the signing of facilities and services as follows:

(a) tourist attractions are indicated by an appropriate symbol, followed by the primary name of the facility (indicated by a single word whenever possible); and

(b) services are indicated by symbol only.

5 Examples of typical tourism signs are given in Figures 4.6 to 4.10.

4.4.4 Quality Assessment of Tourist Facilities

1 The information obtained from the inventory and possible questionnaires will help to identify the limits of the area. Typical problem areas are:

(a) area could constantly change in size and scope;

(b) area is not well-defined within clear boundaries;

(c) there could be too many tourist facilities on un-numbered roads to possibly show all of these on one tourist sign at a turnoff from the nearest numbered route;

(d) some of the facilities may only be open part-time, i.e. one weekend per month and thus not always available to the public; and

(e) some facilities are members of the Local Tourism Organisation, while others are not.

4.4.5 Options for the Signing Treatment of a High Density Tourism Area

1 Whilst there are areas which may immediately warrant consideration as high density tourism areas, and these can be assessed in terms of the criteria given in this section, it is likely that many high density tourism areas will evolve in the future as a result of the growth of tourism as an industry. A concentration of tourist facilities can develop along a road, or collection of connecting roads, until eventually an area served by a number of such roads can be considered as a tourist area. The principles developed to assist with the signing of high density tourist areas can be applied throughout this growth process in such a way that they can be made to work for a single "route" or for an area.

2 Tourist "routes" may thus require to be identified singly or there may be several within a high activity tourism area. It is already a common practice amongst facility operators to recognise such "routes" and to name them in accordance with some common theme or geographical location. In the context of signing such a "route" it becomes appropriate to extend the theme concept to the symbol to be used on any tourism signs. In this way the generic or group identity of the "route" can be made visible to road users through the medium of the signs. This grouping approach to tourist destination types has been built into the classification of these destinations, as is illustrated in Table 4.2 (see Section 4.2). In Table 4.2 a wide range of tourist attractions have been grouped according to some 12 identifiable themes e.g Group A8 facilities all have a "Coastal" theme. The use of the "Coastal" theme symbol (see Subsection 4.3.10), to identify a route or area theme, does not preclude the use, along the route, of appropriate symbols from other theme groups if the relevant facility occurs in addition to the "Coastal" facilities.

3 The evolution of a tourist "route" can occur along a road that is already identified within the national, provincial, regional or metropolitan road networks as of significant navigational importance, to the extent that it has been allocated a navigational route number, or it can occur along an un-numbered road. An illustration of the development of a tourist "route" along a single linear numbered navigational route is given by Figure 4.18, whereas Figure 4.19 shows how a similar situation could occur along a single linear un-numbered road. The example in Figure 4.18 has been identified as an historical route and has been given the name "The Gold Diggers (historical theme) Route". Similarly the example route in Figure 4.19 has been identified as the "Disa Valley (scenic theme) Route". Provided they remain isolated "routes" neither of the types of tourist routes described are recommended to be allocated a tourist route number (see Subsection 4.5.3). In the example given in Figure 4.18 the allocation of such a number would clash with that already allocated for navigational purposes. For this reason the duplication (continued on page 4.4.10)
<table>
<thead>
<tr>
<th>ROUTE - km</th>
<th>FACILITY NAME</th>
<th>TOURIST ATTRACTION Groups A1 - A13</th>
<th>EMERGENCY SERVICES Group B1</th>
<th>MOTORIST &amp; FOOD SERVICES Groups B2 - B4</th>
<th>GENERAL SERVICE Group B5</th>
<th>ACCOMMODATION Group C1</th>
</tr>
</thead>
<tbody>
<tr>
<td>17,09</td>
<td>Zenex Garage</td>
<td>Shopping Centre&lt;br&gt;Cafe (opposite corner)&lt;br&gt;Lion Park (± 1.8km)</td>
<td>Wildlife</td>
<td>Petrol - 24 h's&lt;br&gt;Phones&lt;br&gt;Refreshments</td>
<td>I, Toilets&lt;br&gt;I, Shop</td>
<td>Restaurant&lt;br&gt;Toilets</td>
</tr>
<tr>
<td>± 19,5 LH</td>
<td>Hertford Hotel</td>
<td>Restaurant</td>
<td></td>
<td></td>
<td></td>
<td>Hotel</td>
</tr>
<tr>
<td>20,39 RH</td>
<td>Turn off onto D1027: Eugen Hofmann</td>
<td>Sculpting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 22,0 LH</td>
<td>Bayrischer Hotel/Casino</td>
<td>Restaurant</td>
<td></td>
<td></td>
<td></td>
<td>Hotel</td>
</tr>
<tr>
<td>23,4 RH</td>
<td>Lanseria Shopping Complex&lt;br&gt;SAAF Museum&lt;br&gt;Lindele Knitwear</td>
<td>Historical&lt;br&gt;Arts &amp; Crafts</td>
<td>Phone&lt;br&gt;Take aways</td>
<td>I, Shop&lt;br&gt;Post Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 22,5 RH</td>
<td>Gallery XYZ</td>
<td>Sculpting, Painting&lt;br&gt;Arts &amp; Crafts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 24 LH</td>
<td>Wilderness Pleasure Resort</td>
<td>Resort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25,28 RH</td>
<td>Farm Stall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stall</td>
</tr>
<tr>
<td>26,7 LH</td>
<td>Cafe &amp; Shops</td>
<td></td>
<td>Restaurant - Take aways</td>
<td>I, Shops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 27,2 RH</td>
<td>Winsome Valley</td>
<td></td>
<td>Restaurant&lt;br&gt;Shop, Picnic</td>
<td>Shop&lt;br&gt;Shop</td>
<td></td>
<td>Rondavels, Chalets, Caravans.</td>
</tr>
<tr>
<td>28,6 RH</td>
<td>New Vaalie Store&lt;br&gt;Whitesbar Farm</td>
<td></td>
<td>Restaurant</td>
<td>Shop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28,75 LH</td>
<td>Trek Garage&lt;br&gt;Shop &amp; Cafe</td>
<td></td>
<td>Petrol - 12 h's&lt;br&gt;Phone&lt;br&gt;Restaurant - Take aways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 29,5</td>
<td>Fleischer Mountain Gallery&lt;br&gt;Arts &amp; Crafts, Jewellers, Pottery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 30</td>
<td>Magaliesberg Conference Centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 31</td>
<td>Alpha Education Centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32,4</td>
<td>SVR Creations&lt;br&gt;GED Originals</td>
<td></td>
<td>Antiques&lt;br&gt;Arts &amp; Crafts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>± 39</td>
<td>River Bear Lodge Conference Centre&lt;br&gt;Dietmar Wjening</td>
<td></td>
<td>Arts &amp; Crafts&lt;br&gt;Sculpture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Cafe Supermarket</td>
<td></td>
<td>Phone&lt;br&gt;Take aways</td>
<td>I, Shop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40,8</td>
<td>Cafe Farm Stall</td>
<td></td>
<td></td>
<td>I, Shop</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4
Typical Example of Tourist Attractions and Services on a Tourist Route in a High Density Tourist Area
Fig 4.18  Signing to Identify a Tourist Route Superimposed Upon a Single Navigational Numbered Route
Fig 4.19  Signing to Identify a Tourist Route on a Single Linear Otherwise Un-numbered Road
Fig 4.20  Signing to Identify a Tourist Area Using a Gateway Perimeter Method
Fig 4.21  Signing to Identify a Tourist Area Using a Nearest Numbered Route Signing Method
or overlapping of navigational and tourist route numbers is not recommended.

In Figure 4.18 tourism signs pertinent to the indication of the "route" by theme are identified by number (those signs appropriate to identification of individual facilities such as the cemetery are not shown - these should conform to the signing application detail given in Figure 4.29, Subsection 4.7.5). Since access to the "route" can be gained from a crossing freeway, signs (1) may be provided as standard GF1 type signs (see Figure 4.6, Detail 4.6.2), displaying an interchange number, a "route" theme symbol and the name of the route. Signs (2) are standard GF2 type signs which are provided at all other significant non-freeway points of access to the "route", and which display the "route" theme symbol and name. Signs (3) is an optional GL6.3 sign indication the start of the tourist route and sign (3A) a similarly optional sign indicating the end of the route. The signs indicated by (4) are compact tourist route marker GE18 signs, intended to reduce the sign area in comparison to the alternative GF2 sign and to give reassurance to tourists that they are still on the tourist route. These signs display the route theme symbol (without a tourist route number - see Figure 4.24, Detail 4.24.2).

Signs (2), (3), (3A), and (4), displayed in Figure 4.19 have the same function and detail as those shown in Figure 4.18 (sign type (1) is not required because there is no freeway). If this type of route is very long and winding, or involves changes of direction then, even although it is an isolated route, the allocation of a tourist route number may be warranted. This tourist route number should be displayed in front of the theme symbol (see Figures 4.9 and 4.14).

Recent history and the growing promotion of tourism makes it reasonably predictable that once one tourist route has been successfully established, and it is not totally isolated by its geographical location, the growth of tourist movement along the route will promote the establishment of new tourist attractions so that eventually a whole area may become identifiable (from others) as being a high activity or density tourist area with a specific theme. When this happens the tourism signing of the area can be developed according to one of two principles as illustrated in Figures 4.20 and 4.21. If the same process is occurring in adjacent areas, it is clearly very important that the theme development processes be undertaken in a spirit of close co-operation.

Figure 4.20 shows an area in which two numbered tourist routes have been created, in addition to five navigational numbered routes, four of the latter of which create the majority of the perimeter of the theme area. The signing for this example has been developed according to a concept known as the "Gateway Perimeter" method. This concept involves a significant concentration of the information and signing effort at the main points of entry to the area. Signing at internal junctions between numbered routes, including numbered tourist routes, is limited to tourist route marker signs GE18. Because of the likely high number of facilities in the area the "Gateway" method also recommends the establishment of tourist information centres or laybys at the "Gateways". This can be a costly process and requires a high measure of commitment from the tourist operators in the area. The "Gateway" concept is therefore recommended for the most highly developed or concentrated tourist areas.

Figure 4.21 shows a very similar area with a similar signing treatment. This signing treatment is developed according to the well-established "Nearest Numbered Route" principle. Because two routes have been allocated tourist route numbers this means that the "Nearest" numbered route is now one level lower in the road hierarchy with the result that tourist route signs can be used to lead tourists closer to facility destinations before the actual facility requires signing. This has the effect of making more of the signs in the area "generic", or theme, signs and reduces the pressure to take facility signs further and further from the facilities. The main difference to the signing shown in Figure 4.20 is that several of the internal signs are shown as GF2 signs in place of GE18 signs. This type of signing treatment is more appropriate for a moderately developed tourism area which would also not warrant or be able to afford the provision of gateway information centres or laybys.

In Figures 4.18 to 4.21 the signs shown by number are of the following types:

(a) (1) - GF1 FREEWAY ADVANCE EXIT signs displaying an interchange number, the tourist area theme symbol and the tourist area theme name (if the route to which the freeway exit leads is a numbered tourist route then the tourist route number should be displayed in front of the symbol) - see Figures 4.6 and 4.9;
(b) (2) - GF2 ADVANCE TURN DIRECTION signs displaying the tourist area theme symbol and the tourist area theme name (these lead to a numbered navigational route within the tourist area) - see Figure 4.7;
(c) (2A) - GF2 ADVANCE TURN DIRECTION signs displaying the tourist route number, the tourist area theme symbol and the tourist area theme name - see Figure 4.9;
(d) (3) - optional - GL6.3 TOURIST AREA NAME sign to identify the start of the tourist area - see Volume 1, Subsection 4.5.9;
(e) (3A) - optional - GE18 END OF TOURIST ROUTE/AREA signs - see Figure 4.24;
(f) (4) - GE18 TOURIST ROUTE MARKER signs - see Figures 4.9 and 4.24.
4.5 SIGNING OF HIGH DENSITY TOURISM AREAS

4.5.1 Concept Development

1 One of the main objectives of the planning and development of a tourism signing plan for an area should be to develop some concept which will offer an adequate compromise solution to the various conflicting problems which exist. In most cases, the possible solution may lie on two levels, namely:

(a) the signing treatment of the whole area; and
(b) the signing treatment of individual facilities.

2 The concept of identifying certain routes as "tourist routes" has been under consideration throughout the country for some time and experience to date in KwaZulu/Natal and in the Western Cape and developments in Gauteng have shown that the concept is implementable and can support the primary guidance signing system in the area.

3 Throughout the preparation of a tourism signing plan for a high density tourist area, close attention should be paid to finding ways of reducing the need for large signs or large numbers of signs, wherever possible. The motivation for this approach is to achieve the most effective signing reasonably possible by means of the least possible total sign area, and this for two basic reasons:

(a) to limit the overall environmental intrusion of the signs (but still have enough impact for them to achieve their purpose); and
(b) to limit the total cost input to the provision of the signs.

4 Achievement of these objectives can be assisted by the use of the organised provision of tourist information throughout the area and the use of tourist route marker signs.

4.5.2 Area Identification

1 It is an established principle, covered in Volume 1, that signing for an area can be kept within reasonable limits if the area has a uniqueness of identity which can be used on tourism signs, involving:

(a) a Unique Collective Name - the need for alternative means of displaying tourism information will usually arise due to an "overload of information" at an existing intersection or on an existing tourism sign; in this instance, the pro-active approach is recommended whereby a collective "name" or "identity" could be used to replace a number of separate tourism facilities; this option is clearly cheaper than an information lay-by, requiring the usual brown tourism signs only, but it should be facilitated through the local or regional tourism organisations, in consultation with the appropriate tourism stakeholders; hence, the existence of such a tourism body will expedite any discussions and final proposals; to keep sign area down a "collective" name for an area should be kept as short as practical, but should certainly not exceed 2 to 3 words; the name allocated to a tourism area should either be unique to a geographic area or unique to some theme such as historical mining ("Old Digger's Route") or scenery ("Namaqualand Flower Route").

(b) Collective Route or Area Symbol - in the context of tourism signing, the other method by which a tourism area should be collectively identified, as "an area", is by means of an appropriate symbol; the symbol can relate to a descriptive representation of the area, e.g. a "mountain" symbol for an area in the Drakensberg, or to an established theme for the principal activities of the area, e.g. a symbol representing "wine", or "arts and crafts" symbol for an area such as the Crocodile River Ramble Area; the symbol should be used together with the full name of the high density tourism area;

(c) even if generic tourism symbol(s) can be used with a unique or collective name to describe a high density tourist area, it may still be desirable to identify the area with a unique "Emblem" or "Logo" - such an emblem or logo may be used on an off road information sign at a laybye at the gateway to the area, and at the entrances to individual facilities.

2 The use of generic theme symbols such as "arts and crafts", "wildlife" or "scenic" also has the potential to keep within controllable limits the total numbers of symbols available for use on tourism signs. The larger the number of symbols, the greater will be the difficulty experienced by drivers in interpreting them correctly and also in sign manufacturers supplying the correct symbol. The function of the symbol to allow early recognition of the associated destination with a minimised need to read words on a sign will also be eroded by large numbers of symbols, many with distinct similarities.

3 Table 4.2 in Section 4.2 shows that a wide range of individual types of tourist attraction can be signed, in the environment of tourist routes or a tourism area, using 10 to 12 generic symbols. (Table 4.2 represents a recent rationalisation of thinking on the previous tourism destination classification which has evolved over a considerable period of time and not all the generic symbols mentioned are yet available or approved).

4.5.3 Numbering of Tourist Routes

1 Having established the limits of an high density tourism area, the road network within the area (including minor roads) and the locations of candidate tourism facilities and services, consideration should be given as to how to contain the number of tourism signs required at the more important or busy junctions if a traditional approach to the provision of such signs were to be adopted. Many of the minor roads in an area could provide access to three or more facilities or services. It should, therefore, be natural to consider some of the minor roads as "tourist routes".

2 In order to keep the system as simple as possible and for such routes to form a logical extension of the existing numbered route system, the use of the designatory uppercase letter "T" is allowed, e.g. "T1", "T2", etc. A very significant benefit of this approach is that, in terms of existing policies, the signs on for example, on a provincial numbered route on the approach to a junction with a numbered tourist route, would display a tourist
4.5.2 SIGNING OF HIGH DENSITY TOURISM AREAS

Detail 4.22.1 Tourist Route Number Indication

Detail 4.22.2 Generic Theme Symbol for Area

Crocodile River Ramble

Detail 4.22.3 Unique Collective or Theme Name (Maximum of 3 words)

Detail 4.22.4 Typical Sign at Main Point of Entry to Tourist Area (Example being from a freeway to an entering crossroad)

Detail 4.22.5 Typical Sign GF2 Indicating a Numbered Tourist Route From a Numbered Navigational Route

Detail 4.22.6 Typical GL6 Location at Gateway to Tourist Area

Fig 4.22 Tourist Route or Area Signing, Signface Elements, and Typical Signs Used at Entry Points or Gateways
route number, a generic symbol and the unique collective name. Any such junctions would be signed in this manner, each minor road being identified, where relevant, by the allocated tourist route number, i.e. “T4”. In this way the alternative needed to try to indicate a multitude of specific tourism destinations at such junctions is avoided at no disadvantage to the driver or the facility, since an awareness of the tourist route number required to reach a specific facility is a very simple piece of information to promote and acquire. Once on the tourist route, drivers will now expect to see a sign to the specific tourism destination they are seeking. The signface elements for the Crocodile Ramble Area are illustrated in Figure 4.22 as an example of specific signs indicating a tourist route as opposed to a tourism facility.

3. In principle, the signs described above should be provided by the road authority as part of the basic navigational Guidance Signing Plan for a high density tourism area.

4.5.4 Facility Identification

1. The allocation of tourist route numbers and the signing described in Subsection 4.5.2 is intended to enable tourists to make what amounts to a “final” turn from a numbered route towards the tourism destination they seek. It is a criterion of the route design process that the number of tourism destinations at such a turn should not exceed three. This limit is dictated by the norms applicable to tourism signface design and relates to the maximum amount of information which should be displayed at one point, for drivers to read with safety.

2. It should be noted that, in terms of this criterion, signing of specific tourism facilities or services may be provided directly from navigational numbered routes, numbered tourist routes and other roads which have not been allocated a number. For most high density tourism areas it is possible to classify tourism destinations into three groups, as follows:

(a) full-time attractions or services;
(b) part-time attractions or services; and
(c) temporary attractions or services.

The level of signing should be different for each group and the provision of signs in all cases should be subject to approval after formal application.

4.5.5 Full-time Attractions or Services

1. To qualify as “Full-time Attractions or Services” tourist facilities must comply with numerous warrants given in Subsection 4.6. Briefly, such facilities will need to be available to the public 365 days a year for between 8 and 24 hours per day and must also fulfil various parking, toilet and other normal health and business licencing requirements. Such facilities, if their applications for signs are approved, will be provided with standard GF1, GF2 or GF3 tourism class signs as appropriate, normally at their cost subject to road authority policy. The provision of standard GF1, GF2 and GF3 signs will thereby identify such facilities to the public as full-time facilities. Figures 4.6 to 4.10 illustrate examples of such signs.

4.5.6 Part-time Attractions or Services

1. These facilities are not always available to the public. They commonly only open on a once-a-week or once-a-month basis, or are only available seasonally or by appointment. These facilities represent a source of very real demand for tourism signs. This demand comes both from drivers and from facility operators.

2. In order to clearly differentiate such part-time facilities from full-time facilities within the same area this demand can be satisfied by the provision of a smaller, more compact, and therefore economical, GF17 Fingerboard tourism sign. This type of sign should be used on a permanent basis for approved part-time facilities, however GF17 signs may only be used in an area formally recognised as a high density tourist area (see Section 4.4). Approval should be subject to compliance with warrants to be developed (see Subsection 4.5.5), and subject to an approval process in a similar manner to full-time facilities. (A temporary version of this sign type, TGF17, can similarly be allocated to special event or temporary tourism facilities - see Subsection 4.5.7.)

3. In function, the GF17 sign replaces the larger GF3 signs and it should be provided at the final turn towards the facility. In certain instances, where the facility is not the last property on the side road but is some distance before the end of the road, an additional GF17 sign may be required at the property entrance. Junctions at which GF17 are provided may require advance warning signs W101, W107 or W108 in accordance with the normal warrants for such signs. Sign GF17 is a recognised road traffic sign and as such is placed within the road reserve. It is desirable that part-time facility operators display an additional sign, within their property but clearly visible from the approaching roadway, which should be a changeable sign capable of indicating when the facility is “OPEN” or “CLOSED”. The sign may include any unique “Emblem” or “Logo” adopted by the area (see paragraph 4.5.2.1(c)).

4. GF17 signs, like all tourist signs, should display an appropriate symbol plus the primary (short) name for the facility. The symbol used on the GF17 signs may be either the collective symbol for the area or it may be a symbol specific to the principal activity of the facility, if such a symbol is available (see Subsection 4.3.10). Figure 4.23 illustrates examples of such signs.

5. The following are suggested criteria, subject to review and development of warrants during the design and implementation stages, for the provision of GF17 tourist signs for part-time facilities:

(a) the facility must be located within an identified high density tourist area;
(b) applications for part-time tourist facility signs (GF17) must be submitted for processing to the Local Tourist Organisation/publicity association whether the applicant is a member of the organisation or not;
(c) an applicant must sign an agreement to accept the Local Tourist Organisations’ decisions with regard to monitoring and control of standards for signing purposes (standards will be set (continued on page 4.5.6)
4.5.4 SIGNING OF HIGH DENSITY TOURISM AREAS

Fig 4.23 Signs Appropriate to Part-Time Tourist Attractions And Services, and Temporary Events
4.5.5 SARTSM – VOL 2
TOURISM

Fig 4.24
Tourist Route Marker Signs
SIGNING OF HIGH DENSITY TOURISM AREAS

4.5.6 (continued from page 4.5.3)

by the Regional Tourist Organisation and the road authority
in co-operation with the Regional Tourism Liaison
Committee);

d) the facility must be accepted for inclusion in marketing
brochures and maps promoting the area;

e) the facility must be open to the public on a regular basis;

(f) the facility must be a fixed site or venue;

g) the facility must comply with minimum hygiene and tourist
attraction standards as set from time to time;

(h) the facility must comply with any other requirements set;

(i) the operator of the facility must sign an agreement to
remove any unapproved signs, including advertisements,
when the tourist sign is erected;

(j) the operator of the facility must sign an agreement
accepting the responsibility for the correct display of the
approved sign(s) and accepting the jurisdiction of the road
authority to remove signs, at the operators expense, if too
many complaints are received from the public regarding the
operation or availability of the facility; and

(k) adequate safety precautions must be maintained at
facilities where members of the public have access to
workshops.

4.5.7 Temporary Events

1 Temporary events are, in essence, one-off part-time tourist
attractions, although many of them may be regular annual
events. These may be signed using sign TGF17 and the signs
are commonly erected and removed by a service organisation
such as the Automobile Association. These signs should be
truly temporary signs and conform to the black-and-yellow
temporary sign colour code.

2 Typical temporary events include (examples of temporary event
signs are also illustrated in Figure 4.23):

(a) auctions;

(b) festivals;

(c) fetes;

(d) conferences;

(e) gymkhanas (and other infrequent sporting occasions, etc).

3 There is a general trend to provide multi-function venues.
These may have a significant potential to attract visitors and
from a very wide catchment area. Many of these visitors will be
unfamiliar with the location of the venue. Consideration may be
given to providing such facilities with part-time tourism signs,
GF17, because the facilities are not operating all the time, and
relying on such signs to guide visitors rather than providing
regular TGF17 signs. An alternative to such an approach, in an
urban or peri-urban area might be to use a similar fingerboard
LOCAL DIRECTION sign GDL3. The latter would particularly
be the case if the events being staged are directed at
commercial participation rather than as tourist attractions.

4.5.8 Tourist Route Marker Signs

1 It is anticipated that the manner in which many identified high
density tourism areas will be used by the public is in a very
informal meandering way. It is quite likely under these
circumstances that tourists may lose their bearings and require
relatively frequent reassurance as to where they are.
Consistent with the objective of limiting total sign area within the
system, whenever practical, the concept of utilising compact
TOURIST ROUTE MARKER guidance signs, GE18, is worth
considering. Since certain roads within a high density tourist
area could be recommended to be designated as tourist routes,
it becomes relevant to consider using TOURIST ROUTE
MARKER signs. Such signs should display the tourist route
number and the theme symbol for the area, and can be used
for route confirmation purposes. They can also be used instead
of the much larger GF2 or GF3 signs at junctions of two tourist
routes. Figure 4.24 illustrates typical TOURIST ROUTE
MARKER signs GE18.
4.6 SYMBOLS AND WARRANTS

4.6.1 General

1 The symbols presented in this section have all been through an approval process whereby an assessment has been made of their appropriateness and legibility. Only symbols approved by the Route Numbering and Road Traffic Signs Sub-Committee shall be used and preference will be given to signs having a generic use, rather than a uniquely individual use.

2 The present preference to the use of symbols, logos and names is as follows:
   (a) a symbol has priority and should be of a generic nature;
   (b) a logo has secondary status;
   (c) a logo should not be allowed without a symbol;
   (d) the logo should not be bigger than the symbol and preferably the same size;
   (e) a full name may be used in conjunction with a symbol alone;
   (f) a full name may be used with a symbol and a logo;
   (a logo and a full name alone will not be allowed);

3 A logo should identify the region and be part of the general information system e.g. to be included in regional brochures, maps and letterheads. The inclusion of such a regional identifying logo will be allowed on map-type signs at lay-byes, provided it complies with the guidelines given in section 4.7.9.

4 In the following warrants, when a distance warrant from the nearest numbered route is quoted, the facility may be signed from the nearest numbered route. In general terms, other facilities will first be signed at a more local level from a road lower in the road hierarchy.

5 If a facility lies beyond the distance warrant limit this does not preclude the facility from being signed from a lower order road.

6 Subject to compliance with other warrants, facilities may also be signed on numbered routes when they take direct access from the route.

4.6.2 Warrant Structure

1 The warrant structure is arranged in three levels:
   (a) Level 1:
       general criteria relating to location and accessibility applicable to all classes of facility;
   (b) Level 2:
       criteria specific to each type of facility relating principally to hours of operation, distance from the approach road, and most importantly the quality rating of the facility;
   (c) Level 3:
       criteria specific to the design of the design of the sign to be provided with particular regard to:
       (i) the use of a primary name;
       (ii) supplementary symbols;
       (iii) an area symbol;
   (iv) the distance to the facility;
   (v) a route number.

4.6.3 Warrant Criteria

1 Level 1 Warrant Criteria:

   the following factors are taken into account for all facilities before continuing with the warrant investigation:
   (a) locational details:
       (i) name and nearest town;
       (ii) number of nearest numbered route;
       (iii) is facility accessed directly or indirectly from this numbered route;
       (iv) identification details of road from which access is obtained (when not a numbered route)
   (b) access warrants:
       (i) based on the locational details are tourism signs likely to be required or not;
       (ii) even if facility is clearly visible from the road are tourism signs necessary to identify the point of access;
       (iii) is the access road of an all-weather standard;
       (iv) are internal roads of an adequate geometric standard to offer good mobility.

2 The following symbols and warrants are organised to prioritise the provision of services for which detailed warrants are well-established. The subsections therefore describe emergency, vehicle, food, general and rest area services, followed by accommodation facilities and tourist attractions.
4.6.4 Level 2: Warrant Criteria: Emergency Services: Group B1

1 Emergency Services:
   (a) Telephone:

   GFS B1-1

   Basic Requirements:
   - rural - within 5 km of the nearest numbered route;
   - urban - within 1 km of the nearest numbered route;
   - shall be accessible 24 hours per day 365 days per year.

