



FREE STATE PROVINCE

FILLING STATION DEVELOPMENTS

ACCESS- & BUILDING LINE MANAGEMENT

TECHNICAL OVERVIEW & GUIDELINES



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INTRODUCTION

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PURPOSE OF THE PRESENTATION

To give a broad overview of the policies, standards and specifications that govern the Department in making informed decisions based on the suitable position for the access from the development to the provincial road.

Two main types of accesses that we normally consider:

- 1) Agricultural type which are accesses to Farms or farm stalls.
- 2) Those with spatial planning elements which are accesses to developments, businesses activities etc



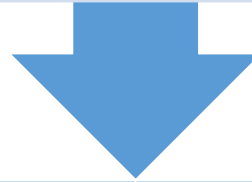
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LEGISLATION

Applications are regulated in terms of the following legal documentation

Advertising on Roads and Ribbon development Act, 1940 (Act 21 of 1940)
Roads Ordinance, 1968 (Ordinance 4 of 1968)



Applications are further considered with the adoption of the design principles from the following documents

Sanral Design Manual
TRH 17 – Technical Recommendations for Highways
UTG 1 – Geometric Design of Urban Arterial Roads
South African Road Traffic Signs Manual –
Chapter 2 (Road Marking Applications)
National Guidelines for Road Access Management and the Urban Transport Guidelines manuals.



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ACCESS MANAGEMENT POLICY

The Department formulated an access management policy in order to maintain the integrity of high order roads and to minimise conflict areas by making use of engineering principles, knowledge and experience. It is without a doubt that traveling speeds on major arterial and rural roads are incredibly high.



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OBJECTIVES-

Access design must make it possible for cars, trucks and busses to move safely to and from public roads and therefore the following objectives should be borne in mind in respect of design standards:

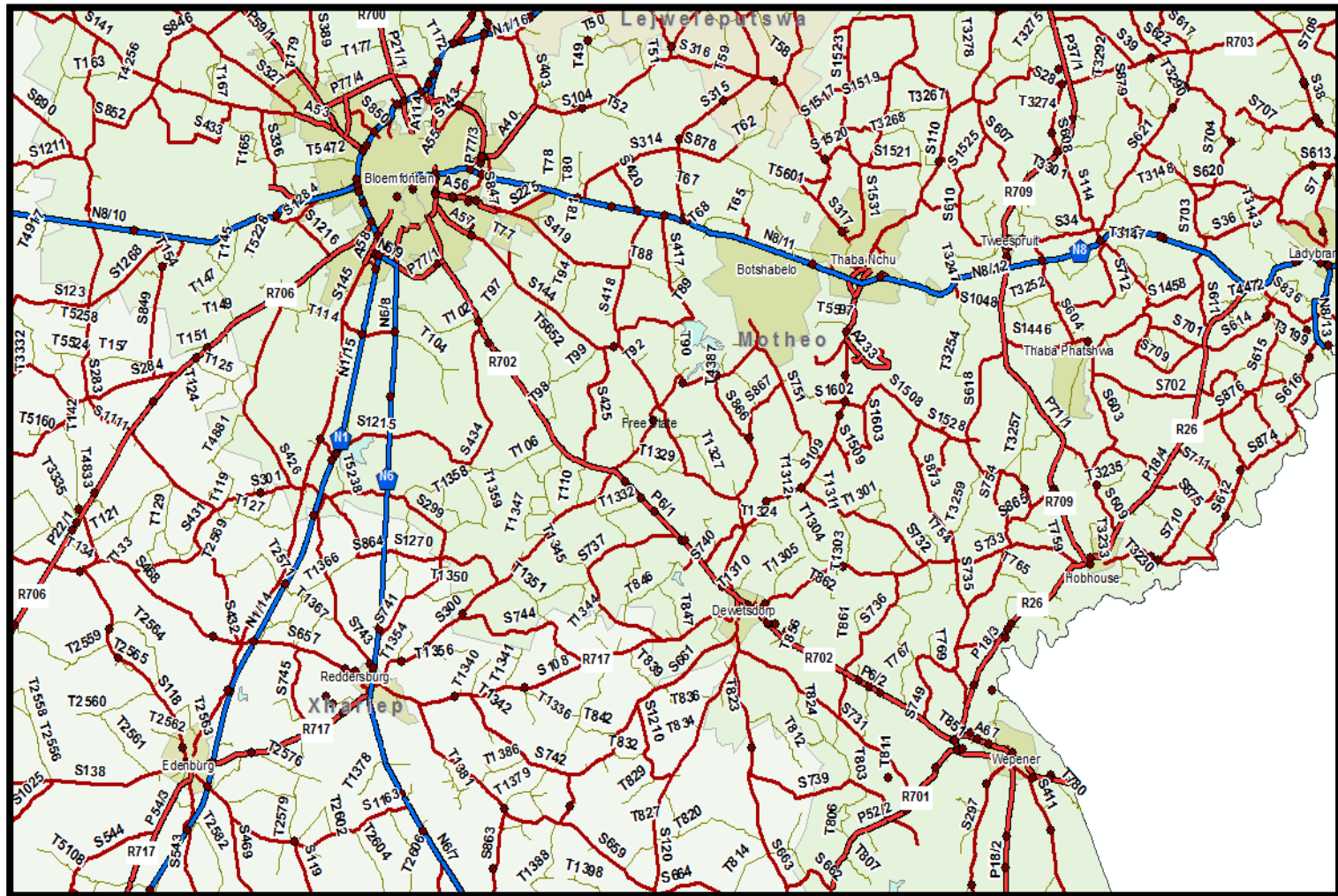
- Protection of the original design intent of the road being accessed
- Minimisation of the speed differential between through-traffic and vehicles using the access
- Elimination of the encroachment of turning vehicles on adjacent lanes
- Provision of adequate sight distances
- Provision of adequate storage on the access road; and
- Minimisation of conflict point