(b) Police:

   GFS B1-2

   Basic Requirements:
   - rural - within 10 km of the nearest numbered route;
   - urban - within 5 km of the nearest numbered route;
   - shall be open 24 hours per day 365 days per year.

(c) Hospital:

   GFS B1-3

   Basic Requirements:
   - rural - within 10 km of the nearest numbered route;
   - urban - generally within 5 km of the nearest numbered route, but in metropolitan areas the signing of hospitals should be planned, co-ordinated and implemented, in conjunction with the hospitals, to provide the best possible 24 hour emergency service accessibility for road users;
   - a casualty or emergency facility shall be open 24 hours per day 365 days per year.

(d) First Aid:

   GFS B1-4

   Basic Requirements:
   - rural - within 10 km of the nearest numbered route;
   - urban - generally within 2 km of the nearest numbered route (see note under GFS B1-3: Hospitals);
   - shall be open 10 hours per day 365 days per year.

(e) SOS Telephones:

   GFS B1-5

   Basic Requirements:
   - when a system is installed signs shall be provided.
   NOTE: Symbol GFS B1-6 is a variation of symbol GFS B1-5 for use on the actual phone installation.

4.6.5 Level 2 Warrant Criteria: Vehicle Services

1 Light Vehicle Services: Group B2:

   All light vehicle service facilities considered for the provision of a tourism service sign shall provide a photocopy of a current trading/operating licence and shall be inspected for compliance with the following criteria by staff of the Automobile Association of South Africa:

   (a) Filling Station and Workshop:

   GFS B2-1

   Basic requirements:
   - the premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
   - rural - within 5 km of the nearest numbered route;
   - urban - within 1 km of the nearest numbered route;
   - the facility shall be open as a filling station 24 hours per day 365 days per year (subject to compliance with any national controls exercised from time to time);
   - shall have at least six fuel outlet points in urban areas and at least three fuel outlet points in rural areas;
4.6.3

- All fuel pumps must be covered by a canopy;
- The standing area for vehicle refuelling must have a permanent surface;
- The active area of the facility must be illuminated at night;
- Water and air shall be available during the period that fuel is sold;
- Toilet facilities of an acceptable standard shall be available for sale during normal office hours;
- A workshop suitable for the repair of all makes and models of popular light vehicles shall be provided;
- A qualified mechanic trained to repair all makes and models of popular light vehicle shall be available during normal office hours (minimum 8 hours), and be on stand-by for calls after hours;
- An acceptable range and number of the most necessary spare parts likely to be required by a long distance driver shall be available for all makes and models of popular light vehicle (e.g. fan belts, tyres, tubes, water pipes, windscreens, wipers, batteries etc.).

(b) Filling Station:

- The premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- Rural - within 5 km of the nearest numbered route;
- Urban - within 1 km of the nearest numbered route;
- The facility shall be open as a filling station 24 hours per day 365 days per year (subject to compliance with any national controls exercised from time to time);
- Shall have at least six fuel outlet points in urban areas and at least three fuel outlet points in rural areas;
- All fuel pumps must be covered by a canopy;
- The standing area for vehicle refuelling must have a permanent surface;
- The active area of the facility must be illuminated at night;
- Water and air shall be available during the period that fuel is sold;
- Toilet facilities of an acceptable standard shall be available to the public during the period that fuel is sold;
- A telephone shall be available to the public during the period that fuel is sold;
- Road maps of an area in which the facility is situated shall be available for sale during normal office hours;
- An acceptable range and number of the most necessary spare parts likely to be required by a long distance driver shall be available for all makes and models of popular light vehicle (e.g. fan belts, tyres, tubes, water pipes, windscreens, wipers, batteries etc.).

(c) Workshop:

- A workshop suitable for the repair of all makes and models of popular light vehicles shall be provided;
- Rural - within 5 km of the nearest numbered route;
- Urban - within 1 km of the nearest numbered route;
- A qualified mechanic trained to repair all makes and models of popular light vehicles shall be available during normal office hours (minimum 8 hours), and be on stand-by for calls after hours;
- An acceptable range and number of the most necessary spare parts likely to be required by a long distance driver shall be available for all makes and models of popular light vehicle (e.g. fan belts, tyres, tubes, water pipes, windscreens, wipers, batteries etc.);
- The active area of the facility must be illuminated at night;
- Water and air shall be available during the period that fuel is sold;
- Toilet facilities of an acceptable standard shall be available to the public during the period that fuel is sold;
- A telephone shall be available to the public during the period that fuel is sold.

(d) Tow-In Service:

- Rural - within 5 km of the nearest numbered route;
- Urban - within 1 km of the nearest numbered route;
- Rural - the facility shall be available 12 hours per day 365 days per year;
- Urban - the facility shall be available 24 hours per day 365 days per year.
2 **Truck Services: Group B3:**

All truck service facilities considered for the provision of a tourism service sign shall provide a photocopy of a current trading/operating licence and shall be inspected for compliance with the following criteria by staff of the Road Freight Association (RFA) and/or NAPTO:

![Image](GFS B3-1)

**Basic Requirements:**
- the premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- rural - within 5 km of the nearest numbered route;
- urban - within 1 km of the nearest numbered route;
- the facility shall be open as a service for trucks ONLY 24 hours per day 365 days per year (subject to compliance with any national controls exercised from time to time);
- shall have at least four diesel outlet points;
- all fuel pumps must be covered by a canopy;
- the standing area for vehicle refuelling must have a permanent surface;
- the active area of the facility must be illuminated at night;
- water and air shall be available during the period that fuel is sold;
- toilet facilities of an acceptable standard shall be available to the public during the period that fuel is sold;
- a telephone shall be available to the public during the period that fuel is sold;
- an acceptable number of the most necessary spare parts likely to be needed by long distance truckers shall be available;
- sufficient parking for at least ten trucks shall be available, free of charge, as rest stops 24 hours per day.

**Optional Facilities:**
If any of the following are provided to an acceptable standard the use of a primary name on the sign may be considered (see Level 3 warrants):
- at least six chalets accommodation to let;
- suitable fireplaces for cooking purposes;
- suitable refreshment or take-away service.

4.6.6 **Level 2 Warrant Criteria: Food Services: Group B4:**

1 **Restaurant:**

All restaurant facilities considered for the provision of a tourism service sign shall provide a photocopy of a current trading or operating licence and shall be inspected for compliance with the following criteria:

![Image](GFS B4-1)

**Basic Requirements:**
- the premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- rural - within 5 km of the nearest numbered route;
- urban - within 1 km of the nearest national route;
- the facility shall be open 40 hours per week 52 weeks per year to serve lunch and dinner;
- light refreshments shall be available between normal mealtimes;
- the food shall be good quality, properly cooked and attractively presented;
- the service shall be efficient and courteous, and be given in both official languages, imparting an atmosphere of welcome and willingness to please;
- menus, in keeping with the establishment, should be displayed in a weatherproof frame outside the main entrance;
- menus shall be clean and pleasant to handle and shall provided in both official languages and in sufficient number, and shall indicate prices, VAT and any extra charges;
- the dining area shall be suitably and adequately illuminated;
- ventilation, whether natural or mechanical, shall be capable of providing a continuous flow of fresh air to all areas;
- tables and seating shall be of quality and arrangement to permit customers and staff to circulate easily in the dining area; they shall be of adequate size to enable customers to dine in comfort;
- floors shall be clean and without dangerous steps, tears in carpets, vinyl tiles;
- decor shall be in good taste and in good clean condition;
- table appointments shall be of good quality (this includes cutlery, condiments, ashtrays, tablecloths, napkins, mats etc.);
- an adequate number of toilets shall be available for men and women and shall be clearly signed; these shall be in first class repair and shall be regularly inspected to ensure cleanliness and overall maintenance; there shall be adequate natural artificial ventilation; attention will be paid to the ease of use by disabled persons;
kitchen equipment shall be adequate and suitable for the type of catering provided; this covers cooking, food storage, and food preparation equipment; floors, walls and ceilings shall be of a suitable type to maintain the highest standards of hygiene; cooking utensils shall be of suitable design and properly stored; waste bins shall be covered and suitably located; yards and approach areas to the kitchen shall be maintained in the same hygienic condition;

- the restaurant shall be under the constant control of a competent manager or supervisor during operating hours;
- waiters/waitresses shall be properly trained in the service of food and, if appropriate, drink; they shall be friendly, clean, neat, tidy and pleasant in appearance;
- kitchen staff shall be competent and clean;
- indoor seating shall be provided for at least 20 persons.

2 Refreshments and Take-away:

All facilities providing refreshment and/or takeaways considered for the provision of a tourism service sign shall provide a photocopy of a current trading/operating licence and shall be inspected for compliance with the following criteria.

Basic requirements:
- the premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- rural - within 5 km of the nearest numbered route;
- urban - with 1 km of the nearest national route or within 500 m of the nearest other numbered route;
- the facility shall be open 12 hours per day 365 days per year;
- the food shall be of good quality, properly cooked and attractively presented;
- waiter/menu service shall be efficient, courteous, and clear, and in sufficient number, giving prices, VAT and any extra charges;
- the entire area shall be suitably and adequately illuminated;
- an adequate number of toilets shall be available for men and women and shall be clearly signed; these shall be in first class repair and shall be regularly inspected to ensure cleanliness and overall maintenance;
- kitchen equipment shall be adequate and suitable for the type of catering provided; this covers cooking, food storage, and food preparation equipment; floors, walls and ceilings shall be of a suitable type to maintain the highest standards of hygiene; cooking utensils shall be of suitable design and properly

4.6.5

- stored; waste bins shall be covered and suitably located; yards and approach areas to the kitchen shall be maintained in the same hygienic condition;
- waiter/waitresses shall be properly trained in the service of food and, if appropriate, drink; they shall be friendly, clean, neat, tidy and pleasant in appearance;
- kitchen staff shall be competent and clean;
- indoor and/or outdoor seating shall be provided for at least 10 persons;
- a parking area adequate for 10 light vehicles and 5 heavy vehicles shall be available.

4.6.7 Level 2 Warrant Criteria: General Services: Group B5

1 All facilities shall have a clean, attractive and well-kept appearance and shall be in good state of repair.

(a) Parking Area:

GFS B5-1

Basic requirements:
- according to Parking Policy;
- according to Parking Management Plan of the Authority.

(b) Toilets:

GFS B5-2

(c) Shower:

GFS B5-3

(d) Drinkable Water:

GFS B5-4
4.6.6 SYMBOLS AND WARRANTS

(e) **Fireplace:**

![Fireplace Symbol](image)

(f) **Cooking Facilities:**

![Cooking Facilities Symbol](image)

(g) **Picnic Area:**

![Picnic Area Symbol](image)

(h) **Tourist Information:**

![Tourist Information Symbol](image)

(i) **Facilities for Handicapped Persons:**

![Facilities for Handicapped Persons Symbol](image)

Basic Requirements:
- basic information to be available on a 24 hour basis;
- sufficient information provided;
- structure to be provided;
- a person with a knowledge of tourism to be provided;

(j) **Roadside Stall:**

![Roadside Stall Symbol](image)

Basic requirements:
- access road or lay-by shall be safe and of an acceptable standard of surface;
- sufficient safe parking shall be available for 5 vehicles;
- these facilities shall comply with any requirements for the establishment of farm stalls, curio shops or hawking stalls as may be laid down by the relevant road or local authority.

Products are to be South African manufactured or specifically handmade. Location should provide tourism activities to comply with general tourist attraction warrants.

(k) **Post Offices:**

![Post Offices Symbol](image)

Basic requirements:
- open during office hours;
- telephone available 24 hours.

4.6.8 Level 2 Warrant Criteria: Rest and Service Areas: Group B6:

1. **Rest Area Class 1:**

![Rest Area Class 1 Symbol](image)

Basic Requirements:
- tree shade;
- rubbish bin;
- table and bench.

2. **Service Area Class 2:**

![Service Area Class 2 Symbol](image)

Basic requirements:
- roofed shade;
4.6.7

- toilets;
- braai;
- rubbish bin;
- tables and benches.

3 Service Area Class 3:

GFS B6-3

Basic Requirements:
- roofed shade;
- toilets;
- braai;
- rubbish bin;
- tables and benches;
- fuel;
- restaurant for light and heavy vehicle drivers and passengers;

4 In addition the following criteria shall apply:

(a) fuel and restaurant facilities shall comply with warrants for these types of facilities;
(b) a wide range of additional facilities may be provided;
(c) the facility may qualify for the use of primary name on the tourism signs provided;
(d) warrants for signing are given in Volume 1.

4.6.9 Level 2 Warrant Criteria: Vehicle Class: Group B7:

1 This class of facility shall ONLY apply if a rest, service, or rest and service area has different access points for different classes of vehicle. This type of access arrangement is not generally recommended.

GFS B7-1
Motor Cars

GFS B7-2
Caravans

GFS B7-3
Buses

GFS B7-4
Trucks

4.6.10 Level 2 Warrant Criteria: Accommodation: Group C1:

1 All accommodation facilities considered for the provision of a tourism service sign shall provide a photocopy of a current trading/operating licence and shall be inspected for compliance with the following criteria by staff of a Regional Tourism Body at regular intervals. The following are working definitions provided by SATOUR:

(a) Hotel - “A Hotel is a purpose built building which provides lodging, meals and beverages and is accessible to the public”;
(b) Chalet/Self-catering Establishment - “Establishments participating in the self-catering category shall consist of at least four units and will have an owner/manager on the premises. This category will include timeshare apartments, game parks, holiday resorts etc”;
(c) Guest House - “A Guest House is an owner managed commercial accommodation establishment of not less than 4 and not more than 16 bedrooms, and which has its primary source of business, the supply of tourist accommodation and a substantial breakfast for resident guests, and the provision of a substantial dinner where such facilities are not readily in the vicinity”;
(d) Bed and Breakfast - “Bed and Breakfast is an informal, irregular accommodation operation undertaken from a private dwelling”;
(e) Youth Hostel - Provide lodging to youth travellers.

2 A distance warrant is not appropriate for accommodation facilities in urban areas. Information lay-byes should provide accommodation information to the public if required. Otherwise it is considered the responsibility of the facility to ensure that its guests know the street address. Correspondingly it is the responsibility of the local authority to ensure that street name signing is of an adequate standard.

A final turn sign shall not be warranted if the facility access is clearly visible or if the hotel can be adequately identified by its street address.

3 Hotels, Motels, Inns and Lodges:

GFS C1-1

Basic requirements:
- SATOUR quality graded or inspected / recommended;
- the premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- rural - from the nearest numbered route if graded or within 10 km of nearest numbered route if inspected / recommended;
4.6.8 **SYMBOLS AND WARRANTS**

- Reception facilities shall be available 12 hours per day 365 days per year, with the capability to accept, by prior arrangement, arrivals 24 hours per day;
- Breakfast and beverages shall be provided;
- Premises to be clean;
- Premises to be well kept in a good state of repair;
- Brochure should be available.

### Chalet/Self Catering Establishments:

**GFS C1-2**

**Basic requirements:**
- SATOUR graded and inspected / recommended;
- The premises and operation shall be in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety;
- May be signed from the nearest numbered route if graded or within 10 km of nearest numbered route if inspected / recommended;
- Reception facilities shall be available 12 hours per day 365 days per year, with the capability to accept, by prior arrangement, arrivals 24 hours per day;
- Available primarily for the lodging or sleeping of travellers with or without booking;
- Well maintained access and internal roads;
- Must provide self-catering facilities;
- Shall have a minimum of 4 accommodation units, with bathroom facilities, separate access and individual parking (i.e. not inter-leading);
- Each chalet shall contain furniture, cupboard space, fittings and equipment of acceptable standard, quality and condition, for sleeping and toilet purposes;
- Brochure should be available.

### Caravan Parks and/or Camping Sites:

**GFS C1-3**

**GFS C1-4**

**Basic requirements:**
- SATOUR quality graded or inspected / recommended;
- Rural - within 20 km of nearest numbered route;
- Urban - within 5 km of the nearest numbered route;
- Reception facilities shall be available 12 hours per day 365 days per year, with the capability to accept, by prior arrangement, arrivals 24 hours per day;
- The facility shall have at least 20 sites;
- At least 20% of sites shall be available to short-term visitors including single night visits;
- There shall be adequate space between sites and internal facilities such as ablution blocks;
- Ablution blocks or any other structures provided shall be provided with adequate natural and/or artificial lighting and natural and/or artificial ventilation;
- Hot and cold water shall be available during all reasonable hours;
- The premises shall be under the regular supervision of a responsible person capable of maintaining order and control;
- The premises shall be adequately staffed to maintain the above services at all times;
- Brochure should be available.

### Guest House:

**GFS C1-5**

**Basic requirements:**
- SATOUR quality accredited or inspected / recommended;
- Reception facilities shall be available 12 hours per day 365 days per year, with the capability to accept, by prior arrangement, arrivals 24 hours per day;
- Rural - may be signed from nearest numbered route;
- May be signed from the last public road (urban);
- Parking shall be to an adequate standard;
- Accommodation of 4 bedroom-en-suite (or private bathroom) shall be available;
- Meals shall be provided (self-catering facilities shall not be provided);
- Dining room facilities shall be available;
- Brochure should be available;
- Each room shall contain furniture, lighting, cupboard space, fittings and equipment of acceptable standard, quality and condition, for sleeping.
Preferred requirement:

- the premises and operation shall preferably be a registered business run in accordance with statutory requirements of local and other authorities with regard to planning, construction, water supply, sewage disposal, garbage collection and disposal, fire precautions and general safety.

7 Bed and Breakfast:

![B&B](image)

GFS C1-6

Basic requirements:

- SATOUR accredited or inspected / recommended;
- may be signed from the last public road;
- open 12 hours per day, 365 days a year;
- premises should be clean and attractive and in good state or repair; shall provide breakfast;
- available primarily for the lodging or sleeping of travellers;
- provision shall be made for bedding;
- brochure should be available;
- parking should be provided;
- bathroom facilities not be shared with household.

8 Youth Hostel:

![Youth Hostel](image)

GFS C1-8

Basic requirements:

- the hostel, when making application to its Municipality, must be in receipt of a letter from the Youth Hostel Association; the letter will confirm the hostel as being a member and as such, will meet the IYHF’s International Operating Standards as mentioned, together with those listed below;
- the minimum number of beds is 10;
- the hostel must be clean and secure;
- the hostel must offer 24-hour access or else, provision must be made for check-ins if the manager/owner is not available;
- space between beds must be adequate, as must the number of toilets/bathrooms correlate to the number of people, as specified in the IYHF Operating Standards Manual;
- where bedding is not automatically provided, provision must be made for the hiring thereof;
- the hostel must be open throughout the year;
- sufficient parking should be available;
- the hostel must either provide self-catering facilities or communal dining room facilities with meals;
- signed from nearest numbered route.

4.6.11 Level 2 Warrant Criteria: Tourist Attractions: Groups A1 to A13:

1 Generic Warrants - all facilities to be signed shall have a clean, attractive and well kept appearance and shall be in a good state of repair. The relevant criteria are listed for each type of facility.

2 Tourist Attractions Facilities:

(see Figures 4.30 and 4.31):

- open to the public;
- registration (when appropriate);
- information;
- toilets;
- well maintained access and internal roads;
- parking;
- rural - within 50 km of the nearest numbered route;
- urban - within 5 km of the nearest numbered route;
- reception available 12 hours per day 365 days per year, with the capability to accept, by prior arrangement, arrivals 24 hours per day;
- brochure should be available;
- appearance must be clean, neat and be maintained in a good condition.

Preferred requirements:

- drinking water;
- accommodation (which shall be subject to the appropriate accommodation type warrant and to statutory requirements);
- additional facilities designed to make a tourists stay more pleasant;
- in regard to Nature/Game Reserves, only those reserves exhibiting indigenous flora/fauna and are approved/registered by conservation authorities will be eligible.

4.6.12 Level 3 Warrant Criteria

1 The following are basic criteria which may warrant the use of the stated signface design principle on a tourism sign:

(a) Primary Name:

- tourist attractions;
- class 3 or 4 rest and service area;
- grade 2 or higher accommodation;
- hospitals.

(b) Supplementary Symbols:

- is the availability of supplementary facilities obvious from the main symbol?
- as a function of the distance to the facility is it necessary to indicate supplementary facilities?
(c) "Area" Collective Symbol:

- to reduce the need for the indication of many facilities until closer to each facility;
- alternative in marginal cases to provision of an information layby.

(d) A Distance:

- if distance is greater than might be expected;
- if road condition is poor;
- if distance is greater than 20 km;
- if road is a "dead-end" road.

(e) A Route Number:

- if facility is only public destination on a numbered route.
### Table 4.5  
**Tourist Attractions – Specific Warrants**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Warrants - Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFS A5-1</td>
<td>Motor Sport Circuit</td>
<td>Warrants to be laid down by Automobile Association</td>
</tr>
<tr>
<td>GFS A5-2</td>
<td>Golf Course</td>
<td>Classified by the national golf council or appropriate body. The symbol can also be used for a country club, where: - it is graded by SATOUR and qualifies for signs - golf is the main activity - accommodation and restaurants are available at the club - other sporting facilities such as tennis, squash etc are available - the club's principal name plus the symbol can be signed from the nearest numbered route</td>
</tr>
<tr>
<td>GFS A5-4</td>
<td>Riding School (Equestrian Events)</td>
<td>- classified according to Riding School Association of South Africa - to be signed only from Class C or “Collector” Roads in urban areas</td>
</tr>
<tr>
<td>GFS A5-8</td>
<td>Stadium</td>
<td>It should be a multi-purpose stadium and: - be accessible to the general public at all times - parking should be adequate - should have the basic infrastructure needed for stadiums - see section on special event signing</td>
</tr>
<tr>
<td>GFS A7-5</td>
<td>Historic Railway</td>
<td>Registered by NMC (or appropriate authority) Available for excursions by the general public</td>
</tr>
<tr>
<td>GFS A7-6</td>
<td>Historical Battlefield</td>
<td>Interpretation material must be provided on site Acknowledged/Registered by the National Monuments Council (or appropriate authority)</td>
</tr>
<tr>
<td>GFS A7-7</td>
<td>Geological Site</td>
<td>Warrants laid down by the Geological Society of South Africa</td>
</tr>
<tr>
<td>GFS A9</td>
<td>Arts and Crafts</td>
<td>According to warrants provided by the Council for Crafts in South Africa</td>
</tr>
<tr>
<td>GFS A9-6</td>
<td>African Art</td>
<td>- the business has a working studio (and is not simply a gallery, museum or gift shop) where the visitor is invited to watch or participate while artists demonstrate their skills - the studio is a separate building or if located in the artists’ residence, the studio has a separate business entrance to that of the residential space - at least 50% of crafts available for sale on the property are produced on site and the remainder are crafted in South Africa.</td>
</tr>
<tr>
<td>GFS A9-2</td>
<td>Pottery</td>
<td></td>
</tr>
</tbody>
</table>
4.7 TOURISM SIGNING APPLICATIONS

4.7.1 General

1 In order to achieve an acceptable degree of similarity or uniformity between different installations of the same type of TOURISM sign in different parts of the country a number of typical examples of signing applications of TOURISM signs are detailed in this section.

2 The choice of signing applications covered has been based on past experience.

3 The applications covered are generally appropriate for the provision of signs for tourist attractions or tourist services. A number refer particularly to the provision of rest and service areas along major routes and tourist routes and to the provision of a continuing sequence of information relevant to the availability and spacing of such placing where rest and service may be obtained.

4 Specific applications which require a somewhat special treatment are:
   (a) the signing of information laybys or centres (see Figures 4.25 to 4.27); and
   (b) the signing of by-passed towns (see Figure 4.49).

4.7.2 Sign Location

1 Each application includes a diagram and limited text covering such aspects as :
   (a) typical signface layouts and sign sequences for one direction of approach to the facility;
   (b) the likely number of signs required;
   (c) the types of such signs;
   (d) the position in which TOURISM signs may be located, with particular regard to other guidance signs.

2 Where appropriate a “Checklist” of items to be considered before finalising an installation of TOURISM signs is provided.

4.7.3 Tourist Information

1 The provision of tourist information about and within a high density tourist area is very important to the overall effectiveness of the signing and operation of the area. Tourist information can be provided in one or all of three ways:
   (a) gateway information centres;
   (b) information laybys; and
   (c) information agents.

2 Gateway information centres may be situated at the entrances to larger tourism areas. These are intended to be major facilities, commonly manned, and for this reason can normally only be provided for on a limited basis. The whole approach to signing a large high density tourism area can be developed around the provision of high quality gateway information centres.

3 Information laybys with map signs of the area may be strategically located so that tourists entering the area can obtain an overview of the area. As an unmanned facility information laybys can represent a liability of sorts since the information is likely to require regular updating and such facilities are prone to vandalism.

4 It is likely that information laybys will need to be self-supporting, i.e. responsibility for updating and maintenance will be for the local/area publicity or tourism body and/or the local authority concerned. However, such facilities, if combined with existing picnic sites or scenic viewpoints, can offer excellent means to disseminate tourist information.

5 The following functions of tourist information boards have been identified:
   (a) to indicate to road users that they are entering a particular tourism region;
   (b) to provide road users with a schematic map of the region so that they may orientate themselves should they be uncertain of their exact location;
   (c) to indicate the towns which have local information offices;
   (d) to indicate the locality of the regional tourism office;
   (e) to promote tourism by creating an increased tourism culture in the region amongst the inhabitants and role players who reside within the region.

6 The detailing of Tourism Information Boards should include:
   (a) design and detail in a variety of forms; the information board should be colourful and attractive and should utilise the same details as those appearing on the tourism signs, such as symbols;
   (b) the following information:
      (i) the “I” symbol;
      (ii) an orientational insert map of the area and surrounding regions;
      (iii) legend describing tourist facilities;
      (iv) if possible a distance table showing distances between all towns in the region;
      (v) the logo of the tourism association;
      (vi) legend “Welcome to....” with the area name.

7 The positioning of information boards is one of the most critical elements in order to derive the maximum usage and lifespan from such boards. The following factors are relevant and must be considered in the assessment of likely positions:
   (a) a favourable background promoting the region – e.g. a scenic mountain view;
   (b) adequate sight distance before the sign so that there is a sufficient safe stopping distance in order to gain access to the layby;
   (c) favourable gradient for vehicles pulling away from layby area;
   (d) an existing layby would be a preferential position because of the costs involved in building such a layby and the time factor involved;
   (e) an undeveloped site with trees in the road reserve would be ideal in order to provide shade;
Facility Groupings
Try to display information groups consistent with their classification, namely:
- Groups A1-A13 Tourist Attractions
- Groups B1-B7 Services
- Group C Accommodation

Fig 4.25
Information Layby and Board Layouts

Detail 4.25.1
Typical Information Layby
Near a Tourist Area or Town

Detail 4.25.2
Conceptual Information Board for Use
at a Layby or Information Centre

Tourist Facilities
Facilities identified in lists by symbol and name shown on map itself
(use symbols on board)

Information Display
Use Tourism Symbols to identify groups of attractions or services or to identify individual facilities - this will promote symbol awareness and understanding.
Facilities may be numbered in lists and on the detail map

Map Area
Recommended to include regional map (#1), local map (#2), and detailed map (#3) resulting in several "layers" of information

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(f) vandalism from pedestrians must be borne in mind and areas where people wait for public transport should be avoided.

(g) positions close to intersections must be avoided because of conflicting traffic manoeuvres which increase the risk of an accident.