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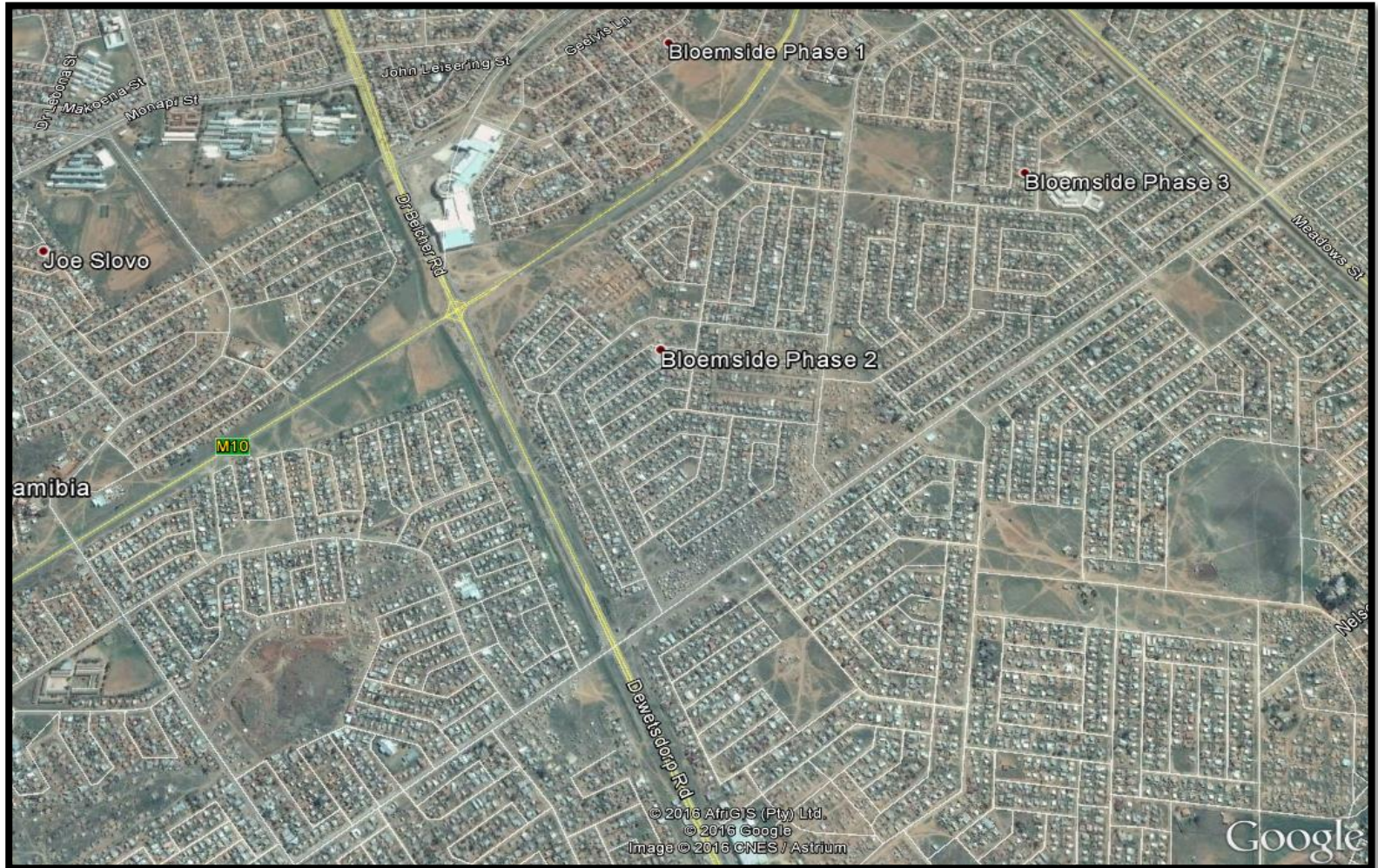
TYPICAL EXAMPLE – PRIMARY ROAD P54/4



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TYPICAL EXAMPLE – PRIMARY ROAD P54/4



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TYPICAL EXAMPLE – PRIMARY ROAD P54/4



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REQUIREMENTS FOR FILLING STATIONS



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LOCATION OF FILLING STATIONS

- It is expected that the majority of sites with respect to applications for filling stations will be situated at intersections or junctions due to the greater volume of traffic usually occurring there.
- The location of access to filling stations and the points from which distances are measured which are of importance in the theoretical analysis of the guidelines and with which the design must therefore comply are indicated by the following symbols:



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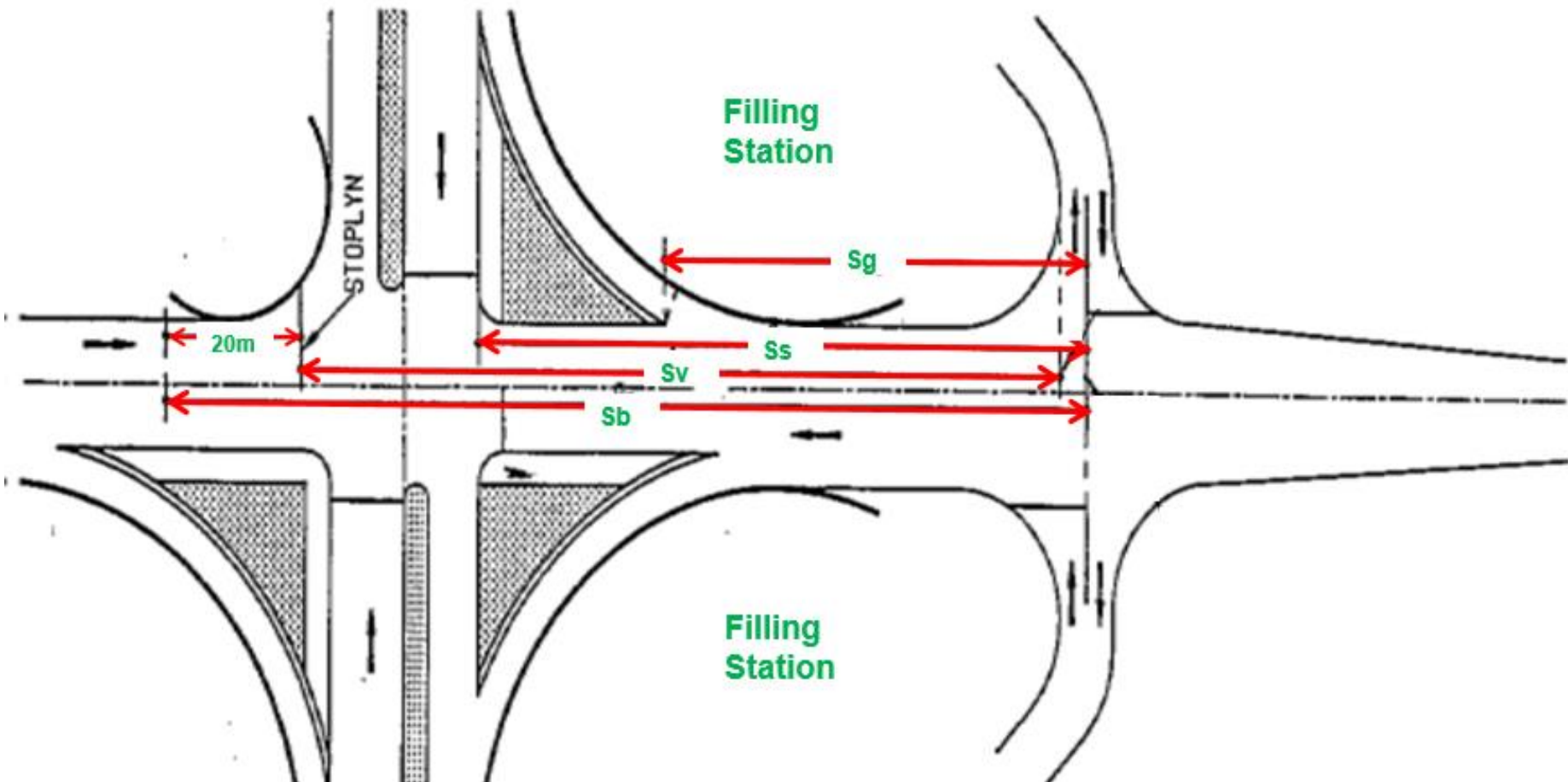