8 Subject to the layout of any layby provided (see Figure 4.25) information boards should be placed just like normal road signs at a height of 2m above the shoulder surface and in front of the layby area. Allowance should be made for at least three cars to be parked at a particular layby at any stage in time. This would require approximately 100 m² of parking area additional to that of any picnic area. The area should preferably be tarred so that a muddy surface would not deter drivers from parking there and discourage passengers from alighting. The extent of the earthworks required varies from place to place but at least 25 m³ of compacted natural gravel is estimated.

9 The positions of tourist information laybys should be indicated at least 500 m in advance by means of advanced tourism signs (GF5).

10 Tourist information boards may be designed to be read either by drivers sitting in their vehicles or by persons outside their vehicles standing in front of the board (or both circumstances). The following guidelines may be of assistance in the detailed design of tourist information boards:

(a) letter style - whilst the style of lettering need not be prescribed, the use of clean, uncluttered letter styles is recommended - a typical such style is Helvetica (organisations using Department of Department's Sign Design Program may find it convenient to use the DIN 1451 Part 2 letter style, which, being fully proportional, may be reproduced at any size), it is recommended that text be displayed primarily in lower case letters, as in normal written text;

(b) lower case letter height:
   (i) 3 mm per metre of viewing distance under good lighting conditions;
   (ii) 6 mm per metre of viewing distance under a wider range of lighting conditions;
   (iii) 8 mm or above per metre of viewing distance for greater visual impact or to establish an information hierarchy (i.e. for titles);
   (iv) the ratio of lower case letter height to uppercase letter height varies from 2:3 to 3:4 according to letter style, the ratio for DIN 1451 Part 2 style lettering is 5:7;

(c) symbols - subject to the complexity of symbols involved these should range between 10:7 and 15:7 times the size of upper case letters used on the board (whilst all symbols may not be uniform height, tourism signs symbols have a nominal ratio of 15:7 and guidance sign symbols have a nominal ratio of 10:7 in relation to DIN 1451 Part 2 upper case letters). Figures 4.26 and 4.27 show examples of typical information boards, that could be used at information laybys.

11 The use of information agents could be applicable in certain areas. In such areas, it is recommended that the tourism management committee establish a co-ordinated network of information agents by utilising existing service stations, cafes and shops in the area. Such centres of information should be indicated by tourist sign GF17 displaying the TOURIST INFORMATION symbol GF5BS-8. Such a concept will only be effective if the chosen agents are enthusiastic about their role. If they are only open for limited hours, it would be beneficial if they made sure that basic information, such as emergency contact telephone numbers and a map of the area, are available to view on a 24-hour basis.

12 It is also within the area of responsibility of the tourism management committee to see that each and every facility in the area acts as a mini information agent, prepared to promote the area as a whole, and not just their own attractions.

13 Subject to affordability, the technology exists that the centres of information could be fully automated by utilising electronic media tourist information booths which operate in a manner similar to an ATM at a bank.
Modular construction to generate maximum surface area from standard components
4.7.4 Direct Access - Numbered or Unnumbered Route

1 This detail illustrates the basic provision of TOURISM signs for the direct access or final turn to a tourist attraction or service facility. This placing sequence may be used from a numbered or an unnumbered road, particularly to a facility which can be considered isolated in the sense that it is not affected by a distance warrant from a nearest junction.

2 The normal requirement is for two signs on each approach from which tourists are likely to drive towards the facility. This provision may be modified in terms of the responses to items in the "Checklist" by either deleting or adding signs.

3 For each approach which is to be signed:
   (a) 1 x ADVANCE TURN sign GF2;
   (b) 1 x FINAL TURN sign GF3.

4 Signs should be positioned as follows:
   (a) the ADVANCE TURN sign should be positioned in advance of the access so that it is two thirds of the standard position of an ADVANCE DIRECTION sign from the access or roadway, whether or not a GD1 sign is in place at the time; under normal circumstances this positioning rule will translate to the following distances:
      (i) 120 km/h operating speed - 240 m;
      (ii) 100 km/h operating speed - 180 m;
      (iii) 80 km/h operating speed - 120 m;
      (iv) 60 km/h operating speed - 80 m;
   (b) the FINAL TURN sign should be located in the far left corner of the junction of the access and the passing roadway so that drivers entering the access road pass in front of the sign.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- is the facility visible from the passing road?
- is the access to the facility safely visible?
- is the facility one of several covered by an area-wide TOURISM signing exercise and/or information board, layby, or centre?
- check for Level 3 warrant characteristics.
Fig 4.28    Signing for Direct Access from a Numbered Route or Un-numbered Road
4.7.5 Nearest Numbered Route

1 This detail illustrates the signing recommended when a tourist attraction or service facility is accessed from an unnumbered road but lies within the warranted distance "y + z" of the nearest junction with a numbered route. (According to the discretionary clause in Volume 1, Subsection 4.9.4 (see also Table 4.2) this sign application may also be appropriate between two numbered routes.)

2 The number of signs required is subject to the number of approaches from which tourists are likely to drive towards the facility. The minimum provision will be two signs. In terms of the example illustrated this number could increase to four signs if all approaches to the junction of the numbered and unnumbered roads are likely to be used. This requirement to increase further to eight signs if tourists can approach from a similar junction located within the warranted distance in the opposite direction.

3 Subject to the circumstances described in paragraph 4.7.5.2:
   (a) 1 to 4 x ADVANCE TURN signs GF2;
   (b) 1 or 2 FINAL TURN signs GF3.

4 Signs should be positioned as follows:
   (a) an ADVANCE TURN sign used on a numbered route approach should be located between the standard GD1 sign and the junction to which it refers so that it is two thirds of the distance of the GD1 sign from the junction; this positioning rule will translate to the following distances:
      (i) 120 km/h operating speed - 240 m;
      (ii) 100 km/h operating speed - 180 m;
      (iii) 80 km/h operating speed - 120 m;
      (iv) 60 km/h operating speed - 80 m.
   (v) the FINAL TURN sign should be located in the far left corner of the junction of the access and the passing roadway so that drivers entering the access road pass in front of the sign.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:
- is the facility visible from the passing road?
- is the access to the facility safely visible?
- is the facility one of several covered by an area-wide TOURISM signing exercise and/or information board, layby, or centre?
- if distance "y + z" for the facility in question is over 10km a distance may be warranted on the GF2 signs, OR a CONFIRMATION sign GF7 may be warranted;
- check for other Level 3 warrant characteristics.
Fig 4.29 Signing from Nearest Numbered Route – Access Identification
4.7.6 More than One Facility

1. This figure combines the characteristics of Figures 4.28 and 4.29 with the additional need to differentiate between two tourist attraction or service facilities in relatively close proximity to each other and approached from a common junction. The junction could be any combination of numbered or unnumbered roads. If a large number of facilities exist a tourist information layby should be considered (see Subsection 4.7.3 and Figures 4.25 and 4.26).

2. Additional sign stacks will be required in comparison to the provisions for Figure 4.29 and FINAL TURN signs GF3 may be warranted to clarify the split to the facilities at the common junction remote from the facilities. Once again the total number of signs required is subject to the number of approaches from which tourists are likely to drive towards the facility. The minimum provision will be three signs. The maximum provision covering all approaches could be 10 signs, subject to the need for additional FINAL TURN signs at the main junction.

3. Subject to the circumstances described in paragraph 4.7.6.2:
   (a) 1 or 2 x 2 stack ADVANCE TURN signs GF2;
   (b) 2 or 4 x 1 stack ADVANCE TURN signs GF2;
   (c) 2 to 6 x FINAL TURN signs GF3.

4. Signs should be located as for Figure 4.29. An optional treatment when two GF3 signs (one sign for each direction of approach) are required at the access to a facility, which access is a T-junction, is to locate the GF3 signs on common supports opposite the access branch of the junction as illustrated.

Checklist
One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- is the facility visible from the passing road?
- is the access to the facility safely visible?
- is the facility one of several covered by an area-wide TOURISM signing exercise and/or information board, layby, or centre?
- if distance "y + z" for the facility in question is over 10km a distance may be warranted on the GF2 signs, OR a CONFIRMATION sign GF7 may be warranted;
- check for other Level 3 warrant characteristics.
Fig 4.30
Signing for More Than One Facility

NOTES:
1) GF3 signs not detailed due to limited space.
2) Destinations on multi-panel signs may be arranged vertically in one of three ways:
   (i) nearest at the top; or
   (ii) longest at the top; or
   (iii) in the order tourist attractions, accommodation, service.
Subject to poor aesthetic results the latter is recommended.

Detail 4.30.1
Typical Signing for More Than One Facility

Detail 4.30.2
Signs for More Than One Facility—Recommended Panel Order on Multi-Panel Sign
4.7.7 Follow-Up Signs

1 This figure illustrates the signing treatment which may be used when a number of turns are required between the point where the facility is first signed and the final turn towards the facility. Signing for the initial and final turns should be as for Figures 4.29 or 4.30. The signing for intermediate turns may be as for the initial turn, namely using an ADVANCE TURN sign, OR follow-up versions of such signs may be used to reduce cost and space considerations. This placing sequence is particularly appropriate in urban or peri-urban situations.

2 A follow-up ADVANCE TURN sign displays only the symbol used on a preceding ADVANCE TURN sign (the primary name is omitted). The addition of a distance to follow-up ADVANCE TURN signs may also be considered. Subject to the needs of the initial and final turns, which may be determined from Figures 4.28 and/or 4.29, further signs may be required as follows:
   (a) 1 x follow-up ADVANCE TURN sign per intermediate turn.

3 Signs should be positioned as follows:
   (a) an ADVANCE TURN sign used on a numbered route approach should be located between the standard GD1 sign and the junction to which it refers so that it is two thirds of the distance of the GD1 sign from the junction; this positioning rule will translate to the following distances:
      (i) 120 km/h operating speed - 240 m;
      (ii) 100 km/h operating speed - 180 m;
      (iii) 80 km/h operating speed - 120 m;
      (iv) 60 km/h operating speed - 80 m.
   (b) a follow-up ADVANCE TURN sign should be positioned in the same way as an ADVANCE TURN sign;
   (c) the FINAL TURN sign should be located in the far left corner of the junction of the access and the passing roadway so that drivers entering the access road pass in front of the sign.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- is the facility visible from the passing road?
- is the access to the facility safely visible?
- is the facility one of several covered by an area-wide TOURISM signing exercise and/or information board, layby, or centre?
- check for Level 3 warrant characteristics.
Fig 4.31 Signing for Several Turns – Follow-up Signs
4.7.8 Facility on Minor Route

1. This signing application is a “special case” version of Figures 4.28 or 4.29 where the fact that the access road to the facility is a public road with no other significant public destination results in the FINAL TURN sign being located some distance from the facility. All other aspects of signing should be treated as for Figures 4.28 or 4.29.
Fig 4.32  Signing from Nearest Numbered Route – Facility Off Minor Public Road
4.7.9 Freeway Sign Sequence

1 This figure illustrates the basic provision of TOURISM signs at a freeway access interchange (the provision of TOURISM signs at a freeway systems interchange is not recommended). This signing application may be used leading to an unnumbered cross road, or within the provisions of Volume 1, Subsection 4.9.4 (see also Table 4.2), leading to a numbered cross route. Additional signs as detailed in earlier Figures are commonly likely to be necessary unless the facility is located in close proximity to the interchange.

2 The normal requirement will be for two signs on each approach to the interchange up to and including the ramp terminal.

3 For each approach the following types of signs are required:
   (a) 1 x FREEWAY ADVANCE EXIT sign GF1;
   (b) 1 x ADVANCE TURN sign GF2 located on the off ramp.

4 Signs should be positioned as follows:
   (a) the FREEWAY ADVANCE EXIT sign should be located on the left side of the roadway approximately 600m in advance of the exit point (this location should be adjusted towards 700m - 800m if a FREEWAY SUPPLEMENTARY EXIT DIRECTION sign is already located at the 500 m point);
   (b) the ADVANCE TURN sign should be located on the left side of the off-ramp approximately 60 m-150 m from the ramp terminal; if the off ramp is particularly short the sign should not be located closer to the exit point (see Volume 1, Section 4.8) than half way down the ramp.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- is the facility visible from the passing freeway?
- if more than one facility is indicated on the GF1 sign are all facilities to the same direction at the ramp terminal? - if not the GF2 sign should be provided as a two stack sign, one stack to the right over one stack to the left;
- is the facility one of several covered by an area-wide TOURISM signing exercise and/or information board, layby, or centre?
- check for Level 3 warrant characteristics.
Fig 4.33
Signing from a Freeway - Numbered or Un-numbered Crossroad

Detail 4.33.1
Basic Freeway Tourism Signing Application

Detail 4.33.2
Freeway Tourism Signing with Maximum 3 Destination Display

Detail 4.33.3
Freeway and Follow-up Signing with Triple Panel Freeway Applications

No signs decrease filling station very visible
Un-numbered Route

Detail 4.33.4
Optional Disposition of Right and Left Turn Signs on Off-Ramp

Signs subject to visibility of facility and entrance

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4.7.10 Freeway Service Exit Sequence Signs

1  This figure illustrates the provision of service exit sequence information on a section of freeway. The provision of such information is appropriate when one or more freeway systems intersect and drivers may feel cut off from surrounding areas within which services will be available. The placing sequence is therefore particularly appropriate when the combination of freeway systems intersecting occurs in urban or metropolitan areas. The need for such signs will most likely occur when there are a number of closely spaced interchanges.

2  The normal requirement is for one sign on each appropriate exit side of a freeway systems interchange. If the length of a section of freeway between intersecting freeways, is such that there are very many interchanges, it may be appropriate to provide such signs at regular spacings covering two or three consecutive interchanges.

3  The appropriate sign type is the SERVICE EXIT SEQUENCE sign GF8.

4  The sign should be located at least 1km beyond the last point of entry to the freeway system following a systems interchange, subject to the presence of FREEWAY DIRECTION signs which shall take precedence for position. In addition the sign should preferably not be positioned closer to the first exit indicated than 2km in advance of such exit.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- is the facility visible from the passing road?
- only service information may be indicated;
- primary names shall not be indicated.
Fig 4.34  Signing for Service Exit Sequence From a Freeway System
4.7.11 Freeway Rest and Service Area

1 This figure illustrates the signing treatment of a high standard rest and service area which is provided with direct access from a freeway. The approach signing should be similar to the standard level of FREEWAY DIRECTION signing provided at an access interchange.

2 The normal requirement is for six signs on each approach unless the route in question has been subject to a co-ordinated rest and service area sequence signing exercise in which case seven signs are required on each approach (see Subsections 4.7.12, 4.7.13, 4.7.19 and 4.7.20). This type of facility is commonly provided on both sides of a freeway without interconnecting access.

3 For each approach which has to be signed:
   (a) 1 x REST AND SERVICE SEQUENCE sign GF9.1;
   (b) 1 x FREEWAY ADVANCE EXIT sign GF1 with distance;
   (c) 3 x COUNTDOWN signs IN1, IN2 and IN3 (Brown);
   (d) 1 x FREEWAY ADVANCE EXIT sign GF1 without distance;
   (e) 1 x GORE EXIT sign GF4.

4 A number of other standard regulatory and warning signs shall be provided, as is the standard treatment for normal freeway off-ramps and on-ramps:
   (a) 1 x FREEWAY DE-RESTRICTION sign R601 on the off-ramp;
   (b) 1 x SPEED LIMIT sign R201 on the off-ramp;
   (c) 1 x FREEWAY BEGINS sign R401 on the on-ramp;
   (d) 1 x SHARP JUNCTION sign W112 in the on-ramp gore area;
   (e) 1 x SPEED LIMIT sign R201 on the freeway beyond on-ramp.

5 Signs should be positioned as follows:
   (a) the REST AND SERVICE SEQUENCE sign should normally be located 2 km in advance of the first exit point shown on the sign;
   (b) the FREEWAY ADVANCE EXIT sign indicating a distance should be located at, or within 50 m of, the distance displayed on the sign (this is normally 1km);
   (c) the FREEWAY EXIT DIRECTION sign without a distance should be located within 50 m of the point of exit from the freeway;
   (d) the GORE EXIT sign should be located within the gore in the conventional manner.

Checklist
One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:
- the access geometry of the rest and service area shall conform to normal freeway exit and entry treatments;
- no signs indicating the nature of the services available within the rest and service area shall be located on the freeway (see Figure 4.38);
- if the distance between rest and service areas exceeds 80 km to 100 km an additional GF9.1 sign may be provided approximately half way between facilities;
- are further rest and service areas known to be planned for development within the life of the GF9.1 signs?
Fig 4.35  Signing for a Direct Access Rest and Service Area from a Freeway
4.7.12 Freeway Rest and Service Exit Sequence Signs

1. This figure illustrates the provision of signs indicating the availability of rest and service facilities along a route. The use of such signs is not appropriate until the availability of such service areas is well developed at regular intervals along the route.

2. On a route basis the decision to provide the signs should be dependent on the number and spacing of the rest and service areas. However, only one sign is required in advance of each area for each direction of approach subject to the provision that if two facilities are more than 80 km to 100 km apart an additional sign may be provided approximately halfway between the facilities.

3. The appropriate sign type is the REST AND SERVICE SEQUENCE sign GF9.1.

4. This sign should be located approximately 2 km in advance of the next available rest and service facility subject to the position of FREEWAY DIRECTION signs.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- only the next two rest and service areas should be indicated;
- the signs may indicate named and unnamed facilities, and facilities available to all classes of vehicle or only certain classes of vehicle.
Fig 4.36  Signing for a Sequence of Rest and Service Facilities Along a Freeway Route
4.7.13 Freeway/At-Grade Route Rest and Service Area Sequence Signs

1 This figure illustrates the provision of information relating to the availability of rest and service facilities consistently along a route. The use of such signs is only appropriate once such facilities are established at reasonably frequent intervals. Provision of this type of information along a route will encourage road users to plan their rest and service stops resulting in reduced fatigue and safer driving practices, and thereby reduced accident rates.

2 At least one sign is required, for each direction of travel, in advance of each area supplying the high level service required in terms of rest and service area class 3 and 4 warrants. Additional signs may be provided at approximately 50 km intervals if the distance between rest and service areas exceeds 80 km to 100 km. These signs are included in the placing sequence covered by Subsection 4.7.11.

3 The appropriate sign types are the REST AND SERVICE SEQUENCE signs GF9.1 and GF9.2. This sign type may be used without rest and service area names, particularly if several facilities occur within close proximity of each other. To further reduce sign area, a single symbol may be used if both rest areas offer the same class of service. The possible need for a hybrid GF9.1/9.2 sign in advance of the change from freeway to at-grade sections of route should be noted.

4 The signs should be located approximately 2km in advance of the exit or turn to the rest and service area. In advance of a town on an at-grade section of route a GF9.2 sign should preferably be located in the outer urban area or just beyond the town limits at an increased distance of 5 km to 10 km. GF2 and/or GF3 signs in accordance with Figures 4.28 to 4.31 may be used within towns subject to compliance with distance and other warrants by the facilities and to the availability of roadside space.

Checklist

One or more of the following factors or questions may indicate a need to provide a different sign treatment, or for some other action to be taken:

- only the next two areas should be indicated on the sign;
- areas may be given a geographic name in accordance with Section 4.6, and may include generic terms; the geographic name should not be that of the town in which the facility is located;
- signs may display named and un-named facilities, and facilities for all or one vehicle class;
- if several facilities exist in a town the distance displayed should be to the closest facility, or an average for all;
- if several facilities exist in a town the sign type GF9.2 should be used without facility names.
Fig 4.37 Signing for a Sequence of Rest and Service Facilities Along a Mixed Freeway/At-Grade Route
4.7.14 "TOTEM" Signing Inside Rest and Service Area

1 This signing application shows an example of the use of "totem" signs within a rest and service area. The example illustrated is a very high standard facility involving detailed landscaping treatment. The use of "totem" signs is equally appropriate for less developed rest and service areas.

2 The number of signs required is entirely dependent on each individual site.

3 The specific types of "totem" signs required is also very site dependent but is likely to include:
   (a) arrows;
   (b) route number(s);
   (c) fuel;
   (d) toilets;
   (e) food etc.

4 Sign location is dependent on the internal roadway geometry. Signs should be mounted in "totem" clusters close to points where roadways split using one "totem" for each exit road from such internal junctions.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:
- "totem" signs shall not be used outside the confines of the rest and service area;
- is the intention to segregate vehicles by class?
- is the direction by which drivers return to the freeway clearly visible?
Fig 4.38  Internal Signing for a Rest and Service Area
4.7.15 Special Case - Facility Only Destination

1  This signing application is very similar to that covered in Figure 4.33. When the only significant public destination on the cross road is a tourist facility destination the facility may be additionally signed by incorporation of a brown stack into the RAMP TERMINAL DIRECTION sign GA6. This placing sequence is in fact the “final turn” indication to the facility (see typical sign examples in Figure 4.10).

2  All other details are as for Figure 4.33.
Fig 4.39    Signing from a Freeway – Facility the Only Public Destination
4.7.16 Emergency Services - SOS Telephone

1 This signing application shows a typical section of roadway provided with an emergency service communications network - in this case a SOS TELEPHONE system. Such installations are likely to be provided over distances of many kilometres.

2 The minimum requirement will be for one advance system sign and one end of system sign plus two signs per telephone installation. Such installations normally provide for telephones at regular intervals of between 2 km and 4 km.

3 Types of sign required are as follows:
   (a) at the beginning of a section:  
      1 x EMERGENCY SERVICE SPACING sign GF11;
   (b) after every intermediate freeway to freeway junction before the end of the section:  
      1 x EMERGENCY SERVICE SPACING sign GF11;
   (c) for each telephone or other type of installation:  
      1 x EMERGENCY SERVICE ADVANCE sign GF12; 1 x EMERGENCY SERVICE TURN-IN sign GF13;
   (d) at the end of a section:  
      1 x LAST EMERGENCY SERVICE sign GF14.

4 Signs should be positioned as follows:
   (a) the EMERGENCY SERVICE SPACING sign should be located a minimum distance of 1 km in advance of the first telephone;
   (b) the EMERGENCY SERVICE ADVANCE sign should be located 1000 m to 300 m in advance of the telephone;
   (c) the EMERGENCY SERVICE TURN-IN sign should be located at the telephone;
   (d) the LAST EMERGENCY SERVICE sign should be located a minimum distance of 1 km in advance of the last telephone in the system.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- all signs GF11, GF12 and GF14 shall be located well away from any FREEWAY DIRECTION sign;
- in terms of the last statement it is common practice to locate telephones within interchanges - in such instances the EMERGENCY SERVICE ADVANCE sign GF12 may be obscured by the GORE EXIT sign GA4 - the position of the GF12 sign should be adjusted towards 300 m from the telephone to reduce this effect.
Fig 4.40  Signing for Emergency Services – SOS Telephone
4.7.17 Roadside Layby

1 This figure illustrates the signing requirements for a roadside layby provided adjacent to a high speed roadway. The placing sequence is appropriate for a range of laybys provided for rest, water, farm stall, curio shop, etc.

2 The standard requirement is for two signs as follows:
   (a) 1 x LAYBY ADVANCE sign GF5;
   (b) 1 x LAYBY TURN-IN sign GF6.

3 Signs should be positioned as follows:
   (a) the LAYBY ADVANCE sign should be located on the left side of the road approximately 1km in advance of the point of entry to the layby;
   (b) the LAYBY TURN-IN sign should preferably be positioned just beyond the point of entry to the lay-by so that an entering driver passes in front of the sign - this may not be practical if the layby is not well set back from the road, in which case the sign may be positioned on the left side of the road just before the point of entry.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- the layby shall only be signed from the near side direction of approach;
- UNLESS the point of access is very clearly visible and has a similar level of geometric treatment to intersecting roads on the section of road in question;
- a layby may only be provided on a freeway if the access treatment is of a similar standard to any other exit or entry point on the freeway.
Fig 4.41  Signing for a Roadside Layby
4.7.18 Facilities on Routes Parallel to Freeways

1. This figure represents a further extension to that covered in Subsection 4.7 applicable when tourism facilities exist on a numbered route, or routes, which parallel a freeway. The sign sequences used should conform to those covered by Subsection 4.7.9 - Freeway Sign Sequences.

2. The normal requirement will be for two signs for each freeway approach serving a facility. The proximity of facilities and their optimum accessibility will influence how placing sequences may be combined. Additional signs will be required for additional turns towards facilities and final turn signs may be required subject to the visibility of the facility and its final turn access.

3. The following types of signs will normally be required:
   (a) FREEWAY ADVANCE EXIT sign GF1;
   (b) ADVANCE TURN sign GF2 (on the off-ramp);
   (c) ADVANCE TURN sign GF2 (at subsequent junctions);
   (d) FINAL TURN sign GF3.

4. The signs should be located in the positions recommended by the appropriate placing sequences (see Subsections 4.7.9).

Checklist

- One or more of the following factors or questions may indicate a need to provide a variation on a standard sign treatment, or for some other action to be taken -
  - are the discretionary principles covered in Volume 1, Subsection 4.9.4 (see also Table 4.2) appropriate?
  - are the additional warrants covered in Section 4.6 appropriate?
  - when more than one facility is indicated on a sign, or sign cluster, ensure that the order of display vertically is always such that facilities which are reached after a right turn at the ramp terminal appear above facilities reached after a left turn AND, that once this requirement is satisfied, the closer facility appears above the further facility (see detail of signs in Figure 4.42 for facilities “A”, “B” and “C” - and Figure 4.33 for a more detailed general example); these principles are also appropriate at an at-grade intersection under similar circumstances;
  - can follow-up signs be used (see Subsection 4.7.7)?
  - would a tourist information layby be more appropriate or cost effective?
Fig 4.42  Signing for Tourism Facilities on Routes Parallel to a Rural Freeway
4.7.19 At-Grade Rest and Service Area

1 This figure illustrates the signing treatment of a high standard rest and service area which is provided with direct access from an at-grade major route. The choice of sign sequence must be made carefully. The signs provided for the facility may supplement direction signs in which case they should conform to the placing sequences covered by Subsections 4.7.4 to 4.7.6. If direction signs are not required the signing treatment should be similar to that used for a freeway rest and service area (see Subsection 4.7.11).

2 The normal treatment is for two signs on each approach unless the route in question has been subject to a co-ordinated rest and service area sequence signing exercise in which case three signs are required on each approach (see Subsections 4.7.12 and 4.7.13).

3 For each approach the following types of signs are required:
   (a) 1 x REST AND SERVICE SEQUENCE sign GF9.2;
   (b) 1 x ADVANCE TURN sign GF2 with distance;
   (c) 1 x FINAL TURN sign GF3.

4 Signs should be positioned as follows:
   (a) the REST AND SERVICE SEQUENCE sign should normally be located 2 km in advance of the final turn;
   (b) the ADVANCE TURN sign should be located between 600 m and 800 m in advance of the final turn subject to the presence of other entrances including farm entrances;
   (c) the FINAL TURN sign should preferably be located in the far left corner of the junction of the access and the passing roadway but for economy the FINAL TURN signs for both directions of approach may be mounted on common supports opposite the access.