Figure 5.1: Schematic representation of positions of various speeds



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SPEED FOR WHICH ACCESS IS DESIGNED (km/h)	REQUIRED DISTANCE (m)		
	SIGHT DISTANCE S_v	GAP ACCEPTANCE DISTANCE S_b	ACCELERATION DISTANCE S_g
60	80	117	73
70 – 80	115	156	73
90	135	175	73
100	155	194	73
120	205	233	73

TABLE 5.1 : DISTANCES WITH WHICH THE DESIGN OF A FILLING STATION MUST COMPLY



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Typical example of access on curves



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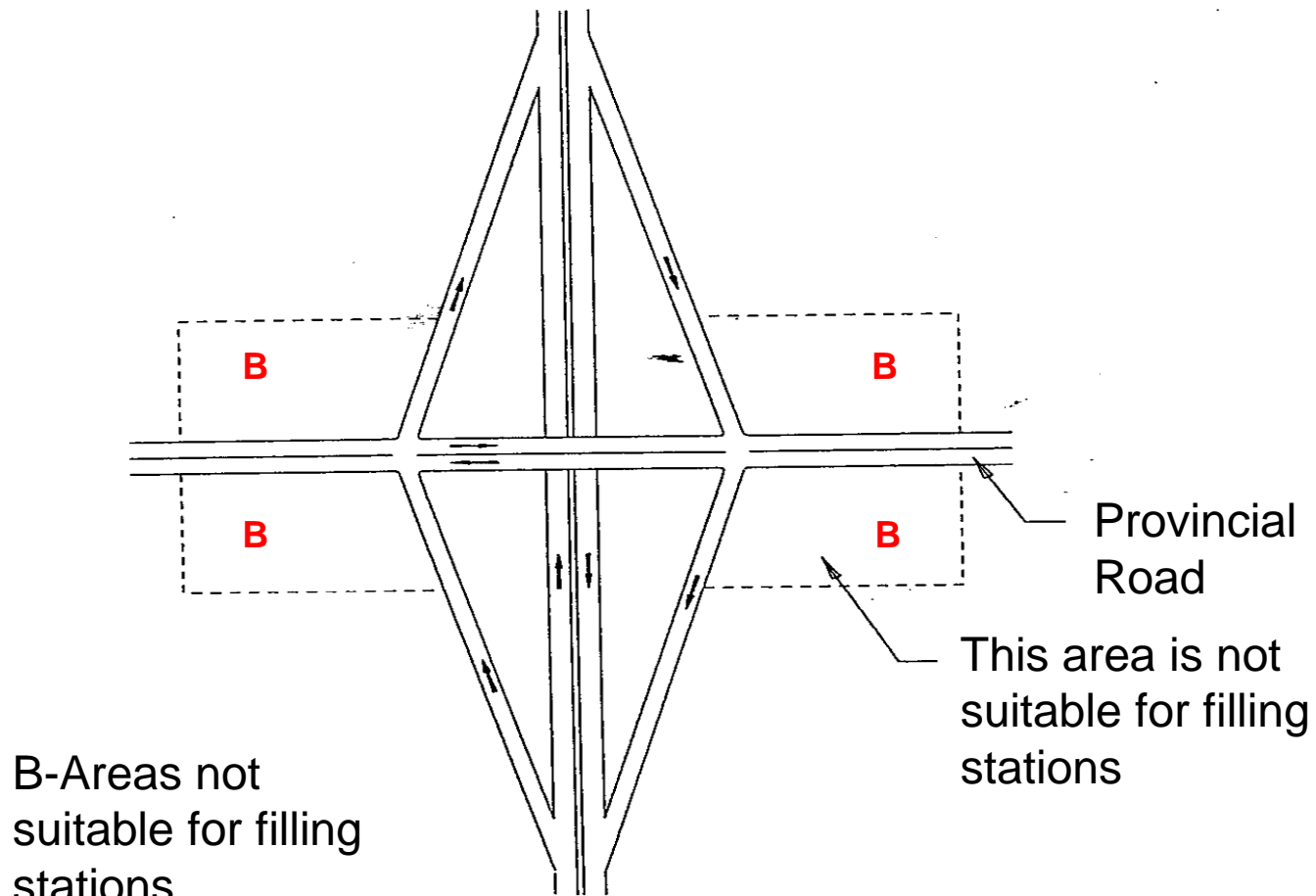
OTHER REQUIREMENTS

1. Median Barrier - When the traffic volume on a single-carriageway road exceeds 6000 vehicles per day, an access from the development will not be allowed unless a median barrier is installed
2. Access at T-junctions - Will not be considered
3. Traffic Impact studies - Should concentrate mainly on the placing and layout of the accesses
5. Building Restrictions - The following is applicable in term of legislation
 - Radius of 500m measured from centre point of intersection
 - Distance of 95m measured from the centre line of passing roads