Checklist

One or more of the following factors or questions may indicate a need to provide a differing sign treatment, or for some other action to be taken:

- no signs indicating the nature of the services available within the rest and service area shall be located on the at-grade route (see Figure 4.38);
- if the distance between rest and service areas exceeds 80 km to 100 km an additional GF9.1 or GF9.2 sign may be provided approximately half way between facilities;
- are further rest and service areas known to be planned for development within the life of the GF9.1 or GF9.2 signs?;
- the use of town or city names on direct access rest and service area signs is not recommended (see Volume 1, Subsection 4.9.22) - the facility names may be omitted altogether.
Fig 4.43  Signing for a Direct Access Rest and Service Area
From a Class “B” or Lower Class Route

NOTE
1. Use of a distance on GF2.1 will normally be warranted for at-grade direct access, Rest and Service Areas on rural routes. See *. 
2. This sign placing sequence may not be feasible in urban environments.
4.7.20 Rural Class 3 Rest and Service Area Signing Sequence

1. The provision of Rest and Service Exit Sequence signs to Class - 3 Rest and Service Areas on non-freeway routes requires a different approach to that used on freeways. The need for a specific policy on "exit" sequence signing for non-freeway routes has arisen due to the fact that the nature of the "exits" and the facilities is different to that on freeway routes, i.e. the level of accessibility is far greater on non-freeway routes due to frequent at-grade intersections and to the fact that such routes also often pass through towns. This latter aspect in particular, with the inherent competition between a number of facilities and services, has led to the development of an appropriate policy on the "exit" sequence signing for such facilities. This subsection and Figure 4.44 cover the rural application of the policy, whereas Subsection 4.7.21 and Figure 4.45 cover the urban implications. In addition Figures 4.46 to 4.48 illustrate practical examples of the application of the policies.

2. The policy for rural sections of non-freeway route recommends the provision of REST AND SERVICE EXIT SEQUENCE sign GF9 50 km in advance of selected and approved rest and service facilities. The underlying principle behind this 50 km GF9 exit sequence sign is to offer guidance to motorists as to where they may find specific services of a certain standard in order to plan the rest and service aspects of their journey. To achieve this, it is not necessary to give any corporate reference on the signs and only two lines of information referring to an intermediate-range and a long-range facility are to be displayed. Hence, the signs at "a" and "e" in Figure 4.44 display an enlarged Class - 3 symbol with the distance to the first facility in, what is in this example, a group or cluster of service facilities (intermediate-range), plus the distance to the next long-range facility (380 kilometres).

3. These principles apply equally to 100 km, 150 km etc. signs which would show the distance to the first facility (intermediate range) and the next long-range facility. This is on the proviso that major towns or cities would interrupt the exit sequence signing, i.e. exit sequence sign locations should be determined backwards from the facility to the next facility but no exit sequence signs will be allowed within urban boundaries (see Subsection 4.7.21).

4. In a similar way a REST AND SERVICE EXIT SEQUENCE sign GF9 is recommended at 2km from the intermediate-range facility identified on the preceding GF9 sign. The underlying principle behind this 2km exit sequence sign is to present a short-range and a long-range alternative to the motorist. The short-range facility or facilities shall be those in the immediate vicinity while the long-range facility shall be greater than 50 km from the short-range facility, being consistent with the information shown on the preceding 50 km GF9 exit sequence sign.

5. Figure 4.44 shows a complex example of a cluster of rest and service facilities "B", "C" and "D" in a rural context. Sign "b" shows the first facility in the cluster (short-range) plus the long-range facility. The middle line of information shows the second facility in the cluster but he third facility in this cluster cannot be accommodated on this sign. Because of the existence of the cluster of facilities signs "c" and "d" continue the principles by "rolling-over" the sequence of exits to facilities in the cluster. The inclusion of the long-range facility on all the signs "a", "b", "c" and "d" includes no corporate reference as it is the announcement of a Class - 3 facility to motorists, together with its distance, that is the essential minimum information to be conveyed. This "clustering" of facilities is particularly difficult to manage and has been presented in the rural context as a 'worst case' scenario in order to demonstrate all the principles needed to produce a consistent policy. It should be noted that any group of facilities (two or more) shall be announced on the 50km GF9 exit sequence sign (or at other multiples of 50km) by one symbol and one distance only.
Fig 4.44  Signing for a Sequence of Class 3 Rest and Service Facilities Along a Rural Non-Freeway Route (Cluster Example)
4.7.21 Urban Class 3 Rest and Service Area Signing Sequence

1 The provision of Rest and Service Exit Sequence signs to Class - 3 Rest and Service Areas on non-freeway routes requires a different approach to that used on freeways. The need for a specific policy on "exit" sequence signing for non-freeway routes has arisen due to the fact that the nature of the "exits" and the facilities is different to that on freeway routes, i.e. the level of accessibility is far greater on non-freeway routes due to frequent at-grade intersections and to the fact that such routes also often pass through towns. This latter aspect in particular, with the inherent competition between a number of facilities and services, has led to the development of an appropriate policy on the "exit" sequence signing for such facilities. This subsection and Figure 4.45 cover the urban application of the policy, whereas Subsection 4.7.20 and Figure 4.44 cover the rural implications. In addition Figures 4.46 to 4.48 illustrate practical examples of the application of the policies.

2 The principles applying to the provision of REST AND SERVICE EXIT SEQUENCE signs GF9 at 50 km and 2km distances from approved urban located facilities are identical to those developed in Subsection 4.7.20 except that, to avoid placing sequence signs within an urban boundary, it is recommended that the "2km" position of the sign be considered to be nominal and that it always be placed outside the boundary. Thus, in the case of the 2 km exit sequence sign, the precise distance indicated on the sign to the facility would be greater than 2 km.

3 Where towns or cities interrupt the rural 50 km spacing, without themselves providing an acceptable standard of facility, the GF9 sign may have to be displaced on occasions outside an urban boundary. To maintain consistency of information in such instances, the sign interval should be made less than 50km and the distance displayed on the exit sequence sign to the next facility should be greater than 50 km, i.e. the exit sequence sign should be brought ahead of an urban boundary (in the direction of travel) and not after.

4 The provision of exit sequence(GF9), advance(GF2) nor final turn(GF3) signs within urban boundaries, is generally not considered necessary as it is expected that location and access design in the urban area shall be such that traffic flow and safety will not be compromised.

5 REST AND SERVICE EXIT SEQUENCE signs GF9 are designed to announce Class - 3 facilities only and other facilities shall not be included, i.e. any other facilities graded lower than Class - 3 occurring within or outside urban boundaries shall not appear on the exit sequence signs. (The inclusion of a "small-man" policy could not be accommodated on this sign. The secondary level of guidance information, namely that given on at-grade roads by signs GD1 and GD2 and CONFIRMATION signs GD3, in the form of orientational destinations is adequate to offer alternative facilities to the motorist through the announcement of these destinations, which by virtue of their inclusion as classified orientational destinations have available lower level service facilities. If any other approved Class - 3 service facility is available just off the route, this may be signed in accordance with the policy provisions covered in Volume 1 and substantially in accordance with Subsection 4.7.4 and Figure 4.28 e.g. GF2, GF3 or GF8.3 signs).
Fig 4.45  Signing for a Sequence of Class 3 Rest and Service Facilities Along an Urban Non-Freeway Route
4.7.22 Typical Examples of the Application of Class 3 Rest and Service Area Signing Principles

1 The examples illustrated in Figure 4.46 to 4.48 have been chosen to test the policy principles developed in Subsections 4.7.20 and 4.7.21. However, it should be noted that the actual sites and facilities alongside the chosen routes have not been investigated thoroughly to confirm the detailed accuracy of the signing solutions given. Hence, while the use of actual examples is useful in practice, a number of assumptions have been made as follows:

(a) that the indicated Class -3 rest and service areas are assumed to be of a standard deemed necessary to achieve such a grading;

(b) that there are no other Class-3 facilities within the extent of the examples shown - any exclusion of a facility is unintentional and any facility subsequently upgraded to Class-3 would alter the sign information as shown.

2 Example 1 - Figure 4.46 - Three Sisters

This example is an isolated, rural case and simply illustrates the policy principles as applied to one facility. The intersection of the N1/N12 could introduce problems of sign location (which should be investigated thoroughly in the field) but the proposed locations are suggested so as not to conflict with the guidance signs. With regard to motorists travelling southbound on the N12, the announcement of facilities on the N12 at 2 km, implies that if the motorist remains on the N12, those services will be found. Hence, when arriving at the N1/N12 intersection, the primary guidance information will be a guide to turn right (on the N12) and not left which would be signed for the N1 only.

It should be noted that by way of example, the exit sequence signs in Figure 4.46 show the long-range distance to Laingsburg and not to Beaufort West. This latter location does not presently have a Class -3 facility, although the area has become known traditionally as a ‘stopping point’ for motorists and truck drivers who can receive comparable services from separate locations in the town. This condition highlights the dilemma of sequence signing but until a facility at Beaufort West is adjudged to meet the warrants for Class -3 Rest and Service areas, a “purist” approach has been adopted, thus omitting Beaufort West from the sequence. Clearly, the town of Beaufort West would be indicated on direction and confirmation signs as part of the system orientational information in the normal manner (see Subsection 4.7.21)

3 Example 2 - Figure 4.47 - Colesberg

The Colesberg example illustrates the rural, clustered situation and, again, the policy principles have been used to guide the sign application design (shown in the southbound direction only). The profusion of signs under these circumstances should be noted and, in particular, the inclusion of a 2 km sign before the “C’berg Ultra City”. This inclusion would need to be checked in the field because the distance between the Star Stop and the Ultra City is only 3 km, which could lead to difficulties arising from entry/exit ramps, additional signs or geometric conditions.

4 Example 3 - Figure 4.48 - Kimberley

The Kimberley example highlights the problems associated with a facility positioned within an urban boundary. Travelling in the southbound direction, the 2 km sign becomes a 2.5 km sign (distance to be checked in the field) which also displays the Kwagga Stop on the southern side of Kimberley. If there were another Class -3 facility inside Kimberley, this should be shown in preference to the Kwagga Stop, but no signs should be included inside the urban boundary. The long-range facilities given in this example are illustrative only.
Fig 4.46  Example of Class 3 Non-Freeway Rest and Service Signing Sequence - 1
Three Sisters

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Fig 4.47 Example of Class 3 Non-Freeway Rest and Service Signing Sequence - 2 Colesburg
Fig 4.48  Example of Class 3 Non-Freeway Rest and Service Signing Sequence - 3 Kimberley
4.7.23 Basic Principles – Tourism Signing for a By-Passed Town

1 A "By-Passed Town" can be considered to be a town which once had a main navigational numbered route, commonly a Class "B" route, running through the town but which route has subsequently been diverted to avoid the developed area of the town. In principle a small town which has developed alongside such a route could also be considered as being de facto a by-passed town.

2 If a by-passed town continues to grow so that it eventually envelopes the passing route the guidance signing, including any direction and tourism signs, should be considered in terms of general policies appropriate to an urban area (see Chapter 9).

3 A by-passed town may offer passing motorists the opportunity to utilise any of the various services available in the town such as emergency services (police or hospital), fuel or food / accommodation, or it may offer tourist attractions in addition. If a town has orientational destination status it can be expected that it offers all or most of the services noted above. However, the change in status brought about as a result of being by-passed can be considered as a warrant to provide a tourism service sign. Such a GF2 sign may have up to five service symbols, comprising emergency, vehicle, food and/or accommodation, and tourist information when this is available. Detail 4.49.1 shows such an indication at a single access by-passed town.

4 Detail 4.49.2 shows a typical tourism signing arrangement when the by-passed town has two (or more) access roads. In such an instance the display of tourism service information should be designed for the optimum convenience of passing motorists. To offer the quickest access to the police service in this example, for instance, "south-bound" motorists are directed past the first access to the second access since this is likely to offer the quickest approach to the police station.

5 When a by-passed town offers tourist attractions or is at the gateway to a tourist area it may be appropriate to provide a tourist layby or information centre in close proximity to an access road / main road junction (see Figure 4.25). Such an information facility may be combined with an adjacent service facility such as a fuel service station.

Checklist

- do the services in the town comply with normal warrants for such services?
- is there some reason, such as the recent construction of the by-pass, which strengthens the warrant for tourism service signs?
- does the town have more than one access road from the by-pass?
- is an information layby or centre available?
Fig 4.49  Basic Principles – Tourism Signing for a By-Passed Town
4.7.24 Part-Time Facilities

1 Figure 4.50 illustrates two typical situations where signing for part-time facilities may be appropriate. Signing of part-time facilities is generally subject to their location within an identified high density tourism area (see Sections 4.4 and 4.5), and to their compliance with normal and/or specific warrants.

2 Detail 4.50.1 shows a minor dead-end road which provides access to three tourist attractions, two of which are classified as part-time attractions (see Subsection 4.5.6). The use of FINGERBOARD sign type GF17 for part-time facilities is intended to identify these as different from normal “full-time” facilities which, when they are in a common environment, continue to be signed, subject to compliance with warrants, using GF2 and GF3 signs. Detail 4.50.1 therefore demonstrates the ability to sign for a mix of full-time and part-time facilities.

3 Detail 4.50.2 takes the signing for such a mix of full-time and part-time facilities to a more intensive level. In this example the number of facilities warrants the road in question being allocated a tourist route number as described in Subsection 4.5.3. This has the effect that the tourism signs on the main approach road(s) need only indicate this number and an appropriate theme symbol and name, NOT all the individual facilities on the route. Once on the tourist route the individual facilities can then be signed using GF2 and GF3 signs for full-time facilities and FINGERBOARD sign GF17 for part-time facilities. Subject to the spacing of facilities it may, when they are closely spaced, be acceptable to use only a GF2 sign OR a GF3 sign, and not both. Slow travelling speeds would support such a decision.

Checklist

- are there both full-time and part-time facilities?
- is the road in question a minor road?
- if the road is not a minor road does it warrant consideration as a tourist route?
Fig 4.50
Signing of Part-time Facilities
4.7.25 Temporary Events

1 The signing of temporary events has been provided for in the past, and covered in Volumes 1 and 4, by the provision of FINGERBOARD sign GF17. The function of this sign has been broadened to be applicable to the signing of “part-time” facilities (see Subsection 4.5.6). Sign GF17 has been replaced for use for temporary events of tourist interest by temporary sign TGF17. Sign type TGF17 is also a fingerboard shaped sign but is simplified in design (see Figure 4.16) and in keeping with its temporary function should be manufactured in yellow and black colours.

2 The principle behind the use of sign TGF17 is that it must be easy to erect and quick to remove. The use of the sign is only appropriate on lower order roads due to its compact size. The highest class of road on which sign TGF17 is recommended for use is a single carriageway Class “B” road. If signing for a temporary event is approved for use on higher order roads the signs provided should be full size temporary guidance signs of the appropriate type i.e. direction, tourism or local direction.

3 Figure 4.51 shows three typical details which illustrate ways in which TGF17 signs may be used.

4 Consistent with the need for TGF17 signs to be quickly erected it is recommended that road or local authorities monitoring their use develop policies which lay down where such signs shall be positioned AND where they shall NOT be positioned. Such policies should be developed in a flexible way at a local level but inclusion of details such as the following is recommended:

(a) TGF17 signs shall not be attached to any other type of road traffic sign support, except a STREET NAME sign support;

(b) TGF17 signs should, where practical, be attached to fencing, street trees or street light poles either at the appropriate junction, or up to 60 m in advance of the junction in an urban area or up to 100 m in advance in a rural area;

(c) a maximum of three TGF17 signs for any one temporary facility is recommended; this maximum can be applied with flexibility and should apply to the total number of signs provided on all approaches to the facility (the example given in Detail 4.50.3 shows four signs for one facility, for instance, and assumes that the known “popular” direction of approach will only be from one direction).

5 TGF17 signs catering for temporary events have traditionally been provided by a service organisation such as the Automobile Association. A road or local authority may come to an agreement with such a responsible organisation or other body, to act as an agent for the erection and removal of TGF17 signs. The development of a formal agreement based, if necessary on a tender process, with adequate quality control safeguards for the authority, is recommended.
Fig 4.51

Signing of Temporary Events
4.7.26 Signing for High Density Tourism Areas

1 The identification, and signing, of high density tourism areas are covered in Sections 4.4 and 4.5 respectively. This subsection and Figure 4.52 illustrate the types of sign used specifically to identify the area rather than individual facilities within the area. The example given refers to an area using the "Gateway Perimeter Method" of signing (see Subsection 4.4.5 and Figure 4.20).

2 The "Gateway Perimeter Method" of signing a high density tourism area tends to concentrate signing effort at the main entry points, or "gateways" to the area. Tourism signing at internal junctions, in terms of this method of signing, tends to be minimised to the use of TOURIST ROUTE MARKER signs GE18, when tourist routes have been identified.

3 Figure 4.52 shows a typical sign set for a tourism area erected at the nearest exit from an adjacent freeway. This sign set comprises a GF1 FREEWAY ADVANCE EXIT sign and a GF2 ADVANCE TURN sign. It is significant that these signs indicate the generic theme symbol and the name of the area, and do not indicate details of any specific facilities.

4 The gateway to the area, reached from the freeway exit, is identified by a version of GEOGRAPHICAL LOCATION sign GL6.3 giving the symbol and name representing the area, in this case "The Midlands Meander".

5 A particular feature of the "Gateway Perimeter Method" of signing is that information centres or information laybys are provided at each gateway. When a tourism area is created the Local Tourism Organisation, commonly formed by a Facility Owners Management Committee, may well decide to adopt a "theme" logo. This "theme" may be one of the generic or other symbol themes already available in the tourism signing system, or it may be something very specific to the area but which can be linked, for convenience, to an existing tourism symbol. This specific theme logo will also commonly be designed in colour. Since full colour logos are costly to produce on retrospective road signs they are therefore not practical, and the use of these logos is reserved for any information centres or signs provided, within the facility properties, at their entrances. Figure 4.52 shows an example of such a sign used at an information layby (for more details see Figures 4.25 and 4.26).

6 The logo sign at the facility entrance may be further enhanced by the use of a number system, unique to the area, which correlates with tourist maps and brochures produced for the area.

Checklist

One or more of the following factors or questions may indicate a need to treat the signing illustrated in Figure 4-52 in a different way:

- has the "area" been properly identified as a high density tourism area as described in Section 4.4?
- are information centres / laybys provided at the entry points to the area? - if not, the "Nearest Numbered Route" signing principle may be more appropriate;
- will the tourism signing towards and within the area, utilize a standard generic or other existing tourism symbol?
- does the area have its own theme logo?
- will property identification numbers be used on the information board and at property entrances?
Fig 4.52  Signing of a High Density Tourism Area
4.8 TERMINOLOGY

4.8.1 General

The following terms are relevant to any discussion on Tourism Signing and tourist destinations. They are included here to assist practitioners in using this Chapter:

Access Interchange:
Is a grade-separated junction between a freeway (class A1 or class A2), and an adjoining lower order road system.

Accommodation:
For the purpose of by-pass town signing accommodation is limited to hotels, motels, inns (symbol GFS C1-1) or chalets (symbol GFS C1-2) or caravan parks (symbol GFS C1-3) (Other categories of accommodation may be catered for in the general context of tourism signing).

Advertising sign:
Any sign board which is not a road traffic sign and which indicates the availability of a service or product for sale by brand name, or which indicates the occurrence of an event the purpose of which is for gain.

At-Grade route:
Is any route of classes “B”, “C” or “D”, which includes a predominance of at-grade road junctions.

Beach (Resort):
May include any beach related development offering accommodation facilities, whether registered as a municipality or not; the symbol may be used if necessary within a town, to indicate the direction to a named or un-named beach.

Bed and Breakfast:
Is a form of accommodation in an urban area which is specifically not registered as a hotel, motel etc., offering basic facilities to overnight or holiday tourists; only breakfast should be available.

Berg (Resort):
May include any mountain related development offering accommodation facilities.

“Bits” of information:
In order to assess the ability of a driver to take in the information displayed on the face of a road traffic sign the information has been broken down into “bits”; the maximum recommended number of “bits” of information on a tourism sign face (including all stacks and/or panels) is 12 “bits”; typical values of signface components in terms of “bits” are:

(i) words up to/including 8 letters = 1 bit
(ii) words more than 8 letters = 2 bits
(iii) arrow (stack-type) = 0.25 bit
(iv) route number = 0.5 bit
(v) symbol = 0.5 bit
(vi) distance information = 0.5 bit
(vii) interchange number = 0.5 bit

Boat Launch:
May include any river or coast based boat launch facility open to the general public.

Botanical gardens:
May include any type of botanical garden, whether specialized or not; if such a garden is named after a town, or province etc. it may be necessary to use the words “botanical gardens” in addition to the symbol and/or primary name; in the absence of a symbol for city parks this symbol could be used for such facilities if necessary.

By-pass town:
Any town which once had a class “A” or “B” route running through it, which route has now been diverted to avoid the developed area of the town (when development spreads to the extent that the by-pass becomes incorporated within the town again, albeit with access control, it is recommended that general tourism signing policies apply).

Class “A”, “B”, “C” or “D” routes:
These classes refer to a route classification for signing purposes; class “A” covers freeways - class “B” other numbered routes etc; for further details see Volume 1 of the Manual.

Cluster (of signs):
A tourism sign cluster is a multi-part tourism sign (maximum three panels or parts) mounted so that stacks applying to different directions are mounted on common supports with a vertical separation of 100 mm to 200mm.

Colour code:
Refers to the background sign colours used for various categories of guidance sign (see Figure 1.18 in Section 1.2).

Curio shop:
May include any facility selling arts and crafts, or farm produce located adjacent to a tourist route but not having direct access to such route.

Dam:
Is a stretch of water which is available to tourists as a picnic or relaxation venue but which does not provide any water based sporting facilities other than public fishing from the shoreline.

Direction sign:
Is a road traffic sign within the guidance sign class, used on class “B” or lower routes, which comprises the principal on-road component of the navigational aids system provided for all road users, both in rural and urban areas; a direction sign displays route numbers and familiar, control or service destination names appropriate to its location in the road hierarchy; freeway direction signs display similar information on class “A” routes.

Ethnic attraction:
Is a tourist attraction with a specific relationship to a racial, religious, linguistic or other population grouping.
**Farm stall:**
See “Curio Shop”.

**Game reserve:**
May include any natural environment provided for the protection and/or development of fauna, either general or specialized, offering accommodation facilities; such reserves are generally categorized as resorts and may also specialise in flora and other ecological aspects.

**General Tourist Attraction:**
May include any form of tourist attraction which is not clearly covered by a symbol provided for an existing category of tourist attraction, or which covers such a wide range of categories that the use of no one symbol is appropriate.

**“Generic” symbol:**
A collective symbol used to identify a wide range of facilities in an area by a group identification in order to simplify tourism sign messages applicable to the area (see symbols GFS A3, A4, A5 etc).

**Graded accommodation:**
Refers to any operational system used to indicate the grade or quality of accommodation offered, such as the systems operated from time to time by organisations such as SATOUR.

**Guest Farm:**
See “Holiday Farm”.

**Guest House:**
Is a form of accommodation offering room and board, normally at least breakfast and dinner, which is not registered or graded as a hotel; a guest house may be located in urban, peri-urban or rural environments.

**Guidance sign:**
Is a basic class of road traffic sign and includes location signs, route marker and trailblazer signs, direction and freeway direction signs, tourism signs and diagrammatic signs used to guide road users from the start to the end of their journeys.

**Holiday Farm:**
Is a form of accommodation offering room and board, normally all meals, located in a farming environment and offering guests specific involvement in the activities of the farm.

**Inland Water Resort:**
May include any stretch of water on which water based sporting activities are permitted and adjacent to which accommodation facilities are available; the symbol may also be used if necessary, within a town to indicate the direction to a water sport facility that is not a resort (see "Resort").

**Interchange Number:**
Several tourism signs include one or more interchange numbers in black numerals on a white block; these numbers represent a kilometre distance from a provincial boundary or the start of a route, increasing in a northerly or easterly direction; they are commonly used on class “A” routes but may also be used on class “B” routes and they also appear on direction and freeway direction signs.

**Justification:**
Is a term used to describe the vertical lining up of text and/or symbols on the face of a road sign; the rules relating to tourism signs are covered in this chapter - for other guidance signs see Volume 1: Chapter 4.

**Lake:**
See “Dam”

**Manual:**
Refers to the current editions of the Southern African Development Community-Road Traffic Signs Manual (SADC-RTSM) and the South African Road Traffic Signs Manual (SARTSM).

**Map:**
Is a diagrammatic representation of the road network of either a general or specific tourist application; it constitutes a fundamental component of the navigational aids system which may be used outside or inside a vehicle and for pre-trip or on-trip planning; it may also appear as part of the information on a tourist information board or brochures produced by tourism venues; it should always include appropriate route numbers.

**Mountain Resort:**
See “Berg Resort”.

**Museum:**
May include any items of historical, artistic, scientific or cultural interest to tourists, whether exhibited within a building or in an open air environment; if the building housing the facility is a national monument the “National Monument” symbol GFS A7-1 should be used.

**Nature Reserve:**
May include any natural environment provided for the protection and/or development of flora, either general or specialised, offering accommodation facilities; such reserves are generally categorized as resorts and may also specialise in fauna and other ecological aspects.

**Navigational Aid:**
Is any device, including maps, brochures, magazines or newspapers, radio or television, video, accommodation bookings, information centres - outside the road environment, or guidance signs within the road environment, which enable tourists to successfully reach their intended destinations.

**Numbered Route:**
This includes any class "A" or "B" route (National, Provincial, Regional or Metropolitan).

**Parallel Routes:**
This applies most commonly to parallel provincial and national routes, normally resulting from the upgrading of a national route to a new but parallel alignment and the subsequent reclassification of the old national route as a provincial or even regional route.

**Primary Name:**
Is that part of the name of a tourist attraction, or accommodation facility one grade above the lowest grade, or a hospital, which is needed to identify it from another similar facility; the primary name should preferably be short and concise and should preferably not be the name of the town in which the facility is located; a primary name is not used at by-passed towns or on service exit sequence signs.
Recreation:
Is the refreshment of health and spirits by relaxation and enjoyment

Resort:
Is a tourist venue where people go for a holiday and/or recreation which for the purpose of tourism signing shall include accommodation facilities; a resort may have a specific theme such as beaches, mountains, water (sports) etc. and it may consist of a facility built specifically as a resort, or facilities at an existing village or town, the principle activities of which are related to holiday and recreational activities.

Roadside stall:
Is a facility within or directly abutting a road reserve from which tourists may purchase arts, crafts and/or farm produce (see also “Curio Shop”/“Farm Store”).

Reasonable road user / tourist:
Is a road user having modest or moderate expectations with regard to guidance signing who is, therefore, prepared to make a contributory effort in the navigational process.

Rooms:
Are a form of accommodation which make no provision for the taking of meals, self-catering or otherwise.

Rest and Service Area:
Is a facility provided to offer the road user a wide range of tourist services, of a high standard, in an environment which encourages the tourist to also take a rest with the general objective of improved road safety.

Road Traffic Sign:
This includes all road signs, road signals, road markings or other devices prescribed in terms of the Road Traffic Act, Act 93 of 1996.

Route Numbering and Road Traffic Signs Sub-Committee:
The Route Numbering and Road Traffic Signs Sub-Committee is a technical support committee tasked with considering all comments, proposals or developments for road traffic signs.

Scenic Route:
Is a route, which may be short or long, which includes in its length sections of attractive natural scenery; a scenic route may include man-made features or facilities which impart a theme to the route in addition to its natural beauty.

Seaside Resort:
See “Beach Resort”.

Service Facility:
Is a facility which can render assistance or be of importance to a road user and which has been established principally to service the short term needs of motorists and/or their vehicles to cater for emergency situations (in terms of general applications accommodation facilities are categorised separately although they are included in the general description of “service” when applied to the signing of by-passed towns).

Sign Panel:
An internal division of a tourism sign stack - a sign stack may include a maximum of three panels (see Figure 4.11).

Sign Stack:
A sign which contains tourism information relevant to one direction of travel only; a maximum of three sign stacks may make up a cluster (see “Cluster” and “Sign Panel”).

Special Event:
A tourist attraction, or service, which is only available for a short time, or on a part-time basis

Supplementary Symbols:
Standard tourism sign symbols used at half size below the primary name of a facility, either in addition to a main symbol or in place of a main symbol; the use of symbols GFS C1-1, (Hotel) and GFS B4-1, (Restaurant), as supplementary symbols on tourism signs for hotels is recommended to keep sign areas down (see Level 3 warrants for use of supplementary symbols - Section 4.6).

Symbols:
Are tourism symbols approved by the Route Numbering and Road Traffic Signs Sub-Committee for use on road traffic signs.

Systems Interchange:
Is an interchange which provides for the free flow of traffic between two or more freeway systems.

Tourism:
Is deemed to include any activity concerned with the temporary movement of people to destinations outside the areas or places in which they normally live and work, and their activities during their stay at these destinations.

Tourist:
Is considered to be a person travelling for pleasure, in the broadest sense.

Tourist Facility:
Broadly includes almost any attraction or service which may be of interest to reasonable numbers of strangers to an area.

Tourism signing:
Guidance information provided to supplement the information given on direction signs, when such information is not appropriate for inclusion on such direction signs, and when road users cannot reasonably perceive the existence or location of tourist attractions or service facilities from the information given on the direction signs.

“TOTEM” signs:
Are a special sub-group of tourism signs only used within a rest and service area or other “closed” tourist facility such as a game reserve or nature reserve.

View Point:
Refers to an elevated position alongside a road or a hiking trail which offers tourists a panoramic view of the area in which they are travelling.

Warrants:
Are written statements given in Section 4.6 relating to specific types of tourist attraction and service which are applied to ensure that the character and quality of the facility complies with standards acceptable to reasonable tourists.

Wine Cellar:
Is a specific tourist attraction open to the public and offering wine-tasting and/or tours of the facility; use of the symbol is not appropriate to groups of wine cellars comprising what is commonly called a “wine route”.

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MAY 2012

SARTSM – VOL 2

CHAPTER 5
It is impossible for a publication of this nature to free of errors. It would be appreciated if errors be brought to the notice of -

Director-General: Transport
Department of Transport
Infrastructure Network Management
Private Bag X193
PRETORIA
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ROAD SIGN, ROAD MARKING, REGULATORY, WARNING

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CHAPTER 5:
FREEWAY SIGNING

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5.1 INTRODUCTION

5.1.1 General

1. This chapter offers additional guidelines (to those provided in Volume 1 and Volume 4) to aid the designers of signs and sign systems for rural and urban freeways. The primary objective, is to achieve a high quality and level of uniformity of design and practice, in freeway signing throughout South Africa. Freeway signing covers the whole range of sign types and road markings which are necessary to ensure safe and easy travelling along these facilities. It is thus essential to have a comprehensive freeway signing system, which is designed as a system, with the express purpose of minimising driver errors. Such errors can, by virtue of the nature of freeways, with limited points of access, result in significant wastage of time and fuel, and can increase the risk of accidents occurring due to unpredictable manoeuvres on the part of drivers.

2. There are often special circumstances involved in freeway design which preclude the use of a standardised signing treatment. Although a wide range of options are covered in this chapter in order to assist designers, the availability of these options and the techniques used to develop them should not be seen by freeway geometric designers as a "cure-all" for complex roadway designs. The geometric design of freeways should be undertaken on the understanding that there are inherent limitations in the signing system. Wherever possible designers should design to standardised sign displays and sequences, and resort to special treatment only if no other reasonable option is available.

3. This chapter should be read in conjunction with various sections of Volume 1: "Uniform Traffic Control Devices" which deal with signing policies and design principles, together with specific information on the meaning and individual application of all traffic control devices. These sections are cross-referenced, where necessary, throughout this chapter.

4. Freeways are sub-classified into Class A1 and Class A2 roadways, where a Class A1 freeway is a dual carriageway roadway and a Class A2 freeway is a single carriageway freeway (see Volume 1, Section 1.2 "Road Classification").

5. Numerous supplementary aspects relating to the application of freeway related road traffic signs are also dealt with in Volume 2, and the following chapters should be referred to:

   (a) Chapter 2 - Road Marking Applications;
   (b) Chapter 3 - Regulatory and Warning Sign Applications;
   (c) Chapter 4 - Tourism Signing Applications;
   (d) Chapter 11 - Signing for Heavy Vehicles;
   (e) Chapter 19 - Toll Route Signing.

   Specific cross-references are provided, where relevant.

6. The following aspects related to freeway signing are dealt with in this chapter:

   (a) general principles of freeway signing;
   (b) range of applicable signs;
   (c) specific requirements for direction signing;
   (d) signing at ramp connections for various types of interchanges;
   (e) emergency vehicle cross-over control.

7. In a freeway environment additional lanes may occasionally be added or dropped. The addition of a lane for a relatively short distance is most commonly provided to permit slow-moving vehicles to move out of the main traffic stream, thereby maintaining capacity levels. A by-product of such a provision is that overtaking or passing opportunities are enhanced. Signing details of such applications are covered in Chapter 11: Signing for Heavy Vehicles and relevant road marking details, including lane drop details are covered in Chapter 2: Road Marking Applications.

5.1.2 Road Traffic Sign Colour Indication

1. The chapters of Volume 2 of the South African Road Traffic Signs Manual (SARTSM) are not prepared in colour. Relevant examples used to illustrate appropriate signs, signals and markings are shaded in a black and white coding which is illustrated below.

2. The basic principles of the road traffic sign colour coding system are shown, in colour, in the SADC-RTSM Volume 1, Chapter 1, Section 1.4, and in the Contents sections of relevant Volume 1 and 4 Chapters.
5.2 FREEWAY SIGNING PRINCIPLES

5.2.1 General

1 Drivers proceed along freeways at high speeds and, following guidance given by direction, and/or other signs, they take action to manoeuvre their vehicles in accordance with the information given and proposed destination. This action is commonly directed at their leaving the freeway via an off-ramp designed for high speed exit.

2 Driver decision making should be aided by a progression of guidance information, given well in advance on a freeway off-ramp, so that drivers are induced to make decisions and take subsequent actions in a sequence of predictable and unhurried manoeuvres, well before the exit point.

3 The driving process requires drivers to make many decisions, and execute many actions, for every kilometre travelled. The decisions resulting from observation of freeway direction signs may comprise a significant portion of this driver work-load. It is therefore desirable to keep the process as simple as possible. Whilst there are many other decisions to make in order to conduct a vehicle safely on the road, the basic decision required by a driver, as a result of reading guidance signs on the approach to a freeway interchange, is likely to be one of the following:

(a) to leave the freeway (which may involve joining another freeway at a systems interchange); or
(b) to stay on the freeway, but prepare to leave it at a subsequent interchange a short distance ahead; or
(c) to continue on the freeway for some distance.

4 In order that a driver may leave the freeway at either the next exit, or another closely following it, sufficient signs shall be provided in such a way that adequate time will be available to permit a safe exit manoeuvre. The configuration of freeway exits may vary widely, and in many instances will require above-average awareness and attention levels from drivers. The freeway direction signs provided should attempt to create such levels of awareness.

5 A decision to remain on the freeway is a much simpler process in that, once taken, little further sign related action is required by drivers. However, the combination of exit and straight-on (or through) information shall be adequate to remove any risk of driver confusion. This is particularly the case when the roadway includes lanes which are provided exclusively for exit purposes. The straight-on driver receives reassurance beyond the interchange from a confirmation sign or an exit sequence sign. These signs are repeated at regular intervals, and also give an early indication to drivers, particularly in rural areas, of the distance to a destination on their route.

6 The navigational process requires that drivers can correlate information, gained before making their trip, with what they see on freeway direction signs. The factor which most drivers would like to see on a sign is likely to relate to features in close proximity to their final destination. It is rarely possible to satisfy such a desire on the signs, and most trips of any length will require drivers to remember several items of navigational information. The use of route numbers and interchange (exit) numbers has been evolved in an effort to simplify this aspect of navigation. However, for these "tools" to be effective they shall be available in a co-ordinated manner in the pre-trip and travel phases of a journey. Rural and urban freeway environments differ significantly in terms of road geometry and driver expectation in terms of potential destinations. The principles relating to freeway sign sequence and signface design, for rural and urban signs, have therefore been developed with this in mind. The increased level of visual "noise" experienced in metropolitan areas complicates the driver observation and decision making processes, making it extremely important that the signing systems be well designed.

7 The more complex the circumstances are, the earlier the sign sequence should commence. The ability to comply with this requirement will commonly be limited in urban areas by closely spaced interchanges and junctions between different freeway systems. In such situations, therefore, the sign sequence for a number of interchanges may start with an EXIT SEQUENCE sign GA8. This sign is intended to make drivers aware that there are, in fact, several points of exit serving one town or city, and that once the first one is reached, the other exits will follow at close intervals. Drivers may immediately be able to identify their intended points of exit by linking the destination to the appropriate interchange (exit) number. If a town is by-passed by a route which has a number of interchanges, the access serving the town centre should be identified.

8 As drivers get closer to the exit point, signs are required which will allow them to assess how and when to make their exit manoeuvre. This manoeuvre may comprise a number of sequential actions in order, for instance, to shift across three or more lanes, in heavy traffic. This traffic itself may be making other lane changing manoeuvres in the process of weaving or overtaking, in order to be in the correct lane for the exit (see Volume 1, Figure 1.29). These signs will be overhead, and shall display the full amount of information appropriate to the exit type (access or systems - rural or urban) at an adequate distance from the exit point. In certain instances at a systems interchange, it may be necessary for drivers to correctly choose one out of two, or even three exit lanes, well in advance of the point where these separate into their opposite directions because it may not be possible to safely make a change of lane closer to the point of separation. It is important that the signs provided make such situations clear, by the accurate display of route numbers and destination names. (Details of basic sign sequences are given in Section 5.4.) If necessary, supplementary signs should be provided when traffic volumes are heavy, and there are significant numbers of heavy vehicles resulting in some signs being obscured, for some of the time during which a driver is on the approach to an exit. The capability of different destination names to provide adequate orientation, varies according to the relative familiarity of a driver with the portion of the road network in which a sign is being read. Destination names may be graded as familiar, control or service destinations on the basis that a stranger will almost certainly know a familiar destination, but is only likely to know the control or service destinations if a map has been consulted.
9 There are limits to the amount of information which drivers can read and comprehend when travelling at high speed. This does not, however, prevent drivers, collectively, from expecting an almost infinite amount of information. It is not possible to meet this demand, and display all destinations that all travellers may expect. The information displayed must, therefore, represent a compromise. Although recommendations are given in the individual sign subsections in Volume 1 regarding standard sign displays and limitations, full details on the effects of the amount of information on the readability of signs are given in Volume 1, Chapter 4, Sections 4.3 and 4.4. The limitations in display of information shall be correlated between the signs and maps, and other sources of navigational information used during pre-trip planning. In this context the correlation of route numbers and interchange numbers is particularly important.

10 Information displayed shall be given with sufficient time and distance in order that drivers may execute required manoeuvres. The detail given in Volume 1, Chapter 4, Subsection 4.4.3 deals with the required and available time to read a sign. The decision process, as a consequence of reading a direction sign on the freeway, is more complex than the reading process. It is recommended that sign designers employ decision sight distance parameters, in order to check whether standard sign spacing and positions, in relation to the exit point, are adequate for the message displayed and manoeuvres required. Critical locations where decision sight distance considerations are most appropriate are:

(a) interchanges with unusual layouts such as a “right” exit;
(b) complex interchanges;
(c) cross-sectional changes such as those at lane drops and toll plazas;
(d) urban areas with visual “noise” intrusion from advertising signs, which compete for drivers’ attention;

(e) locations requiring unusual or unexpected manoeuvres.

11 Designers should refer to the following standards:

(a) the “Green” book - A Policy on Geometric Design of Highways and Streets - 1990, published by the American Association of State Highway and Transportation Officials - AASHTO;
(b) TRH 17: Geometric Design of Rural Roads, 1984;
(c) Department of Transport G2 Manual.

The distance to the exit point shall be displayed on all advance exit direction signs and on exit sequence signs (see Volume 1, Chapter 1, Sections 1.7 and 1.8).

12 It is important that drivers are able to orientate themselves when necessary. At a systems interchange, because there are commonly two exits on the left which lead, in effect, to the left and right, the signs provided in advance of, and at, each exit shall make it clear to drivers which lane leads left and which right. These signs shall be sufficiently far in advance of the exit point, that drivers will make the correct decision and be able to act on it. At an access interchange, however, orientation is not necessary until after the exit point. The signface displays preceding the exit point need not, therefore, provide orientation. This permits a simplification of display, which is particularly relevant in urban areas, where the driver information work-load approaches limiting levels. For this reason, amongst others, the use of the name of the intersecting cross street is recommended in urban environs. Orientation in such situations is given on the off-ramp and/or at the ramp terminal.

13 Freeway direction signs may be ground-mounted or overhead. Ground mounted signs are normally limited to two-lane freeway carriageways, whilst overhead signs are used on three-or-more-lane freeway carriageways. The information displays are similar for each location and are dealt with in the individual sign subsections in Volume 1. Warrants for the use of overhead guidance signs are covered in Volume 1, Chapter 4, Subsection 4.1.8 and these include reference to reading time and decision making time.
5.3 RANGE OF APPLICABLE SIGNS AND MARKINGS

5.3.1 Regulatory Signs

1 A wide range of regulatory signs is applicable under specific circumstances on freeways, and on interchange ramps providing access to or egress from the freeway. The details of individual regulatory signs are provided in the respective subsections of Volume 1, Chapter 2 while their application is dealt with in Chapter 3 of Volume 2. The range of applicable regulatory signs is summarised in Table 5.1.

2 The main control signs which are required only on the interchange ramps are:
   (a) R1 - STOP sign required at the crossing road intersection;
   (b) R2 - YIELD sign required at the crossing road intersection;
   (c) R3 - NO ENTRY sign required to prevent traffic entering the off-ramp from the crossing road.

3 The main command signs which are necessary on the freeway are those relating to speed restriction, to signs relating to regulating specific types of vehicles such as heavy vehicles, vehicles carrying hazardous substances, abnormal vehicles, etc., the full range of which are indicated in Table 5.1. For the specific application of signs relating to:
   (a) heavy and abnormal vehicles, see Chapter 11;
   (b) public transport using freeways, see Chapter 8;
   (c) toll signing, see Chapter 6.

4 The prohibition signs related to freeways concern restrictions on speed, vehicle type and vehicle characteristics, either on the freeway as a whole or related to specific lanes (see Table 5.1).

5 A typical reservation type regulatory sign applicable to freeway operation is the R321 sign indicating a reservation applicable for ambulance and emergency vehicles.

6 The comprehensive type regulatory signs which are required on freeways are:
   (a) R401 - DUAL CARRIAGEWAY FREEWAY BEGINS;
   (b) R402 - SINGLE CARRIAGEWAY FREEWAY BEGINS.

7 Selective restriction signs may also be used, and these provide a secondary message in combination with another regulatory sign. Examples of these signs are:
   (a) (R)511 - DAYTIME restriction;
   (b) (R)512 - NIGHTTIME restriction;
   (c) (R)532 - MASS LIMIT restriction.

8 The derestriction regulatory signs which are required on freeways are:
   (a) R401-600 - DUAL CARRIAGEWAY FREEWAY ENDS;
   (b) R402-600 - SINGLE CARRIAGEWAY FREEWAY ENDS.

9 The warrants for, and placement of, these regulatory signs are dealt with in detail in Volume 1, Chapter 1, Section 1.6, and in the individual subsections in Volume 1, Chapter 2 which deal with each specific sign.

10 The shape, size and colour of regulatory signs is dealt with in detail in Volume 1, Chapter 1, Section 1.4 and Chapter 2, Section 2.1. Specific details of the control, command and prohibition signs themselves are provided in the respective individual subsections of Volume 1, Chapter 2.

5.3.2 Warning Signs

1 A wide range of warning signs is applicable under specific circumstances on freeways and on interchange ramps providing access to or egress from the freeway. The details of the individual signs are provided in the respective individual subsections of Volume 1, Chapter 3, while their application is dealt with in Chapter 3 of Volume 2. The range of warning signs is summarised in Table 5.2.

2 The warning signs related to road layout which may be required are:
   (a) W112 - SHARP JUNCTION FROM LEFT to warn drivers of the interchange on-ramp or junction of two ramps on a systems interchange;
   (b) W116 or W117 - END OF A DUAL ROADWAY;
   (c) W118 or W119 - BEGINNING OF A DUAL ROADWAY.

3 The warning signs related to direction of traffic movement which may be required are:
   (a) W212 - TWO-WAY TRAFFIC AHEAD;
   (b) W214 or W215 - LANE ENDS.

4 Occasionally the geometric characteristics of a freeway may change due to the specific environmental factors. Due to the change in conditions the use of various curve warning signs (W202 to W205, and W208 to W211) may be appropriate.

5 There are a number of symbolic type warning signs which may have application where conditions warrant on a freeway. These relate to potential hazardous natural situations such as wild animals crossing the road, falling rocks in cutting sections, slippery road, etc., or to dangerous traffic conditions related to steep grades and slow moving vehicles. See Figure 5.2 for typical examples of these signs.

6 A number of hazard marker type warning signs also have application on freeways. These include:
   (a) W401 and W402 - DANGER PLATES;
   (b) W405 and W406 - SHARP CURVE CHEVRONS on loop ramps.

7 The warrants for and placement of these warning signs are dealt with in detail in Volume 1, Chapter 1, Section (Continued on page 5.3.4)
<table>
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<th>Volume 4</th>
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<td>Yield</td>
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<td>No Entry</td>
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<td>Minimum Speed</td>
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<td>Ambulance and Emergency Vehicles</td>
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<td>Dual Carriageway Freeway Begins</td>
<td>R401</td>
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<td>Single Carriageway Freeway Begins</td>
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<td>SELECTIVE RESTRICTION SIGNS (see Figure 5.1)</td>
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<tr>
<td>(EXCLUSIVE SECONDARY MESSAGE)</td>
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<td>Daytime Restriction</td>
<td>(R)511</td>
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<td>Nighttime Restriction</td>
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<td>Mass Limit Restriction</td>
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Fig 5.1
Regulatory Signs Applicable to Freeways
5.3.4 Guidance Signs

1. Effective and timely guidance is essential on freeways as vehicles are generally travelling at high speeds and exits from the facility are limited. Drivers therefore need to be accurately apprised of their location along the freeway and of the options available for reaching their destination. A wide range of guidance signs is applicable on the freeway itself, at interchange on and off-ramps, and on the crossing road approaches to an interchange. The guidance signs applicable cover the location type, route marker type, direction type, tourism type and diagrammatic type. The details of the individual signs are provided in the respective individual subsections of Volume 1, Chapter 4. The range of guidance signs is summarised in Tables 5.3 to 5.5.

2. The following location type signs which may be used on the freeway are:
   (a) GL1 - STREET NAME signs suitably mounted to indicate the overpass or under-passing roadways;
   (b) GL3 - TOWN NAME;
   (c) GL4 - RIVER NAME;
   (d) GL5 - PROVINCIAL or TERRITORIAL BORDER;
   (e) GL6 - GEOGRAPHIC LOCATION;
   (f) GL7 - ROUTE NAME;
   (g) GL8 - INTERCHANGE NAME.

The warrants for and placement of these signs are dealt with in detail in Volume 1, Chapter 4, Section 4.5. These signs are indicated in Figure 5.3 and summarised in Table 5.3.

3. Various route marker signs may be used on the approach roads to a freeway to indicate the best route to the freeway, and to confirm the route once reached. The warrants for, and placement of, these signs are dealt with in detail in Volume 1, Chapter 4, Section 4.6, and for urban areas, in Volume 2, Chapter 9.

4. Freeway direction signs are the main type of guidance sign encountered on the freeway and on the approach roads to interchanges. The general details of these signs are dealt with in Volume 1, Chapter 4, Section 4.8 and are summarised in Table 5.4. The range of signs is indicated in:
   (a) Figure 5.4 - Typical Freeway Direction Signs - Ground-Mounted;
   (b) Figure 5.5 - Freeway Direction Signs - Pole-Mounted;
   (c) Figure 5.6 - Freeway Direction Signs - Wall-Mounted;
   (d) Figure 5.7 - Freeway Direction Signs - Bollard-Mounted;
   (e) Figure 5.8 - Freeway Direction Signs - Reflective Panel;
SIGNS AND MARKINGS

5.3.5

Fig 5.2 Warning Signs Applicable to Freeways
### TABLE 5.3

**RANGE OF LOCATION GUIDANCE SIGNS FOR USE ON FREEWAYS**

<table>
<thead>
<tr>
<th>Sign Description</th>
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<th>Reference Page</th>
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<tr>
<td>Street Name</td>
<td>GL1</td>
<td>4.6.2 4.2.1</td>
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<tr>
<td>Town or City Name</td>
<td>GL3</td>
<td>4.6.7 4.2.6</td>
</tr>
<tr>
<td>River Name</td>
<td>GL4</td>
<td>4.6.7 4.2.8</td>
</tr>
<tr>
<td>Provincial or Territorial Border</td>
<td>GL5</td>
<td>4.6.8 4.2.9</td>
</tr>
<tr>
<td>Geographical Location</td>
<td>GL6</td>
<td>4.6.8 4.2.11</td>
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### TABLE 5.4

**RANGE OF DIRECTION SIGNS FOR USE ON FREEWAYS**

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<td>Pre-Advance Exit Direction</td>
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<td>Exit Direction</td>
<td>GA3</td>
<td>4.9.21 6.2.9</td>
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<td>Gore Exit</td>
<td>GA4</td>
<td>4.9.23 6.2.13</td>
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<td>Advance Off-Ramp Terminal Direction</td>
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<td>Off-Ramp Terminal Direction</td>
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<td>Confirmation</td>
<td>GA7</td>
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<td>Exit Sequence</td>
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<td>C-D Road Advance Exit Direction</td>
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<td>C-D Road Exit Direction</td>
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**GROUND-MOUNTED FREEWAY CROSSROAD DIRECTION SIGNS** (see Figure 5.5)

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<td>Far Side On-Ramp Direction</td>
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<td>4.9.32 6.3.4</td>
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**OVERHEAD MOUNTED FREEWAY DIRECTION SIGNS** (see Figures 5.6 and 5.7)

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<td>GC3U</td>
<td>4.9.38 6.4.12</td>
</tr>
<tr>
<td>Exit Direction</td>
<td>GC4U</td>
<td>4.9.40 6.4.16</td>
</tr>
<tr>
<td>Advance Off-Ramp Direction</td>
<td>GC5U</td>
<td>4.9.41 6.4.20</td>
</tr>
<tr>
<td>Through Direction</td>
<td>GC6U</td>
<td>4.9.42 6.4.22</td>
</tr>
<tr>
<td>C-D Exit/Through Direction</td>
<td>GC7U</td>
<td>4.9.43 6.4.24</td>
</tr>
<tr>
<td>Exit/Through Direction</td>
<td>GC8U</td>
<td>4.9.43 6.4.25</td>
</tr>
</tbody>
</table>
NOTE:
(1) The symbol to be used on sign GL7 is either GLS-4 or GLS-5 (see Figure 5.5).
For Direction Signs symbols GDS-4 or GDS-5 shall be used.

Fig 5.3 Typical Location Signs Applicable to Freeways
Fig 5.4 Typical Freeway Direction Signs – Ground Mounted
Details 5.5.1 Freeway Crossroad Approach Sign.

Fig 5.5 Typical Freeway Crossroad Direction Signs – Ground Mounted – and Direction Sign Symbols
Fig 5.6
Typical Freeway Direction Signs
Overhead Mounted
Fig 5.7 Examples of Typical Freeway Direction Sign Detail
(Continued from page 5.3.4)

(b) Figure 5.5 - Typical Freeway Crossroad Direction Signs - Ground - Mounted, and Direction Sign Symbols (appropriate to freeways)

(c) Figure 5.6 - Typical Freeway Direction Signs - Overhead - Mounted.

Signface details are indicated in Figure 5.7.

5 There are a number of symbols which may be incorporated into the direction signs. These give guidance to facilities such as:

(a) GDS-1 - Railway Station;
(b) GDS-3 - Airport;
(c) GDS-6 - Power Station;
(d) GDS-7 - Industrial Area;
(e) GDS-8 - Central Business District.

The general details of these are given in Volume 1, Chapter 4, Section 4.3. The range of symbols appropriate to freeways is given in Figure 5.5. Refer also to Figure 5.7 for examples of the use of some of these symbols.

6 There are several diagrammatic type guidance signs which may be used on freeways. The general details of these are given in Volume 1, Chapter 4, Section 4.12. The most relevant signs are indicated in Table 5.5 and are illustrated in Figure 5.8. SUPPLEMENTARY PLATE signs IN11 may be used with ground-mounted diagrammatic signs in one of five basic types, as follows:

(a) an advisory speed - IN11.1;
(b) a distance "for" - IN11.2;
(c) a distance "to" - IN11.3;
(d) a text message - IN11.4;
(e) a symbolic message - IN11.5.

7 For details of the application of signing related to heavy vehicles, including diagrammatic signs, refer to Volume 2, Chapter 11.

8 For details of the application of signing on freeway toll routes, refer to Volume 2, Chapter 6.

5.3.4 Information Signs

1 The following information signs should be used on freeways where necessary:

(a) COUNTDOWN signs IN1, IN2 and IN3 on the approach to an interchange off-ramp;
(b) IN11 SUPPLEMENTARY PLATES should be applied in conjunction with various other sign types where needed.

The general details of these signs are dealt with in Volume 1, Chapter 5. These signs are illustrated in Figure 5.1 and Figure 5.9 and summarised in Table 5.6.

5.3.5 Tourism Signs

1 The general details of tourism signs are dealt with in Volume 1, Chapter 4, Section 4.10 and their application is dealt with in Volume 2, Chapters 4 and 9. An example of the placement of tourism signs on a freeway is given in Figure 5.10.

5.3.6 Road Markings

1 Road marking details are dealt with in Volume 1, Chapter 7 and specific aspects of their application are dealt with in Volume 2, Chapter 2.
NOTE:
(1) SUPPLEMENTARY PLATE signs IN11 may be used with ground-mounted diagrammatic signs.
Refer to paragraph 5.3.3.6.
### Table 5.6: Information Signs for Use on Freeways

<table>
<thead>
<tr>
<th>Sign Description</th>
<th>Sign Number</th>
<th>Reference Page</th>
<th>Volume 1</th>
<th>Volume 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SIGNS (see Figure 5.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countdown Signs 100 m</td>
<td>IN1</td>
<td>5.2.1, 9.2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countdown Signs 200 m</td>
<td>IN2</td>
<td>5.2.1, 9.2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countdown Signs 300 m</td>
<td>IN3</td>
<td>5.2.1, 9.2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplementary Plate</td>
<td>IN11</td>
<td>5.2.4, 9.2.8/13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTES:

(1) Supplementary plates may be used in one of five basic types, as:
   (a) an advisory speed numbered IN11.1;
   (b) a distance “for” numbered IN11.2;
   (c) a distance “to” numbered IN11.3;
   (d) a text message numbered IN11.4;
   (e) a symbolic message numbered IN11.5.
5.4 FREEWAY SIGNING APPLICATIONS

5.4.1 General

1 This section of the chapter deals primarily with the various aspects of the application of guidance signs on freeways. These are:

(a) required information display for access interchanges - see Subsection 5.4.2;
(b) required information display for systems interchanges - see Subsection 5.4.3;
(c) basic requirements for freeway direction sign sequences - see Subsection 5.4.4;
(d) details of freeway direction sign sequences - see Subsection 5.4.5;
(e) signing at directional interchange ramp merges - see Subsection 5.4.6;
(f) crossing road name signing at non-access crossroads - see Subsection 5.4.7.

Refer also to Volume 1, Chapter 4, Section 4.9.

2 Emergency vehicle cross-over control is also covered.

5.4.2 Required Information Display for Access Interchanges

1 The minimum primary information to be displayed on freeway direction signs at access interchanges should enable rapid identification of the exit and of the intersecting cross route, and the distance to the exit(s) serving the interchange. This information shall conform to what drivers may expect to see on the signs, having studied a map of the area, and consists of the interchange (exit) number and the number of the intersecting route.

2 Secondary information relates to the place names associated with the exit(s). This information is secondary in the sense that most intersecting cross routes provide access to many towns or cities. The process described in Volume 1, Chapter 8 will produce the best possible selection of destination names for rural access interchanges. In urban areas this task is more complex. In order to correlate most effectively with maps, the display of an orientating street name, normally associated with a route number, is recommended on urban freeway signs. Orientation is given by the off-ramp terminal direction sign GA6 once exit from the freeway has been accomplished. It is considered that a driver can effectively make a decision to exit the freeway on the basis of knowledge of the interchange (exit) number and/or the crossing route number and street name.

3 The following items of information may be displayed on the sequence of signs provided at access interchanges:

(a) interchange (exit) numbers (exit information);
(b) route numbers (exit and straight-on information);
(c) cardinal directions (orientational information);
(d) control or familiar destinations (orientational information);
(e) major transport terminal names (orientational information);
(f) local authority name in urban areas in which the exit is located (reassurance);
(g) distance to exits (exit information);
(h) control destinations on the freeway route beyond the interchange (reassurance);
(i) tourist or service facilities served by the exits which conform to the policy for such signing.

5.4.3 Required Information Display for Systems Interchanges

1 At systems (or freeway-to-freeway) interchanges the minimum primary information to be displayed shall relate to route identification in the form of route numbers. Secondary information, or destination names, should be limited to control and/or familiar destinations. Details of the selection of these types of destinations are given in Volume 1, Chapter 8, but unlike at access interchanges, their principle function must be to orientate drivers. In the event of a systems interchange resulting in a split in a route to two significantly different directions the use of cardinal directions is recommended to improve the ability of the signs to give the necessary orientation.

2 In addition the use of a major transport terminal such as an airport or harbour may provide valuable orientation information for visitors to an area.

3 The following items of information may be displayed on the sequence of signs provided at systems interchanges:

(a) interchange (exit) numbers (exit information);
(b) route numbers (exit and straight-on information);
(c) cardinal directions (orientational information);
(d) control or familiar destinations (orientational information);
(e) major transport terminal names (orientational information);
(f) upward-type arrows showing exit lane configuration (safety information);
(g) distance to exits (exit information);
(h) special signing for situations such as lane drops in the vicinity of an interchange (safety information);
(i) control destinations on the exit routes beyond the interchange (reassurance).
5.4.4 Basic Requirements for Freeway Direction Sign Sequences

1 There are many possible variations of signing sequence on the approach to a freeway interchange. In particular the approaches to systems interchanges vary significantly in their geometry and the signing sequences have to adapt to these variations. In essence a driver needs to be given adequate warning of the approach of an interchange by means of one or more advance exit type signs and then the exit itself must be clearly demarcated.

2 Figure 5.10 illustrates the basic sequence of rural and urban ground-mounted signs for an approach to an access interchange. The minimum sign sequence for a Class A1 freeway shall comprise:

(a) ADVANCE EXIT DIRECTION sign GA2;
(b) EXIT DIRECTION sign GA3;
(c) CHEVRON HAZARD MARKER signs W405/W406;
(d) GORE EXIT sign GA4.

Other additional signs on the approach to the interchange, at the off-ramp and beyond the interchange are also shown. Refer to Volume 1, Chapter 4 and to the subsections on the individual signs for an indication of when their use is recommended.

3 Figure 5.11, Detail 5.11.1, illustrates the basic sequence of urban overhead signs for an approach to an access interchange using downward-pointing arrows. The minimum sign sequence shall comprise:

(a) ADVANCE EXIT DIRECTION sign GC2D;
(b) SUPPLEMENTARY EXIT/THROUGH (or STRAIGHT-ON) DIRECTION sign GC3D;
(c) EXIT DIRECTION sign GC4D;
(d) GORE EXIT sign GA4.

4 Figure 5.11, Detail 5.11.2, illustrates the basic sequence of urban overhead signs for an approach to an access interchange using upward-pointing arrows. The minimum sign sequence shall comprise:

(a) ADVANCE EXIT DIRECTION sign GC2U;
(b) SUPPLEMENTARY EXIT/THROUGH direction sign GC3U;
(c) EXIT DIRECTION sign GC4U;
(d) GORE EXIT sign GA4.

5 Figure 5.12 illustrates two typical sequences of urban overhead signs for an approach to systems interchanges using upward-pointing arrows. The sign sequence for such an approach is very much affected by the exit/off-ramp configuration which can vary widely. This aspect is dealt with in Section 5.4.5. A typical sign sequence will comprise:

(a) PRE-ADVANCE EXIT DIRECTION sign GC1;
(b) ADVANCE EXIT DIRECTION sign GC2U;
(c) SUPPLEMENTARY EXIT/THROUGH DIRECTION sign GC3U;
(d) ADVANCE OFF-RAMP DIRECTION sign GC5U;
(e) GORE EXIT sign GA4;
(f) EXIT DIRECTION sign GC4U displayed with C-D road THROUGH DIRECTION sign GC6U;
(g) CHEVRON HAZARD MARKER signs W405/W406;
(h) C-D EXIT/THROUGH DIRECTION sign GC7U (or ground-mounted C-D ADVANCE STACK-TYPE DIRECTION sign GA9);
(i) EXIT DIRECTION sign GC4U optionally displayed with C-D THROUGH DIRECTION sign GC6U (or ground-mounted STACK-TYPE DIRECTION sign GC10).

Alternative signs may be required depending on whether the subsequent on-ramp is a loop ramp or a fully directional ramp (see Details 5.12.1 and 5.12.2). This aspect is dealt with in further detail in Section 5.4.5.

6 It is a relatively common feature of interchanges which warrant the use of overhead signs that they include one or more exit lanes which are exclusive or "dedicated" exit lanes. This type of sequence may be equally appropriate at an access or a systems interchange. It is important that drivers NOT wishing to exit at this point shall be made aware that the lane does not continue beyond the exit, so that they may move out of the lane as early as possible. The upward pointing arrow system provides for this in the layout of various cluster-type arrows. This aspect is dealt with in more detail in Section 5.4.5.

7 The sign sequence principles for the conditions described in paragraphs 5.4.4.3 and 5.4.4.4 and illustrated in Figure 5.11 and Figure 5.12 differ significantly. Standard design procedure for access interchanges provides for at-grade junctions between the off-ramp and the intersecting cross road. The exit condition from the freeway is thus relatively conventional although this can be complicated by the provision of two or more lanes on the off-ramp. This latter situation may warrant special signing treatment. The exit from a freeway at a systems interchange is more complex because the left and right turn movements are catered for in a free-flowing manner. This will normally result in secondary exits on the collector-distributor (C-D) road where the left and right turn movements separate. Since systems interchanges are normally subject to heavy traffic flows, particularly on turning movements, drivers seeking left turn movements and those seeking right turn movements need a very clear indication of their correct position on the roadway. To cater for this an exit direction sign is not provided at the exit point from the freeway. Instead an advance direction sign is provided at this exit, which indicates the left-right destinations for the next exit split. This sign is called an ADVANCE OFF-RAMP DIRECTION sign GC5U and it is recommended that the arrow cluster be rotated to the left through 15° to 30° to conform with the normal arrow display practice on advance exit and EXIT DIRECTION signs of sloping the arrow at approximately 45°. At the secondary exit a conventional exit direction sign GC4U is used. The principle of displaying an advance sign for an on-ramp may also be used, particularly if a collector-distributor road is provided and the crossing freeway is carried over the C-D road creating

(Continued on page 5.4.4)
Fig 5.10
Typical Freeway Direction Signing Sequence – Access Interchange – Ground Mounted Signs
poor sight distance conditions to the junction of the C-D road and the 360° on-ramp loop. Figure 5.10 illustrates a typical arrangement of off-ramp stack-type direction signs at an access interchange which are appropriate irrespective of the form of the preceding signs in the freeway exit sequence. The minimum requirements shall comprise an OFF-RAMP TERMINAL DIRECTION sign GA6. If the off-ramp develops into two or more lanes an ADVANCE OFF-RAMP TERMINAL DIRECTION sign GA5, or even an overhead sign, may be warranted to ensure that drivers select the correct lane for the junction ahead.

In order to preserve the standards and effectiveness of the freeway direction signing system, the stack-type direction signs used on the intersecting cross-roads, shall be designed incorporating a number of exclusive features related to their function as direction signs serving a freeway. For this reason these freeway cross-road signs are covered in this section.

Figure 5.13 illustrates the basic sequence of rural and urban ground-mounted signs on the cross road approaches to an access interchange. For various types of access interchange configuration the minimum sign sequence on each approach shall comprise:

(a) STACK-TYPE CROSS-ROAD ADVANCE DIRECTION sign GB1;
(b) STACK-TYPE NEAR-SIDE ON-RAMP DIRECTION sign GB2;
(c) STACK-TYPE FAR-SIDE ON-RAMP ADVANCE DIRECTION sign GB3;
(d) STACK-TYPE FAR-SIDE ON-RAMP DIRECTION sign GB4.

On narrow interchanges sign GB3 may be omitted, although it is recommended that sign GB3 should be provided whenever practical. If sign GB3 is not provided it is recommended that the letter size specified for sign GB4 be increased by one or two standard size increments to increase the legibility distance to the sign.

In urban environments space limitations may require that standard crossroad signs be replaced by variations of MAP-TYPE ADVANCE DIRECTION sign GD7, displaying route numbers and cardinal directions only. This sign can be vertically formatted to save lateral space (see Chapter 9).

Table 5.7 gives guidelines for the spacing of signs on freeways, off-ramps and on crossroads. The guidelines are based on an allowance for clear sight distance before reading a sign, but are primarily provided to assist in the location of additional signs in existing sequences rather than for initial design.

### Table 5.7: Minimum Spacing Between Signs

<table>
<thead>
<tr>
<th>Operating Speed (km/h)</th>
<th>On-Freeway Signs</th>
<th>Off-Ramp (m)</th>
<th>Crossroad (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>250</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>100</td>
<td>200</td>
<td>150</td>
<td>80</td>
</tr>
<tr>
<td>80</td>
<td>150</td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>60</td>
<td>n/a</td>
<td>n/a</td>
<td>50</td>
</tr>
</tbody>
</table>

**NOTES:**

1. Recommended longitudinal sign positions are given in Figures 5.11 and 5.12 and repeated in Figures 5.15 and 5.21. Sign spacing can be derived from the given positions.
2. Any additional signs should be carefully located to reduce any risk of visual obstruction of one sign by another.
3. The spacings given in this table are guidelines for minimum sign spacings when additional signs are required in existing situations. These values should not be used for design purposes for initial installations. Sign spacings between signs in minimum sign sequences should be increased at the design stage as additional sign needs are identified.
4. Refer to Volume 1, Chapter 4 for further design criteria.
Fig 5.11
Typical Freeway Direction Signing Sequence – Access Interchange – Overhead Signs
Fig 5.12
Typical Freeway Direction Signing Sequence – Systems Interchange – Overhead Signs
Fig 5.13
Typical Direction Signing for Cross-Road Approaches to Various Types of Access Interchange

NOTE:
Two options are shown for sign GB4. The sign may be provided with a straight on stack when warranted by the forward destination and specific traffic movements.
5.4.5 Details of Freeway Direction Sign Sequences

1. The type of interchange and the freeway and interchange geometric configuration are major factors to be considered in the layout of the direction signs and in particular the arrow types and sequences play a major role in providing a clear indication to the driver of the lane and geometric configuration ahead. This section provides more detail on this aspect.

2. All ground-mounted freeway advance exit direction signs shall be map-type signs, whilst exit direction signs and off-ramp terminal signs shall be stack-type signs. (The GORE EXIT sign GA4 has an exclusive design.)

3. Overhead freeway direction signs may conform to one of two basic signing principles as follows:
   (a) the signs may, by means of downward-pointing arrows, utilising one arrow over each appropriate lane, indicate the lane by which drivers may proceed towards their intended destination; OR
   (b) the signs may, by means of upward-pointing arrows, either in relation to an exit, or collectively in a cluster in relation to the whole roadway, indicate the lane configuration of the roadway, and which (and how many) lanes specifically may be used to exit the freeway at the access or systems interchange concerned.

   Signs incorporating both principles should not be mixed in one approach sequence to an interchange.

4. Notwithstanding the comments made in paragraph 5.4.5.3 regarding upward and downward arrows appearing together in an overhead sign sequence it is acceptable to combine a diagrammatic sign, which displays upward-pointing arrows, in combination with overhead direction signs which display downward-pointing arrows.

5. The various arrow configurations for the sign sequences related to the different interchange types and the different sign mounting are illustrated in a number of figures. In these figures the required sequence of signs and the typical signface layout for each sign in the sequence is indicated on a master layout, but with the arrow type blanked out. The arrow type required on each of the signs is cross-referenced from a table on each figure which indicates the exact requirements for that sign. A comprehensive master listing of all the arrow types is given in Figure 5.14. The individual tables in the figures are cross-referenced to Figure 5.14 arrow types.

6. Figure 5.15 illustrates the exit direction sign sequence related to an access interchange using ground-mounted signs. Both diamond and parclo type interchanges are considered.

7. Figure 5.16 illustrates the signing required on the off-ramp of a diamond interchange while Figure 5.17 indicates the signing on a parclo B type access interchange off-ramp.

8. Figure 5.18 illustrates the exit direction sign sequence related to an access interchange, using overhead-mounted signs with the downward pointing arrow system. Both diamond and parclo type interchanges are considered.

9. Figure 5.19 illustrates the exit direction sign sequence related to an access interchange, using overhead-mounted signs with the upward-pointing arrow system. Both diamond and parclo type interchanges are considered.

10. Figure 5.20 illustrates the exit direction sign sequence related to a cloverleaf type systems interchange, using overhead-mounted signs with the upward-pointing arrow system.

11. Figure 5.21 illustrates the exit direction sign sequence related to a fully directional exit ramp common at a systems interchange, using overhead-mounted signs with the upward-pointing arrow system.

12. Thus in order to ascertain the arrow type requirements for a specific interchange, the following procedure should be followed using the relevant figure:
   (a) check type of interchange configuration to be signed;
   (b) determine the type of signing, both physical type and arrow type;
   (c) select the figure related to these requirements;
   (d) for each sign type, refer to the table incorporated in the figure which will provide the arrow type configuration definition;
   (e) cross-reference this arrow type definition to Figure 5.14 which indicates the physical detail of the arrow type configuration and gives, in the notes, cross references to Volume 4 for individual arrow design details.
NOTES:

(1) In the arrow “type” tables in the subsequent figures some minor variations of the orientation of the above arrow types may be necessary. The following annotations apply:
(i) VAR = varied to represent the road configuration ahead i.e. show curvature;
(ii) ROR = rotated to represent the off-ramp orientation more accurately.
(2) For the correct dimensional details of individual arrows and the relationship of arrows in clusters see Volume 4, Chapters 5 and 6.

Fig 5.14 Arrow Types and Configurations for Freeway Direction Signs

Fig 5.15 Typical Arrow Types for Ground Mounted Direction Signs - Access Interchange
NOTES:
(1) The signing illustrated may follow ground-mounted or overhead signs used on a freeway.
(2) The positioning of sign GA5 should take into account the future need to provide a TOURISM ADVANCE TURN sign GF2. Use position ALT2 if off-ramp widens into two or more lanes.
(3) In the event of very high traffic volumes on the off-ramp, or the provision of more than two lanes, the use of overhead signs should be considered.
(4) Sign spacings must be adequate for all signs to be fully visible and comprehensible – see Table 5.7.

Fig 5.16  Typical Ground Mounted Off-Ramp Direction Signs – Diamond Interchange
Fig 5.17  Typical Ground Mounted Off-Ramp Direction Signs – Parclo “B” Interchange
### Table 5.16.1: Arrow Type in Sign Sequence

<table>
<thead>
<tr>
<th>Description</th>
<th>Diagram of Lanes at Interchange</th>
<th>Sign Type / Arrow Display Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESS INTERCHANGE: DIAMOND TYPE</td>
<td></td>
<td>GEl</td>
</tr>
<tr>
<td>2 THROUGH LANES, 1 EXIT LANE</td>
<td><img src="image1" alt="Diagram" /></td>
<td>M10</td>
</tr>
<tr>
<td>3 THROUGH LANES, 1 EXIT LANE</td>
<td><img src="image2" alt="Diagram" /></td>
<td>M10</td>
</tr>
<tr>
<td>3 THROUGH LANES, 2 EXIT LANES (1 EXCLUSIVE)</td>
<td><img src="image3" alt="Diagram" /></td>
<td>M10</td>
</tr>
</tbody>
</table>

### ACCESS INTERCHANGE - SPINL TYPE

<table>
<thead>
<tr>
<th>Description</th>
<th>Diagram of Lanes at Interchange</th>
<th>Sign Type / Arrow Display Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 THROUGH LANES, 1 EXIT LANE</td>
<td><img src="image4" alt="Diagram" /></td>
<td>M10</td>
</tr>
<tr>
<td>3 THROUGH LANES, 1 EXIT LANE</td>
<td><img src="image5" alt="Diagram" /></td>
<td>M10</td>
</tr>
<tr>
<td>2 THROUGH LANES, 1 EXIT LANE (1 EXCLUSIVE)</td>
<td><img src="image6" alt="Diagram" /></td>
<td>M10</td>
</tr>
</tbody>
</table>

### NOTES:

1. (i) 1 x downward pointing arrow above each through lane.
2. (ii) 1 x downward pointing arrow above each off lane.
3. (iii) GC4D sign to be placed in advance of bridge if intersecting road crosses over the freeway.

(2) To complete the signage sequence a GA7 (Confirmation) sign is required 750 m beyond the on-ramp merge.

---

**Fig 5.18**

Typical Arrow Types for Overhead Direction Signs – Downward Pointing - Access Interchange

Refer to Table 5.16.1 and Fig. 5.14 for arrow details.
NOTES:

(1) (i) 1 x downward pointing arrow above each through lane.
(ii) 1 x downward pointing arrow above each off lane.
(iii) GC4D sign to be placed in advance of bridge if intersecting road crosses over the freeway.

(2) To complete the signage sequence a GA7 (Confirmation) sign is required 750 m beyond the on-ramp merge.
### Table 5.20.1: Arrow in Sign Sequence

<table>
<thead>
<tr>
<th>Description</th>
<th>Diagram of Lanes at Interchange Exit Areas</th>
<th>Sign Type / Arrow Display Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cloverleaf Interchange</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No C-O Roads</td>
<td>UT4</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>2 Through Lanes, 1 Lane Exit A / 1 Lane Exit B</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>3 Through Lanes, 1 Lane Exit A / 1 Lane Exit B</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>2 Through Lanes, 2 Lanes Exit A (Exclusive) / 1 Lane Exit B</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td><strong>Overleaf Interchange</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With C-O Road</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>2 Through Lanes, 1 Exit Lane Split: Ramp 1 Lane, C-O 1 Lane</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>3 Through Lanes, 1 Exit Lane Split: Ramp 1 Lane, C-O 1 Lane</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>3 Through Lanes, 2 Exit Lanes (1 Exclusive) Split: Ramp 2 Lanes, C-O 1 Lane</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
<tr>
<td>3 Through Lanes, 2 Exit Lanes (2 Exclusive) Split: Ramp 2 Lanes, C-O 1 Lane</td>
<td>UT1</td>
<td>C1/C2/C3/C4/C6</td>
</tr>
</tbody>
</table>

Fig 5.20
Typical Arrow Types for Overhead Direction Signs – Upward Pointing - Access Interchange - 2

Refer to Table 5.19.1 for arrow type details.
**Table 5.21.1: Arrow Type in Sign Sequence**

<table>
<thead>
<tr>
<th>SYSTEM INTERCHANGE: DIRECTIONAL TYPE</th>
<th>DIAGRAM OF Lanes at INTERCHANGE EXIT AREAS</th>
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**Fig 5.21**

Typical Arrow Types for Overhead Direction Signs – Upward Pointing – Directional Systems Interchange

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Refer to Table 5.18.1 for arrow type details.
5.4.6 Signing Requirements at Merges - Directional Systems Interchange - Fully Directional Ramps

1 The merging of high speed traffic on fully directional multi-lane ramps at system interchanges is complex and there is a high potential for accidents. Three typical conditions are encountered:
   (a) ending of a lane which is normally the outside lane used by slower moving traffic - see the GS100 series of signs;
   (b) merging of two converging lanes - see the GS400 series of signs;
   (c) the convergence of lanes but without merging - see the GS450 series of signs.

2 Figure 5.22 illustrates typical recommended sign sequences for all three of these conditions.
Table 5.22.1 Appropriate Signs

**LANE ENDING:**
- GS100 SERIES
  - GS101
  - GS103
  - GS105

**LANE MERGE:**
- GS400 SERIES
  - GS401
  - GS402
  - GS404
  - GS405
  - GS406

**LANE CONVERGENCE:**
- GS450 SERIES
  - GS451
  - GS452
  - GS453
  - GS454

---

**SEE FIGURE 5.22**

Typical Signing Requirements at Ramp Merges on Systems Interchange Fully Directional Ramps

- GS460 series sign face varies according to lane configuration (See Table) - Ground or Overhead mounted
- See typical detail of merge area
- Ground mounted or Overhead mounted GS400 series (note that sign face varies according to lane configuration - see Table 5.22.1)

---

**EXAMPLE**
- GS101
  - 400 m
  - IN11.3

**GS101+IN11.3**
- GS400 series sign where relevant
- Second GS100 series sign - optional

**Detail 5.22.2**
- Typical Lane Drop Signs and Markings on a Directional Ramp

---

**Fig 5.22**
Typical Signing Requirements at Ramp Merges on Systems Interchange Fully Directional Ramps
5.4.7 Crossing Road Name Signing in Urban Areas

1  In an urban area where a freeway is crossed by a road/street which does not interchange with the freeway, it is recommended, that in order to improve the orientation of drivers on the freeway, the name of the crossing street should be displayed:

(a) on the bridge where the crossing road overpasses the freeway;
(b) on a ground-mounted sign beside the freeway where the crossing road underpasses the freeway.

See Figure 5.23.

2  When a GL1 sign is located on an overpass structure it is recommended that it be positioned centrally over the carriageway.

3  The letter sizing for such GL1 signs should be determined in accordance with provisions of Section 4.4 in Volume 1. Refer also to Figure 4.25 in Volume 1. A style B lettering is to be used.
Fig 5.23  Typical Street Name Location Signing for Non-Access Cross Streets on Freeways
5.4.8 Emergency Vehicle Signing for Median Crossovers

1 Wide interchange spacings and/or high incident levels on sections of freeway often require a special treatment for accessibility by emergency vehicles. This type of treatment can take a number of different and often unique forms which require specific geometric and signing designs.

2 One feature which has become relatively common, however, is the median crossover reserved for emergency vehicles. Figure 5.24 illustrates typical basic signing requirements for such a crossover.
Fig 5.24  Typical Emergency Vehicle Median Crossover Signing
TOLL ROUTE SIGNING

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ROAD SIGN, ROAD MARKING, REGULATORY, WARNING

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TOLL ROUTE SIGNING

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CHAPTER 6: TOLL ROUTE SIGNING

6.1 INTRODUCTION

6.1.1 General

1 Toll routes have unique features which place new and additional requirements on the road traffic signs provided for drivers. In particular the display of information relating to the payment of toll charges, and to alternative routes, places an additional load on drivers' attention levels.

2 The levying of tolls on national routes was provided for by the South African National Roads Agency and National Roads Act, Act 7 of 1998, read in conjunction with the original National Roads Act, Act No. 54 of 1971, as amended.

3 The toll route legislation required that an alternative un-tolled route shall be available. In addition during the preparation of this legislation it was stated that these alternative routes would be adequately identified by road signs.

4 The policy and principles given in this section represent basic details which should be borne in mind in the planning phase of a new toll route and adhered to whenever possible. These principles are subject to further development at a detail level with the objective of presenting the driving public with co-ordinated and uniform signing of toll routes. The signing of some sections of toll routes can become extremely complex as a result of such factors as:

   (a) the intersecting of two toll routes under the control of different operators;

   (b) the siting of toll plazas within interchanges (including systems interchanges) where major, and/or complex, changes of direction occur.

5 The greatest lengths of toll route can be classed as rural, but increasing lengths are likely to occur in future in metropolitan or urban environs. The characteristics of trips undertaken in rural and urban systems differ in significant ways. Principal among these differences are the level of pre-trip planning likely to be undertaken, and the ease with which an alternative route may be indicated on signs. Rural trips are liable to be, and certainly should be, planned in some detail, whereas in an urban environment a far larger percentage of trips are likely to be unplanned. In addition, the indication of an alternative route to the toll route presents differing signing problems in rural and urban areas.

6 In rural situations, to date, an alternative route has commonly been available more or less parallel to the tolled route and the indication on road signs is relatively straightforward. In some cases, however, such a route may not exist and the normal solution to this problem involves permitting motorists to use a section of the tolled route free of charge (gratis travel) until they are able to re-join the alternative route, although the free section of route is still maintained by the toll operator.

7 This form of toll operation in which a certain amount of free travel is possible is termed an "Open System" and is more appropriate when traffic volumes do not warrant a "Closed System". To date the system used on South African toll routes is the "Open System". The signing of an "Open System" presents the additional problem of having to indicate which sections of a route operated by a toll operator (and therefore by definition a "Toll Route") are subject to a charge and which are not.

8 The problem of indicating alternative routes in metropolitan areas may be significantly more difficult than in a rural situation. In many cases more than one route may be available. Conversely if an alternative route is not available, it may be much more difficult to arrange a gratis section of toll route due to interchange position or the potential loss of revenue such a section may generate. It is therefore important that this aspect be fully investigated at the concept planning stage of a new toll route (see Subsection 6.3.2).

9 It may also be quite difficult to accommodate the full range of additional signs in the often confined space available in metropolitan road reserves.

10 Guidance signs on toll routes shall achieve the same basic guidance requirements fulfilled by guidance signs anywhere else in the road network. The destination information displayed shall conform to the colour code appropriate to the class of road on which the signs appear. Recent toll routes have involved contiguous sections of dual carriageway (Class A1) freeway and single carriageway (Class A2) freeway (see Volume 1, Chapter 1, Section 1.2). This presents a number of difficulties in deciding on the sign background colour.

11 In addition the guidance signs shall still provide adequate orientation and they shall conform to the basic principles of conspicuity, legibility, conformity, accuracy, uniformity, consistency and continuity (see Volume 1, Chapter 4, Section 4.1).

12 The limitations on information display in terms of road geometry, letter sizes and reading time available shall also be taken into account when designing guidance signs for toll routes (see Volume 1, Chapter 4, Section 4.4).

13 In 1988 the Department of Transport started developing a consistent signing policy for toll roads, based on the experience gained during the signing design of the N17. The document "Road Signs for Toll Roads - Towards a Signs Policy" (hereinafter called the Toll Signs Policy document) was issued to selected interested parties in September 1988 and with this document a number of new signing concepts were introduced. During 1989 these concepts were tested in actual situations on various toll routes.
6.1.2 Purpose of This Chapter

1 This chapter replaces the 1988 Toll Signs Policy document and reflects the latest state of the art. Its purpose is to provide the sign designer with a comprehensive guideline which:

(a) assesses the role of signs in the process of communicating toll related information to the driver;

(b) assists the sign designer with the methodology for signing a toll road so that all toll roads can be signed in a consistent way.

6.1.3 Road Traffic Sign Colour Indication

1 The chapters of Volume 2 of the South African Road Traffic Signs Manual (SARTSM) are not prepared in colour. Relevant examples used to illustrate appropriate signs, signals and markings are shaded in a black and white coding which is illustrated below.

2 The basic principles of the road traffic sign colour coding system are shown, in colour, in the SADC-RTSM Volume 1, Chapter 1, Section 1.4, and in the Contents sections of relevant Volume 1 and 4 Chapters.
6.2 TERMINOLOGY

6.2.1 General

1 The terms described in this Subsection are also given in Volume 1, Chapter 10, “Glossary of Terms”, along with many other more general terms. The terms given here tend to be unique to toll route signing principles. Refer also to Figure 6.1 where the different elements of a toll road are indicated in a practical situation.

2 The following terms are used in subsequent Sections:

"Alternative Route" shall serve the same destinations as the toll route and shall be accessible to road users; it shall commence at or near the beginning and terminate at or near the end of the toll route.

"Freeway" is a normal untolled Class A road.

"Throughway" is a freeway or a toll road.

"Point of Entry (POE)" is the point where the driver enters a toll road and may be at one of the following localities:

(a) at the continuation of an untolled road;
(b) at an intersection, access interchange or systems interchange and will involve a positive change of direction;
entering a toll road via an access interchange from a cross-road, the POE is at the on-ramp/cross-road junction;
entering a toll road through a systems interchange the POE will be at the nose of the off-ramp from the freeway;

"Gratis Section" sections of a toll road that drivers can travel on without being forced into a situation where toll must be paid.

"Turn-off to Alternative Route (TTA)" specifically chosen points which have been signed to indicate directions to the alternative route.

"Point of Commitment (POC)" is the point on the road where drivers finally commit themselves to pay toll; once they go beyond this point they will encounter a toll plaza.

"Committed Section" is that section between the POC and the toll plaza on which all drivers will be obliged to pay toll.

"Toll Plaza Approach" is the section of road on the final approach to a toll plaza on a committed or gratis section of road, approximately 2 km long, and on which the driver will encounter the road signs for the toll plaza.

"Toll Plaza Area" comprises the aprons before the toll booths, the toll booths, the toll administration block and all related parking areas and access roads.

"Beyond the Toll Plaza" the section of road beyond the toll plaza which can simply be the continuation of the toll road or ramp or it can include the nose of an interchange; in the latter case the driver must make a decision to change direction immediately after paying toll.

"Mainline Plaza" is a plaza which straddles all lanes on the route and at which toll is paid by all drivers in one of a number of different ways (a plaza may comprise mainline and ramp components).

"Ramp Plaza" is a plaza located only on the off-ramp and/or on-ramp at an interchange and at which toll is paid by drivers leaving or entering the toll route, in one of a number of different ways.

"Long Distance Traveller" is one travelling between national orientation points or provincial orientation points if there are no suitable national orientation points, the long distance traveller’s journey would normally be longer than 100 km².

"Automatic Toll" the toll charge is collected by an automatic device which does not give change, therefore the correct change shall be tendered; Automatic Toll can be collected in a number of ways:

(i) by coin only;
(ii) by credit card or debit card;
(iii) by automatic debiting; in future an automatic toll charge may be collected by automatic debiting if vehicle identifiers are used this system will identify the vehicle in motion and the owner will be invoiced automatically."
Notes for Figure 6.1

(1) This figure illustrates a number of situations which may well occur in an “Open Section” toll system. The variety shown here is unlikely to occur within such a short length of toll route, but is certainly possible.

(2) Points “F” indicate the start (Point of Entry - POE) and end of a toll route for which one of the toll operators is responsible.

(3) Point “A” shows a Turn-off To an Alternative Route (TTA) and a Point of Commitment (POC) whereas Point “E” involves a TTA but not a POC.

(4) All movements on the toll route at Point “B” and all but one of the entering movements are subject to toll. (The movement from west to south is not subject to toll.)

(5) Point “C” shows an interchange with no plazas but entering traffic travelling south will be subject to toll so it includes two POCs.

(6) Point “D” shows a similar interchange with Ramp Plazas. Note that sections of the toll route may still be free or gratis when the toll is levied only on the ramps.

(7) Point “E” shows that Alternative Route re-joining the toll route with gratis travel available in both directions.

(8) The term “Beyond the Toll Plaza” is used to refer to sections of toll route on which, in addition to the “Committed” sections, travel is paid for at a Toll Plaza. Such sections may also be gratis sections for traffic using the system for shorter distances.

Fig 6.1
Elements of a Toll Route
6.3 BASIC PRINCIPLES

6.3.1 General

1 The potential complexity of the different elements making up a toll route system is illustrated in Figure 6.1.

2 Before considering individual signs, it is necessary to determine what additional information is required to that normally given for a road of the class subject to a toll charge. When drivers approach a POE they will see the TOLL ROUTE NAME sign GL7.2, the purpose of which is to indicate that there is a choice of either using or not using the toll road to reach their destination. Ideally drivers should then be provided with information relating to:

   - (a) the tariff at each plaza on the toll route;
   - (b) the acceptable methods of payment;
   - (c) the distances by the toll route and any alternative route;
   - (d) directional guidance to an alternative route.

3 The basic principles used to provide drivers with the necessary information required are derived from the need to clearly identify these elements to drivers. It is, however, virtually always impractical to provide all this information at every approach to a point of entry (POE), especially in urban areas.

4 The information to be provided should therefore be rationalised as follows:

   - (a) a driver entering a toll route should expect to pay toll at some point, and in choosing the route, undertakes to do so;
   - (b) toll routes are most commonly along national roads, therefore the information given is directed primarily at long distance travellers (travelling to national or provincial familiar orientation points involving a trip in the region of 100 km or more - see Volume 1, Chapter 8);
   - (c) direction information shall take priority over toll payment information in terms of the overall limits applicable to a driver's ability to digest information.

5 The basic symbols and signs related specifically to toll routes and their application are discussed in detail in Section 6.4 and Section 6.5 respectively. Their application is dealt with in Section 6.6.

6 Because a toll route may be divided into “gratis” and “pay” sections it becomes necessary for this to be evident from the basic signs rather than through additional worded messages.

6.3.2 Alternative Routes

1 Requirements for selection of an alternative route are as follows:

   - (a) only one alternative route should be chosen and signposted; the choice of route should be made in conjunction with the Department of Transport and the road authority that administers that route;
   - (b) the alternative route must be of the highest standard available and it should be a national or provincial road or a major municipal arterial;
   - (c) it must directly or indirectly serve the same destinations as the toll road;
   - (d) in the interest of public safety short sections of the alternative route may coincide with the toll road, but the alternative route must never be signed in such a way that it only avoids the toll plazas;
   - (e) when the economic viability of a toll road is considered, the cost of using the toll road must be compared with the cost of using alternative routes and it is important to establish which routes were considered in the economic analysis to assist in choosing an alternative route.

2 When signing an alternative route the following must be borne in mind:

   - (a) alternative routes are signed for the long distance traveller on the national route; no direction signs to toll road alternative routes should be provided on metropolitan or provincial approach routes to the toll road;
   - (b) direction signs before the TTA must indicate control destinations that can be reached via the toll road;
   - (c) there is an inherent obligation that once having signposted an alternative route, follow-up signing be provided along this route to enable drivers to navigate their way to their destination;
   - (d) it is undesirable that the environment be cluttered unnecessarily by road signs; it is therefore recommended that the alternative route be identified only up to the point where the familiar destination, which would have been reached if the driver had stayed on the toll route, appears on existing direction signs on the alternative route.
6.4 TOLL SYMBOLS

6.4.1 General

1. It has been noted in Section 6.3 that the information transfer aspects of a toll route system can become complex. The different elements of such a system are illustrated in Figure 6.1. Consistent with one of the primary objectives of the road traffic sign system, namely to simplify message transfer to drivers, symbols are widely used on road signs specified for toll route environments. Since some of these symbols are unique to toll route signing, a specific sign-based education campaign should be implemented in conjunction with the commissioning of any new toll route. This requirement is particularly relevant if the toll route is the first one in the area.

2. Whilst the majority of messages on toll signs related to identification of routes and tariffs are given in a symbolic form, the PAY TOLL regulatory sign R132 is also widely used on signfaces. Sign R132 is used to indicate a mandatory requirement to pay toll in the direction associated with the sign. It should be noted that sign R132 is a regulatory sign and not a symbol. The use of sign R132 carries an ultimate obligation for drivers to pay the appropriate tariff.

3. It is a basic principle of the development of toll route signing, therefore, that wherever possible standard types of location, direction and information signs have been modified for use on toll routes by the addition of various symbols.

4. Ultimately the signing requirements of a toll route are likely to include the full range of roads signs types (see Volume 1, Chapter 1 for details of the road traffic signs classification). From the perspective of the use of symbols on guidance and information signs, three groups of symbols, each identified as a numbered series, are used as follows:

   (a) on LOCATION signs – symbols in the GLS series;
   (b) on ROUTE MARKER, DIRECTION and FREEWAY DIRECTION signs (including overhead signs) – symbols in the GDS series;
   (c) on INFORMATION signs – symbols in the INS series.

5. Dimensional details of the way in which the various symbols should be incorporated into otherwise standard signface layouts are covered in Volume 4, Chapter 9, “Information Signs” and Chapter 15, “Toll Direction Signs”.

6. All symbols unique to toll routes are detailed in Volume 4, normally on a background grid to facilitate manufacture. The symbols are covered in the following chapters of Volume 4:

   (a) Chapter 4: “Location Signs and Route Marker Signs” – all GLS symbols;
   (b) Chapter 5: “Direction Signs” – all GDS symbols;
   (c) Chapter 9: “Information Signs” – all INS symbols.

6.4.2 Basic Toll Symbols

1. In order to convey toll related messages, specific symbols have been devised. These are (see Figure 6.2):

   (a) TOLL ROUTE NAME symbol GLS-2;
   (b) END OF TOLL ROUTE symbol GLS-3;
   (c) TOLL ROUTE symbol GLS-5;
   (d) ALTERNATIVE ROUTE symbol GDS-10;
   (e) TOLL PLAZA AHEAD symbol GDS-22;
   (f) AUTOTOL symbol INS-10 (all vehicles);
   (g) AUTOTOL symbol INS-11 (cars only).

   These are summarized in Table 6.1 which also provides a cross-reference to Volume 1 and Volume 4.

2. In addition PAY TOLL sign R132 is used on toll signs in the manner of a symbol. The use of sign R132 in this way is discussed in Subsection 6.4.7.

3. The application of the TOLL ROUTE NAME symbol GLS-2 and the END OF TOLL ROUTE symbol GLS-3 is discussed in Subsection 6.4.4.

4. The application of the TOLL ROUTE symbol GDS-9, the ALTERNATIVE ROUTE symbol GDS-10 are discussed in Subsections 6.4.6 respectively.

5. The TOLL PLAZA AHEAD symbol GDS-22, for use on overhead direction signs, is discussed in Subsection 6.4.8. This symbol is incorporated into a variety of arrow types, in particular arrow clusters. Dimensional details of how the symbol may be incorporated are given in Chapter 15, Section 15.4.

6. The AUTOTOL symbols INS-27 and INS-28 are discussed in Subsection 6.4.9.

6.4.3 Toll Tariff Symbols

1. The tariff charged for the use of various sections of toll route operated by The South African National Roads Agency varies according to the class of vehicle. Vehicles are classified by their number of axles and tariffs are indicated according to groups of classes of vehicle.

2. The relationship between toll tariff to be paid and vehicle/axle class is indicated on TOLL TARIFF BOARD signs IN24 and IN25. Vehicle class symbols, in the INS series, are illustrated in Figure 6.2 and accurately represent the axle configuration of the class of vehicle. The range of vehicle/axle class symbols, listed with cross-references to Volumes 1 and 4 in Table 6.1, is as follows:

   (a) MOTOR CAR symbol INS-12;
   (b) BAKKIE symbol INS-13;
   (c) MOTORCYCLE symbol INS-14;
   (d) MOTOR CAR plus CARAVAN symbol INS-15;
   (e) CARAVAN symbol INS-16;
   (f) MINIBUS symbol INS-17;
   (g) BUS symbol INS-18;
   (h) TRUCK – 2 axle symbol INS-19;
   (i) TRUCK – 3 axle symbol INS-20;
   (j) TRUCK – 4 axle symbol INS-21;
   (k) TRUCK – 5 axle symbol INS-22;
   (l) TRUCK – 6 axle symbol INS-23;
   (m) TRUCK – 7 axle symbol INS-24;
   (n) TRUCK – 8 axle symbol INS-25;
   (o) BUS – 3 axle symbol INS-26.
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Notes for Figure 6.2

(1) Symbols used on toll route signs fall into one of three categories, namely:
   (a) for LOCATION signs in the GLS series;
   (b) for ROUTE MARKER, DIRECTION and FREEWAY DIRECTION signs (including overhead signs) in the GDS series;
   (c) for INFORMATION signs in the INS series.

(2) Detail 6.2.1 shows a range of vehicle class symbols used primarily on TOLL TARIFF BOARD signs IN24 and IN25. In terms of current toll tariff policy the primary factor which these symbols have to illustrate is the number of axles which each class of vehicle has. From time to time the grouping of vehicles under the one toll tariff rate may change and not all vehicle class symbols may be represented on a sign. If one of the symbols illustrated in Detail 6.2.1 is not displayed the tariff charged will be that of the nearest class vehicle e.g.
   (a) a BAKKIE will be charged a MOTOR CAR tariff, or
   (b) a MINIBUS towing a CARAVAN will be charged a MOTOR CAR plus CARAVAN tariff.

(3) In Detail 6.2.2 symbol GDS-22 represents a toll plaza. The symbol may be used on overhead signs when a mainline or ramp plaza straddles a number of lanes. The symbol may be varied in length to suit the arrow display on the sign but should only be used for two or more arrows. PAY TOLL sign R132 should be positioned in the centre of symbol GDS-22 (see Detail 6.2.3).

(4) PAY TOLL sign R132 is used to indicate the legal requirement for drivers to pay toll, at least once, on a section of toll route. This indication shall be given at Points of Entry (POE’s – see Figure 6.1) by the provision of one or more free-standing examples of sign R132. In addition sign R132 is used extensively by superimposition upon stack, map or overhead type arrows to indicate a direction on, or onto, a toll route in which a toll will have to be paid.
6.4.4 TOLL ROUTE NAME Symbol

1 The TOLL ROUTE NAME symbol GLS-2 is used in conjunction with the TOLL ROUTE NAME sign GL7.2 (Location – Guidance Volume 1, Chapter 4, Subsection 4.6.10), which is a derivation of ROUTE NAME sign GL7 (see Figure 6.3). Symbol GLS-2 will commonly appear with either symbol GLS-4 or symbol GLS-5 which indicate the class status of the route if it is a freeway. This sign is to be placed at the beginning of the toll route section. It may also be placed at strategic points along the length of the toll road, e.g. directly after an interchange where large volumes of traffic enter the toll road.

2 The GLS-2 symbol comprises a black semi-matt “T” on a yellow retroreflective background with a black semi-matt border.

3 The END OF TOLL ROUTE symbol GLS-3 is used in conjunction with the END OF TOLL ROUTE NAME sign GL7.3 which is also a derivation of ROUTE NAME sign GL7 (see Figure 6.3). Symbol GLS-3 is not used with a freeway class symbol. This sign is placed at the end of the toll route.

4 The GLS-3 symbol comprises a black semi-matt “T” on a yellow retroreflective background with a black semi-matt border and red retroreflective cross.

5 Both of signs GL7.2 and GL7.3 may be supplemented by information indicating the name of the road authority responsible for the toll route. This information may be displayed in a SUPPLEMENTARY PLATE sign IN11.6 below the main sign, although it is not necessary to construct the sign in separate parts (as would be the case with a regulatory or warning sign used with an IN11 sign). For dimensional details see Volume 4, Chapter 9, “Information Signs”.

6 For examples of the location of signs GL7.2 and GL7.3 in the relevant sign sequences see Figure 6.12 (Sub-sequence TS3) and Figure 6.17 (Sub-sequence TS7).
Fig 6.3  Application of Toll Route Name and End of Toll Route Symbols – GLS-3 and GLS-4
6.4.5 TOLL ROUTE Symbol

1. The TOLL ROUTE symbol GDS-9 is to be used with the route number to demarcate the extent of the toll route. As such it may be incorporated into various standard signs as required, examples of which are given in Figure 6.4. For dimensional details of how this should be achieved with a various standard Direction – Guidance Signs see Volume 4, Chapter 15, Section 15.2.

2. The GDS-9 symbol comprises a black semi-matt "T" on a yellow retroreflective background.
Fig 6.4  Application of “Toll Route” Symbol – GDS-9
6.4.6 ALTERNATIVE ROUTE Symbol

1 The ALTERNATIVE ROUTE symbol GDS-10 is to be used with the route number of the route which has been demarcated as the alternative route to the toll route. As such it may be incorporated into various standard direction signs as required, some examples of which are given in Figure 6.5. The GDS-10 symbol is to be displayed to the right of the number of the alternative route. For dimensional details of how this should be achieved with various standard Direction – Guidance signs see Volume 4, Chapter 15, Section 15.2.

2 The GDS-10 symbol comprises a black semi-matt “A” on a yellow retroreflective background
Fig 6.5  
Application of “Alternative Route” Symbol – GDS-10
6.4.7 PAY TOLL Sign R132
1 The pay toll regulatory sign R132 imposes a mandatory requirement that drivers of vehicles shall only proceed on a public road designated as a toll route if they are able to pay the toll charge, and that they shall pay the toll charge at the toll plaza or plazas concerned (see Volume 1, Chapter 2, Subsection 2.3.10).

2 In general, the sign is used in the manner of a symbol in conjunction with, or is incorporated into, the format of standard signs as required, examples of which are given in Figure 6.6.

3 The sign comprises a white retroreflective “T” on a blue retroreflective background with a white retroreflective border.

4 Sign R132 shall be displayed at all points of payment at toll plazas. The sign may be combined with a stop sign R1 or an indicator device such as an arrow to make the physical location of the point of payment clear. A special 150mm diameter size is permitted to enable sign R132 to be displayed on individual toll booth windows.

5 It is recommended that sign R132 be displayed in conjunction with a speed limit regulatory sign R201 in high visibility backgrounds, as necessary at appropriate distances from the toll plaza in order to slow down approaching traffic. The positioning of these signs will vary according to circumstances and will be influenced by the location of the toll plaza in relation to other roadway elements such as interchanges.

6 In order to indicate the continuance of the toll route and to bring into force its legal requirement, sign R132 should be displayed just beyond the exit point at a high speed exit from a freeway on both sides of a one-way roadway and on the left side of two-way roads. Sign R132 should similarly be displayed on the left side of a two-way roadway just beyond the far left corner of an at-grade junction.

7 The display of sign R132 indicates a point of commitment (POC) to pay a toll charge, and is the last point at which drivers may take action if they do not wish to pay a toll charge. Sign R132 shall be incorporated into the appropriate arrows on ground-mounted stack-type or map-type advance direction signs or on overhead advance direction signs to indicate to drivers that a route ahead, reached either by travelling straight on or by leaving the route on which they are travelling, is subject to toll charges. The direction sign concerned should be located between 400 m and 1200 m in advance of the exit point on a freeway, or between 240 m and 500 m in advance of the near left corner of the on-ramp at a crossroad access interchange on a freeway or of an at-grade junction. The junction indicated on a guidance sign by regulatory sign R132 is therefore the last junction before a toll plaza at which a driver may leave the route on which he is travelling if he does not wish to, or is unable to pay the required toll.

8 An overhead signs PAY TOLL sign R132 may be linked to an arrow cluster by incorporation into symbol GDS22 (see Figure 6.2 and 6.6).

6.4.8 TOLL PLAZA AHEAD Symbol
1 The symbol GDS-22 is used, where appropriate, on overhead signing on the approach to a toll plaza which is associated with an access or systems interchange to indicate the immediate proximity of the plaza. It may be used on GC6U or GC7U type signs mounted to the right of a GC4U sign, although, particularly when a plaza or plazas are associated with a systems interchange, this symbol may be used on a number of different signs. The number of arrows used will be directly related to the number of toll route lanes prior to reaching the plaza (not the number of plaza lanes).

2 The PAY TOLL sign R132 is to be incorporated into the GDS-22 symbol (see Figure 6.2 and 6.6 and Volume 4, Chapter 15 for details).

6.4.9 AUTOTOL Symbols
1 The AUTOTOL symbol INS-10 may be used on information signs to indicate automatic toll facilities at a toll plaza. If automatic toll facilities are only available to motor cars then AUTOTOL (cars only) symbol INS-11 should be used (see Figure 6.2 and Section 6.5.4).

2 To date there has been no need for Autotol symbols for vehicles other than cars, but this need may occur in future. Electronic toll collection is not automatic toll (which uses cash/cards or in/on vehicle automatic debiting devices), but the lane may be shared by all classes of vehicles – not only cars.
Fig 6.6 Application of the Pay Toll Sign R132
On Guidance and High Visibility Signs
.5 TOLL SIGNS

6.5.1 General

1 Toll related signs may fall into one of several classifications including regulatory, guidance (location, route marker, direction, freeway direction) and information. A list of all the basic toll related signs as well as the cross-references to Volume 1 and Volume 4 is given in Table 6.2.

2 The regulatory PAY TOLL sign R132 is dealt with in Subsection 6.4.5.

3 The location signs GL7.2 and GL7.3 are dealt with in Subsection 6.4.2.

4 Specific combination type toll related signs are dealt with in Subsection 6.5.2.

5 A selection of toll signs which give general information are dealt with in Subsection 6.5.3 and the more specific toll tariff related information signs are dealt with in Subsection 6.5.4.

6 Guidance signs modified for specific use in relation to toll routes are discussed in Subsection 6.5.5.

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6.5.2 Special Toll Booth STOP Sign

1 A special high visibility STOP sign R1-RB, incorporating the STOP sign and the information message "Toll gate", is to be used immediately in front of each toll booth (see Figure 6.7).

2 This sign is unique in that it comprises a normal R1 sign on a high visibility "RB" type background. The high visibility background of this sign is, however, RED and the border is white.

6.5.3 Information from Toll Route Signs

1 A number of signs give information about aspects of a toll route. Although these signs provide various forms of information, like their similar counterparts on normal routes, several of them are classified as types of guidance sign because of their specific applications in terms of sequences of related signs. Signs which indicate a distance to the toll route or a toll plaza, or by an alternative route, are classified as versions of CONFIRMATION sign GA7. A sign which indicates a sequence of toll plazas with distances to them is classified as a form of SEQUENCE sign GA8. Specific signs giving information related to toll routes are as follows:
   (a) TOLL AND ALTERNATIVE ROUTE CONFIRMATION sign GA7A;
   (b) TOLL ROUTE AHEAD sign GA7R;
   (c) TOLL PLAZA AHEAD sign GA7P;
   (d) TOLL PLAZA SEQUENCE sign GA8P;
   (e) CHOOSE CORRECT LANE sign IN26.

Refer to Figure 6.7 for examples of these signs.

2 The TOLL AND ALTERNATIVE ROUTE CONFIRMATION sign GA7A which indicates the distances along the toll route and alternative route, is to be placed in advance of the TTA (see Section 6.6).

3 The TOLL ROUTE AHEAD CONFIRMATION sign GA7R which indicates that a toll road is ahead, is to be placed in advance of the toll route approach section that is approximately 3 km ahead of the POE (see Section 6.6).

4 The TOLL PLAZA AHEAD CONFIRMATION sign GA7P is to be placed on the final approach to, and approximately 2 km from the toll plaza.

5 The TOLL PLAZA SEQUENCE sign GA8P provides information on which toll plazas are to be encountered along the toll route and the distance to each.

6 A TEXT MESSAGE information sign IN26 displaying the message "Choose correct lane NOW" is to be used on the approach to a Mainline/Ramp combination toll plaza when this type of plaza is located in advance of an interchange. The sign should be located a minimum of 300 m ahead of the appropriate direction sign (normally an EXIT DIRECTION sign GA3 at the start of the plaza apron) or at least this distance from the off ramp nose.
**Detail 6.7.1 Regulatory R1-R8 Toll Booth Stop Sign**

**Detail 6.7.2 Guidance GA7 and GA8 Signs**

**Detail 6.7.3 Information IN26 Text Message Sign**

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**Fig 6.7** Information from Toll Route Signs
6.5.4 Toll Tariff Information Signs

1 Payment information is required to cover the following aspects:
   (a) **How much to pay?** - there is to be an indication of how much shall be paid by each class of vehicle (this is usually related to the number of axles on the vehicle) - this amount may be different for Mainline and Ramp Plazas;
   (b) **Where to pay?** - traffic may need to be segregated by class on the approach to a plaza, or by intended route beyond a plaza, or for Automatic Toll collection;
   (c) **How to pay?** - there is a need to provide information of payment alternatives, namely, in cash with a requirement to receive change, by Credit or Debit card, by correct cash in coins at an Automatic Toll Machine or by automatic vehicle identification and invoicing;
   (d) **What is being paid for?** - there is a need to provide drivers with some indication of what they are getting for the toll charge - this information may be given on a CONFIRMATION sign GA7A from which the difference in distance to a familiar destination via the toll route and the alternative route may be determined - signs may be used to identify the start and end of the section of a route controlled by the toll operator (different operators may control contiguous sections of a route).

2 Only the following type of toll payment related signs are to be used along a toll route to display the "how much to pay" message:
   (a) TOLL TARIFF sign IN24;
   (b) TOLL TARIFF sign (reduced size) IN25;
   (c) AUTOTOL TARIFF sign IN27.

3 Tariff boards are required to indicate to drivers of various different classes of vehicle what toll is required to be paid if the toll route is travelled. Only tariff board signs IN24 or IN25 are permitted (see Figure 6.8). A tariff board is to be divided into four distinct vehicle symbol groups, and three sections, as shown in Figure 6.8, namely:
   (a) Upper section: should display the name of the next mainline toll plaza;
   (b) Middle section: should display the toll tariffs to be paid by each of the four groups of vehicles;
   (c) Lower section: may display the logo of and name "The South African National Roads Agency" or the name of the operator of the toll route if the toll route has been privatised.

4 Only the toll charges to be paid at the next mainline toll plaza should be displayed, even if further tolls are to be paid beyond this plaza.

5 Where there is a combination of mainline and ramp plazas, and if there is a difference in the tolls to be paid between ramp and mainline, the tariff board sign on the freeway i.e. the IN24 sign on the approach to the toll plaza, shall only indicate the tariffs for the mainline plaza. Whilst space may make it difficult, an IN24 tariff board indicating the toll to be paid at the off-ramp toll plaza, may be displayed to drivers after entry to the off-ramp (see paragraph 6.5.4.8).

6 The toll tariffs shall be repeated at each toll booth on a small facsimile of sign IN24.

7 If space is limited on crossing road approaches to an interchange access to a toll route a reduced toll tariff sign IN25 may be specified. This sign IN25 should be mounted below an appropriate crossroad direction sign as follows:
   (a) GB2 sign;
   (b) GB3 sign;
   (c) GB4 sign (if single panel).

8 Figure 6.8 illustrates two examples of the combination of a GB3 DIRECTION sign and an IN24 or IN25 INFORMATION sign. This principle may be extended to a TOLL TARIFF sign IN24 provided on the freeway in advance of an off-ramp on which a ramp plaza is located (with no mainline plaza) so that the information given on the EXIT DIRECTION sign GA3 is repeated in a stack above the IN24 sign with a sloping Type 1 STACK-TYPE arrow on the left side of the stack.

9 The "AUTOTOL" symbol is to be displayed above the toll lane and is to indicate the lanes at the toll plaza where automatic payments may be made. If "AUTOTOL" is restricted to cars only, the sign should be displayed on a flexible drape to inhibit larger vehicles from entering the toll lane (see Figure 6.8).

10 If the automatic toll is applicable to all classes of vehicles, the symbol "AUTOTOL" IN-27 only is used. If applicable only to motor cars, the "AUTOTOL" symbol is to be incorporated into the motor car symbol as INS-28 (see Figure 6.2). The sign IN27 is to display the conditions applicable to the use of the automatic payment lane(s) in advance of the plaza. Typical information, where relevant, to be displayed will be:
   (a) exact silver coins;
   (b) valid cards;
   (c) no change given;
   (d) the toll tariff;
   (e) cars only;
   (f) no heavy vehicles.

11 A typical example of an AUTOTOL sign IN27 is given in Figure 6.8.

12 Where regulatory or prohibition signs related to the vehicle types are used in conjunction with the autotol signs, care must be taken to avoid confusion with signs designating specific lanes for specific classes of vehicle.
Fig 6.8
Toll Payment Signs
6.5.5 Guidance Signing

1. The basic principle which has been applied to the development of toll route guidance signs has been to modify the standard direction signs by means of appropriate incorporation of the relevant toll symbols/signs, namely:
   (a) GDS - 9 - TOLL ROUTE symbol (see Figure 6.4);
   (b) GDS - 10 - ALTERNATIVE ROUTE symbol (see Figure 6.5);
   (c) R132 - PAY TOLL sign (see Figure 6.6).

2. The appropriate toll symbols/signs may be incorporated into the following ground mounted freeway related direction signs:
   (a) GA1 - PRE-ADVANCE EXIT DIRECTION sign;
   (b) GA2 - ADVANCE EXIT DIRECTION sign;
   (c) GA2/3 - SUPPLEMENTARY EXIT DIRECTION sign;
   (d) GA3 - EXIT DIRECTION sign;
   (e) GA5 - ADVANCE OFF-RAMP TERMINAL DIRECTION sign;
   (f) GA6 - OFF-RAMP TERMINAL DIRECTION sign;
   (g) GA7 - CONFIRMATION sign;
   (h) GA8 - EXIT SEQUENCE sign;
   (i) GA9 - C-D ROAD ADVANCE EXIT DIRECTION sign;
   (j) GA10 - C-D ROAD EXIT DIRECTION sign;
   (k) GB1 - CROSS-ROAD ADVANCE DIRECTION sign;
   (l) GB2 - NEAR-SIDE ON-RAMP DIRECTION sign;
   (m) GB3 - FAR-SIDE ON-RAMP ADVANCE DIRECTION sign;
   (n) GB4 - FAR-SIDE ON-RAMP DIRECTION sign.

3. The appropriate toll symbols/signs may be incorporated into the following overhead mounted freeway related signs:
   (a) GC1 - PRE-ADVANCE EXIT DIRECTION sign;
   (b) GC2D - ADVANCE EXIT DIRECTION sign;
   (c) GC3D - THROUGH DESTINATION(S) sign;
   (d) GC4D - EXIT DIRECTION sign;
   (e) GC2U - ADVANCE EXIT DIRECTION sign;
   (f) GC3U - SUPPLEMENTARY EXIT/THROUGH DIRECTION sign;
   (g) GC4U - EXIT DIRECTION sign;
   (h) GC5U - ADVANCE OFF-RAMP DIRECTION sign;
   (i) GC6U - C-D ROAD THROUGH DIRECTION sign;
   (j) GC7U - C-D FIRST EXIT/THROUGH DIRECTION sign;
   (k) GC8U - C-D SECOND EXIT/THROUGH DIRECTION sign.
6.6 SIGNING APPLICATIONS

6.6.1 General

1 An indication of how the various toll related signs should be applied along the toll route is dealt with in this section. Not all situations can be covered, but an attempt is made to discuss the more common cases as well as to demonstrate the principles involved.

2 The approach taken in this section to the illustration of the application of toll signing is as follows:

(a) firstly the necessary toll signing related to various basic toll road layout situations is indicated on a number of key illustrations which show the plan layout of the signing in relation to the main toll facilities such as the point of entry (POE), turn-off to the alternative route (TTA), the point of commitment (POC) and toll plazas;

(b) secondly, specific toll signing sub-sequences are illustrated in detail and cross-referenced to the key illustrations;

(c) specific issues related to the sign sub-sequences and/or individual sign applications are discussed.

3 Toll signing in relation to the following situations is dealt with in subsequent subsections:

(a) signing on the approach to a POC and/or TTA, and/or POE (see Subsection 6.6.2);

(b) mainline plaza (with the POC far in advance of the next toll plaza and with the next interchange far beyond the plaza) (see Subsection 6.6.3);

(c) mainline and ramp plaza configuration (with the POC far in advance of the next toll plaza but with the next interchange just beyond the plaza) (see Subsection 6.6.4);

(d) mainline and ramp plaza configuration (plaza just beyond an interchange and the POC immediately ahead of the interchange) (see Subsection 6.6.5);

(e) ramp plaza approach (see Subsection 6.6.6);

(f) crossing road (interchange) (see Subsection 6.6.7);

(g) general signing at a typical mainline plaza and general signing at a typical ramp plaza (see Subsection 6.6.8).

4 The more complex situation of overhead signing on an urban toll route signing is dealt with in Subsection 6.6.9.

5 The distance over which a signing sub-sequence is indicated on the key figures is a minimum distance required to meet the spacing requirements between individual signs appropriate to acceptable message transfer. Where these overall distances vary, an adjustment to the altered situation must be made in accordance with the spacing principles related to the clustering of similar types of sign. The recommended spacing between signs is indicated on the more detailed figures dealing with the individual signing sub-sequences.

6 In all the figures dealing with the details of the signing sub-sequences, the basic minimum signing is identified. In many instances other additional or optional signing may be introduced when considered expedient, and where this is possible such signing has been shown as a “requirement category” as follows:

(a) Min. indicates the minimum signing;

(b) Add. indicates the additional signing which should only be excluded if spacing does not permit the erection of the sign;

(c) Opt. indicates optional signing which may be included, if spacing allows, to provide the driver with added useful information.

7 Refer to Volume 2, Chapter 5 for the correct placement and signing sequence of standard ground-mounted freeway signs.

8 Refer to Volume 2, Chapter 4 for the correct placement and signing sequence of tourism signs.
6.6.2 Start of Toll Road (POE/POC/TTA)

1 The signing requirements on the approach to the start of the toll road, i.e. the point of entry (POE), the point of commitment (POC) and the turn-off to the alternative route (TTA) are as indicated in Figure 6.9. The details indicated in this example are for ground-mounted signing.

2 The signing sub-sequences related to the initial sections of the toll road up to the POC are as follows:
   (a) Sub-sequence TS1: alternative route decision and payment information signs on the approach to a POC and/or a TTA and/or a POE;
   (b) Sub-sequence TS2: destination decision signs on the approach to a POC and/or a TTA;
   (c) Sub-sequence TS3: signs just beyond a POC or TTA/POC;
   (d) Sub-sequence TS4: signs beyond the TTA.

Detail 6.9.1 indicates the situation where the TTA and the POC are separate while Detail 6.9.2 indicates the coincident TTA and POC situation.

3 Signing Sub-sequence TS1 which deals with the initial signing encountered on the approach to a toll road is shown in detail in Figure 6.10. Essentially this signing deals with information on the upcoming toll road, the alternative route and the toll tariffs which are required to be paid, as follows:
   (a) the name of the toll route on sign GA7R;
   (b) the various toll plazas which will be encountered up ahead on sign GA8P; both mainline and ramp plazas are to be indicated;
   (c) in the urban situation the next exit ramps may be indicated on EXIT SEQUENCE sign GA8; in combination with sign GA8P the distance of gratis travel along the toll route may be determined; it is used only in urban areas where the street name appears on the exit signs;
   (d) the PRE-ADVANCE EXIT DIRECTION sign GA1 must indicate that the turn-off is to the alternative route and that the freeway ahead is a toll route; because of the importance of this first message, sign GA1 is commonly enhanced to repeat all of the information normally provided on the ADVANCE EXIT DIRECTION sign GA2; sign R132 is to be included in the arrow if the exit is a TTA and POC, but should not be included on the approach to a TTA only exit;
   (e) both of the distances along the toll route and alternative route to the same familiar or control destination (commonly beyond the end of the toll route) are indicated on sign GA7A;
   (f) the required toll to be paid by each of the various classes of vehicle, at the next mainline toll plaza, is to be indicated on sign IN24.

4 Signing Sub-sequence TS2, which details the information related to destination decisions on the approach to a TTA, or POC or a TTA/POC, is shown on Figure 6.11. There are subtle differences in the signing and these are evident when one considers each of the signs in the three different sequences dealt with. Tourism signs may also be included in this sub-sequence if so required.

5 Signing Sub-sequence TS3, which deals with the signing sub-sequence beyond a POC, is shown in Figure 6.12. It comprises:
   (a) PAY TOLL sign R132 sign indicating that toll is to be paid on the route section ahead before any further exit points; sign R132 is to be placed just beyond the GORE EXIT sign GA4 (see Figure 6.13) but must not be obscured by the latter;
   (b) a standard CONFIRMATION sign GD7 is to be placed beyond the interchange;
   (c) the TOLL ROUTE NAME sign GL7.2 is to be placed beyond a POC interchange; this confirms that drivers are now on a section of the toll route on which they are committed to pay toll; if space permits, similar signs may be placed after subsequent interchanges on the toll route.

6 Signing Sub-sequence TS4 which deals with the signing on the off-ramp at a TTA/POC situation is indicated in Figure 6.13. This comprises the normal direction signing modified to incorporate the alternative route symbol GDS-10 as appropriate, and any tourism sign if required. A number of variations are possible:
   (a) at a TTA access interchange off-ramp (diamond or parclo configuration) the signing would be as indicated in Figure 6.13;
   (b) at a TTA exit configuration as shown in Detail 6.9.1 a GA7 sign, incorporating the alternative route symbol GDS-10 next to the route number, should be used at the appropriate location beyond the gore;
   (c) at a POC access interchange off-ramp (diamond or parclo configuration) the signing may be as for Sub-sequence TS4 if the alternative route is to be indicated; otherwise the normal signing excluding the GDS-10 symbol is to be used.
Fig 6.9 Key Plan for Sub-sequences for POE/TTA/POC Approaches

Notes for Figure 6.9
(1) Use Sub-sequence TS4 only if an alternative route is to be indicated. Otherwise provide normal signing for the off ramp excluding the GDS-10 symbol.
Notes for Figure 6.10

(1) \( d_s \) = minimum distance between signs.
(2) Refer to Figure 6.9 for overall layout of signing.

Fig 6.10  Signing Sub-sequence TS1
Fig 6.11
Signing Sub-sequence TS2

Notes for Figure 6.11
(1) Refer to Figure 6.9 for overall layout of signing.
(2) \( ds \) = minimum distance between signs.
Notes for Figure 6.12
(1) ds = minimum distance between signs.
(2) Refer to Figure 6.9 for overall layout of signing.

Fig 6.12  Signing Sub-sequence TS3
Notes for Figure 6.13
(1) Refer to Figure 6.9 for overall layout of signing.
(2) At a POC the signing to the alternative route is optional.
6.6.8 Mainline Plaza

1 The signing requirements for a mainline toll plaza for the situation where the point of commitment (POC) is far in advance of the plaza (greater or equal to 7 kilometres) and the next interchange is far beyond the plaza (equal to or more than 2 kilometres) are as indicated in Figure 6.14. The details indicated in this example are for ground-mounted signing.

2 The signing sub-sequences related to this toll plaza situation are as follows:
   (a) Sub-sequence TS5: payment information signs;
   (b) Sub-sequence TS6: signs on approach to plaza apron;
   (c) Sub-sequence TS7: signing immediately beyond the mainline plaza.

3 For an indication of the general signing requirements within the plaza area itself, refer to Subsection 6.6.8.

4 Signing Sub-sequence TS5, which is the initial signing on an approach to a plaza, firstly advises of the pending approach to the plaza and then provides information related to payments, is shown in detail in Figure 6.15. In this example, over and above the basic signing, the means of including the possible additional signing for the emergency communication phones is shown.

5 Signing Sub-sequence TS6, which deals with the signing related to reducing traffic speed on the final approach to the toll plaza apron, is shown in Figure 6.16.

6 Signing Sub-sequence TS7, which deals with the signing requirements immediately beyond a mainline toll plaza, is shown in Figure 6.17. This example is for a situation where the toll route continues for some distance with further toll(s) having to be paid. Where relevant in the urban situation, the numbers of the next off-ramps may be indicated by means of a GA8 sign. In combination with the GA8P sign this will give an indication of the distance of gratis travel which is possible by using the exits where no toll has to be paid. Sign GA8 should only be used in urban areas where the street name appears on exit signs and these exits are closely spaced.

7 If the toll route ends just beyond the plaza, Sub-sequence TS7 falls away but an END OF TOLL ROUTE sign GL7.3 should be erected in the position of the GL7.2 sign.
Notes for Figure 6.14

1. The signing sequence beyond Sub-sequence TS7, and on the approach to the next interchange, will depend on factors such as:
   a. a toll plaza on the off ramp (see Figure 6.23);
   b. the toll route ends over this section;
   c. the toll route continues beyond next interchange and no ramp plaza (see Figure 6.11, Figure 6.15 and Figure 6.16).

2. For signing details at plaza see Figure 6.28.

3. Use EXIT SEQUENCE sign GA8 only in urban areas where necessary.

4. The SOS emergency telephone signing is indicated for example purposes only, to show how these signs, if required, may be incorporated into a signing sequence.

5. ds = minimum distance between signs.

Fig 6.14
Key Plan for Signing Sub-sequences on Approach to a Mainline Toll Plaza
Notes for Figure 6.15
(1) \( ds \) = minimum distance between signs.
(2) Refer to Figure 6.14 for overall layout of signing.
Notes for Figure 6.16

(1) ds = minimum distance between signs.
(2) Refer to Figure 6.14 for overall layout of signing.

Fig 6.16  Signing for Sub-sequence TS6
Notes for Figure 6.17

(1) $ds =$ minimum distance between signs.
(2) Refer to Figure 6.14 for overall layout of signing.

Fig 6.17  Signing for Sub-sequence TS7
6.6.4 Mainline/Ramp Plazas In Advance of an Interchange

1 The signing requirements for combined mainline/ramp plazas immediately in advance of an interchange are as indicated in Figure 6.18. The details indicated in this example are for ground-mounted signing.

2 The signing sub-sequences related to this toll plaza situation are as follows:
   (a) Sub-sequence TS5: payment information signs (refer to paragraph 6.6.3.4);
   (b) Sub-sequence TS8: destination decisions and signs on the approach to the plaza apron.

3 For an indication of the general signing requirements within the plaza area itself, refer to Subsection 6.6.8.

4 Signing Sub-sequence TS8 which deals with signing related to choice of direction and the slowing down of vehicles on the final approach to the plaza is shown in detail in Figure 6.19. The following aspects should be noted:
   (a) it is recommended that the normally ground-mounted EXIT DIRECTION sign GA3 at the start of the toll plaza apron, where ramp traffic and mainline traffic must split into their respective lanes on approach to the plaza itself, should be replaced by overhead sign GC4U; this should be in conjunction with a THROUGH DIRECTION sign GD6U indicating toll payment ahead as shown in Figure 6.19;
   (b) SPEED LIMIT sign R201-60 and PAY TOLL sign R132 should be mounted on both the left and right-hand gantry columns when overhead direction signs are used (otherwise these signs need to be adequately separated from other ground-mounted signs such as GA3);
   (c) if an EXIT DIRECTION sign is required beyond the plaza, at a ramp gore, it should ideally also be an overhead-mounted GC4U type of sign.

5 Only the mainline tariffs will normally be displayed on the approach to such a combination toll plaza. Ramp tariffs will only be displayed at the toll booth although they may occasionally be warranted on additional TOLL TARIFF signs IN24 positioned on the off-ramp when road or plaza geometry permits.

6 Where possible, it is preferable to have the interchange off-ramp before the mainline plaza and have a separate toll plaza on the ramp. For such an example refer to Subsection 6.6.6 for details of the signing requirements on the approach to such a ramp toll plaza.
Notes for Figure 6.18

1. The example indicates a situation of a combined off-ramp and mainline toll plaza where traffic must be separated at the start of the plaza apron.

2. Refer to Figure 6.23 for signing when ramp plaza is separate from the mainline plaza. This situation where the ramp exit is ahead of the mainline plaza apron is preferable.

3. Refer to Figure 6.28 for the general layout details of a mainline/ramp plaza and related signing.

Fig 6.18
Signing Sub-sequences at a Main Line/Ramp Toll Plaza Combination
(Preceeding an Interchange)
Notes for Figure 6.19

(1) This sub-sequence indicates the signing for a combined mainline and ramp plaza immediately in advance of an interchange where traffic must be separated at the start of the plaza apron.

(2) Refer to Figure 6.28 for general layout details of a mainline/ramp plaza and related signing.

(3) ds = minimum distance between signs.

(4) The GA3 EXIT DIRECTION sign on the apron approach should preferably be replaced by a GC4U EXIT DIRECTION sign mounted overhead in conjunction with a GC6U THROUGH DIRECTION sign. SPEED LIMIT sign R201-60 and PAY TOLL sign R132 should be mounted on both the left and right gantry columns of signs GC4U/GC6U.

Fig 6.18
Signing Sub-sequence
6.6.5 Mainline/Ramp Plazas on Far Side of an Interchange

1. The signing requirements for combined mainline/ramp plazas on the immediate far side of an interchange, with a POC immediately before the plazas are as indicated in Figure 6.20. The details indicated in this example are for ground-mounted signing.

2. The signing Sub-sequences related to this toll plaza situation are as follows:
   (a) Sub-sequence TS1: alternative route decision and payment information signs on the approach to a POC; note that the signs relating to the approach to the toll route POE would be excluded, that is Sub-sequence TS1(a) (see Subsection 6.6.2 and Detail 6.9.1 - Figure 6.9);
   (b) Sub-sequence TS2: destination decision signs on the approach to a POC (see Section 6.6.2 and Figure 6.11);
   (c) Sub-sequence TS9: signs on approach to plaza apron;
   (d) Sub-sequence TS10: signs on ramp on approach to plaza apron.

3. For an indication of the general signing requirements within the plaza area itself, refer to Subsection 6.6.8.

4. Signing Sub-sequence TS9, which deals with the signing on the approach to the plaza beyond the interchange off-ramp, and which relates to advice as to the proximity of the plaza and the slowing down of vehicles, is shown in Figure 6.21.

5. Signing Sub-sequence TS10, which deals with the signing on the on-ramp leading to the toll plaza, is shown in Figure 6.22. The spacing of this signing will be dependent on the length of the ramp. Refer also to Subsection 6.6.8 for details of signing on the approach to a toll plaza on an on-ramp.
Notes for Figure 6.20

(1) Refer to Figure 6.28 for the general layout details of a mainline/ramp plaza and related signing.

Fig 6.20  Key Plan for Signing for Sub-sequence at a Mainline/Ramp Toll Plaza Combination (Plaza Beyond Interchange)
Notes for Figure 6.21
(1) ds = minimum distance between signs.
(2) Refer to Figure 6.20 for overall layout of signing.

Fig 6.21 Signing for Sub-sequence TS9
Notes for Figure 6.22

(1) $ds =$ minimum distance between signs.
(2) Refer to Figure 6.20 for overall layout of signing.

Fig 6.22  Signing for Sub-sequence TS10
6.6.6 **Ramp Plaza**

1 The signing requirements for a ramp plaza on an interchange off-ramp are as indicated in Figure 6.23. The details indicated in this example are for ground-mounted signing.

2 The signing sub-sequences related to this toll plaza situation are as follows:
   (a) Sub-sequence TS11: payment information and direction decision signs on approach to the off-ramp;
   (b) Sub-sequence TS12: signs on the ramp for the approach to the ramp plaza apron.

3 For an indication of the general signing requirements within the plaza area itself, refer to Subsection 6.6.8.

4 Signing Sub-sequence TS11, which deals with payment information and destination decisions on the approach to the off-ramp on which the toll plaza is located, is shown in Figure 6.24. The following should be noted:
   (a) the detail on the direction signing will be dependent on whether there are further mainline toll plazas, or whether the toll route ends at this point; the example shown in Figure 6.24 indicates a continuation of the toll route and a toll plaza ahead (see ADVANCE EXIT DIRECTION sign GA2);
   (b) the possible position in the sequence for the ramp plaza TOLL TARIFF sign IN24 is shown, although this board may only be erected on the freeway as shown if there are no further mainline toll plazas ahead; in general the ramp toll tariffs will only be displayed at the toll booth.

5 Signing Sub-sequence TS12, which deals with the signing on the off-ramp itself, on the approach to the ramp toll plaza, and which relates to advise as to the proximity of the plaza and the slowing down of vehicles, is shown in Figure 6.25.

6 It must be ensured that there is sufficient distance beyond the toll plaza to allow for traffic weaving and stacking before the intersection with the crossing road. This distance should also allow for the adequate placing of the normal signs required on an off-ramp (see Sub-sequence TS4 and Figure 6.13). The ramp must, therefore, be sufficiently long to allow an adequate approach distance to the plaza and also allow sufficient operational space beyond. 
Notes for Figure 6.23

1. The distance beyond the toll plaza must be sufficient for traffic weaving and stacking.
2. The detail on the direction signs in Sub-sequences TS11 will depend on whether there are further mainline toll plazas or not.
3. The toll tariff sign IN24 for the ramp toll plaza is only permitted on the main road in the position shown if there are no further mainline plazas ahead.
4. Refer to Figure 6.29 for the general layout details at a ramp plaza and related signing.
Fig 6.24  Signing for Sub-sequence TS11

Notes for Figure 6.24
(1) \( ds \) = minimum distance between signs.
(2) Refer to Figure 6.23 for overall layout of signing.
(3) See Notes for Figure 6.23.

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Notes for Figure 6.25
(1) $d_s =$ minimum distance between signs.
(2) Refer to Figure 6.23 for overall layout of signing.

Fig 6.25 Signing Sub-sequence TS12
6.6.7 Crossroad Signing

1. The signing requirements for an intersecting crossroad from which access may be gained to the toll route freeway are indicated in Figure 6.26. Detail 6.26.1 illustrates the situation at an access interchange well along the toll route where there are toll plazas in both directions. Detail 6.26.2 illustrates the situation at an access interchange at the start of the toll route, namely at a TTA/POC. The details indicated in this example are for ground-mounted signs.

2. The signing sub-sequence related to an intersecting crossroad approach to the on-ramps at an access interchange is Sub-sequence TS13. The two situations indicated in paragraph 6.6.7.1 above are variations of signing Sub-sequence TS13 and both these alternatives are shown in Figure 6.27.
Notes for Figure 6.26

(1) Detail 6.26.1 illustrates the situation at an interchange well along the toll route where drivers accessing the freeway in either direction will be required to pay toll.

(2) Detail 6.26.2 illustrates the situation at an interchange at the start of a toll route, namely at a TTA/POC.

(3) Signing Sub-sequence TS13 is only shown on one of the crossroad approaches to the interchange for clarity sake. Both approaches must be signed in a similar manner.
Notes for Figure 6.27

(1) Signing as for Detail 6.26.1 illustrates the situation at an interchange well along the toll route with toll plazas in both directions:

(a) the TOLL TARIFF sign IN24 is a full size sign and is mounted below a left turn version of sign GB3 which associates the left turn familiar destination with the toll to be paid; the sign relates to the first (nearside) on-ramp and indicates the toll to be paid at the first toll plaza when travelling towards “Durban”; if there are space restrictions this sign may be displayed with sign GB2;

(b) the TOLL TARIFF sign IN25 is a reduced size sign designed to fit into the limited space normally occupied by sign GB3 and relates to the second (far-side) on-ramp and indicates the toll to be paid at the first toll plaza when travelling towards “Ladysmith”.

(2) Signing as for Detail 6.26.2 illustrates the situation at an interchange at the start of a toll route (TTA/POC) where TOLL TARIFF sign IN25 is the only tariff sign on the approach.

(3) ds = minimum distance between signs.

(4) The figure indicates the signing on only one approach to the interchange along the crossroad. The appropriate signing is to be displayed on both approaches.

Fig 6.27
Signing Sub-sequence TS13
6.6.8 Signing Within Toll Plaza Area

1 Examples of typical layouts and related general signing for mainline/ramp combination plazas and for a ramp toll plaza are given in Figure 6.28 and Figure 6.29 respectively. For the situation where there is only a mainline plaza the essential details of Figure 6.28 should be used.

2 The following mainline/ramp plaza related signing sequences should also be referred to:
   (a) Sub-sequence TS8 - approach to plaza and far side of plaza (ramp related);
   (b) Sub-sequence TS9 - approach to plaza.

3 Refer also to the following ramp toll plaza related signing sub-sequences:
   (a) Sub-sequence TS4 - general signing on off-ramp;
   (b) Sub-sequence TS10 - signing on on-ramp;
   (c) Sub-sequence TS12 - signing on off-ramp approach to plaza;
   (d) Sub-sequence TS13 - signing on crossroad.

6.6.9 Overhead Signing

1 In urban areas and specifically on multi-lane urban freeways, overhead signing is generally used, particularly for direction signing.

2 For direction signing the upward pointing arrow system is preferred but the appropriate incorporation of the TOLL ROUTE symbol GDS-9 and ALTERNATIVE ROUTE symbol GDS-10 into both the upward arrow and downward arrow systems will allow for a clear indication of the toll routing and alternative routing options.

3 Where relevant, the other major toll related signs and signing sequences dealt with in this chapter may be appropriately mounted overhead.

4 Figure 6.30 illustrates a complex urban toll route/plaza environment. The plaza and apron area are represented in Figures 6.28 and 6.29. Almost fifty signs on the mainline approaches and on the high capacity intersecting crossroad are also illustrated in Figures 6.31 to 6.33. It should be noted that no two situations as complex as this will be anywhere near the same in detail. The example is included to show that complex situations can be catered for and to allow practitioners to work through the example sign by sign.
Fig 6.28
Typical Layout and Signing at
Mainline/Ramp Combination Plazas
Fig 6.29
Typical Layout and Signing at Ramp Plazas
6.6.10 Example of a Toll Signing Application

1. The actual signing along a toll route, at a toll plaza and in an interchange area is illustrated in Figures 6.30 and in Figures 6.31 to 6.33.

2. This example indicates the signing erected in the vicinity of Interchange Number 144 between the R23 (Heidelberg Road) and the National Route N17 toll route. It also gives the signing for the Dalpark Toll Plaza which is adjacent to the interchange.

3. It should be noted that a number of minor alterations have been made to the signs to include new requirements as indicated in this chapter, so that a number of the signs will differ slightly from those actually in place.

Fig 6.30
Example of Signing – Interchange and Plaza Layout
Fig 6.31  Signs Required for Figure 6.30 – Example-1
Fig 6.32  Signs Required for Figure 6.30 – Example-2
Fig 6.33  Signs Required for Figure 6.30 – Example-3