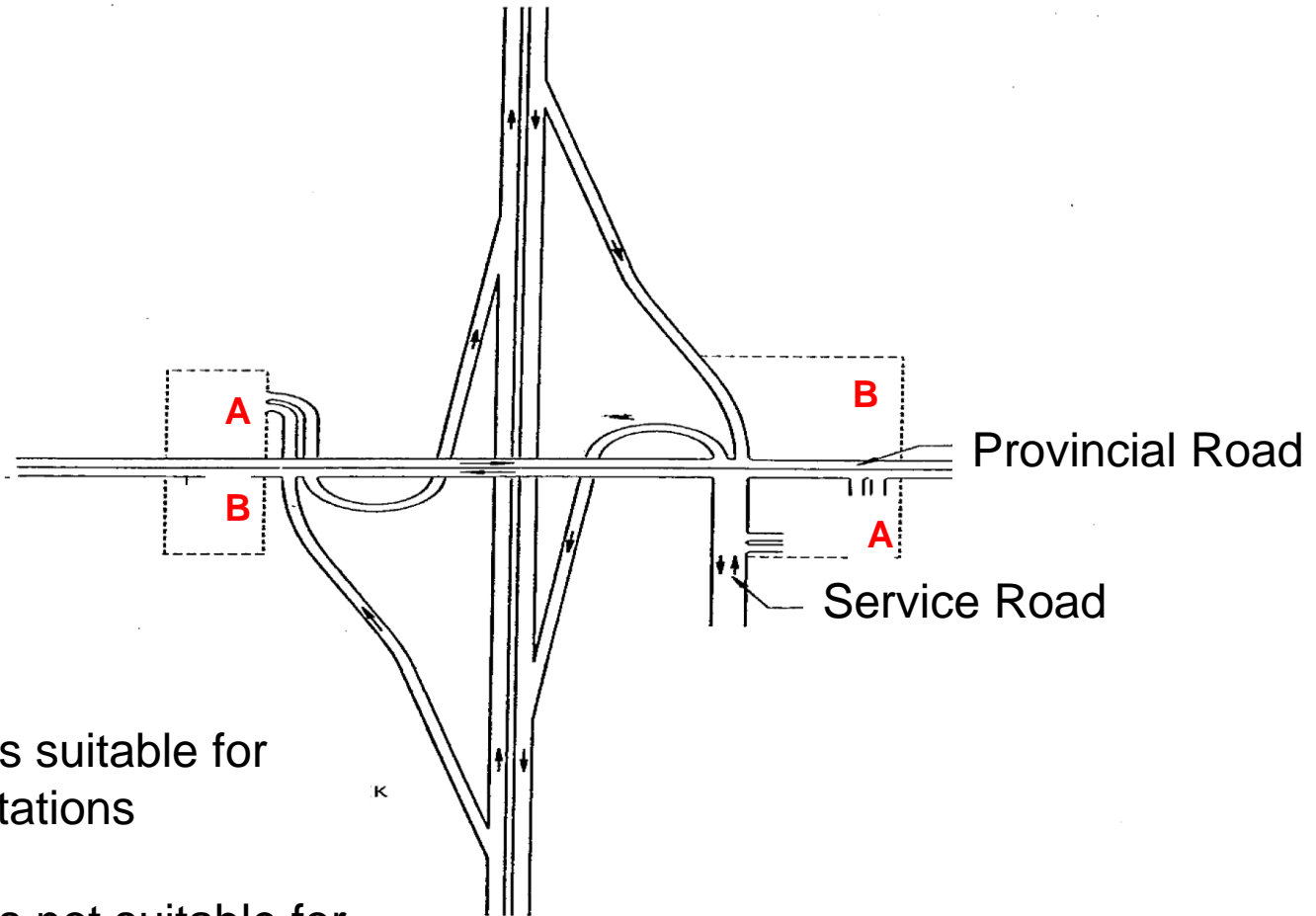
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A-Areas suitable for
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B-Areas not suitable for
filling stations



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ADMINISTRATIVE MATTERS

Institutional - applications can be posted to the:

Director: Infrastructure Planning
Chief Directorate Roads
P.O. Box 119
Bloemfontein
9300

or delivered at

Room 111
Medfontein Building
152 St Andrew Street
Bloemfontein



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APPLICATION FORM



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WAY LEAVE / ENCROACHMENT APPLICATION

APPLICATION AND CONSENT IN TERMS OF THE ROADS AND REGION DEVELOPMENT ACT 134, (ACT 21 OF 1941)
AND THE ROADS ORDINANCE 1965 (ORDINANCE 4 OF 1965) TO ENCROACH ON THE PROVINCIAL ROAD
RESERVE BOUNDARIES OR WITHIN THE BUILDING RESTRICTION AREA

SERVICE OWNER:	APPLICANT:
Address:	Address:
.....
.....
Contact Person:	Contact Person:
Telephone Numbers	Telephone Numbers
Office:	Office:
Cell:	Cell:
Fax/mobile:	Fax/mobile:
e-mail:	e-mail:

1. PURPOSE OF APPLICATION (Mark with X)

- To install a new utility service ☐
- To extend an existing utility service ☐
- To maintain/repair, replace an existing utility service ☐
- To apply for and access ☐
- To perform other operations ☐
- Application for the relaxation of the building line ☐

2. DETAIL OF APPLICATION AND LOCALITY

FULLY DESCRIBE THE EXTENT OF THE SERVICE AND/OR WORK TO BE UNDERTAKEN IN THE ROAD RESERVE OR BUILDING RESTRICTION
AREAS AND CLEARLY INDICATE THE LOCATION RELATIVE TO THE KM MARKERS (If any) OR THE START-/END POINT OF THE ROAD.
KINDLY COMPLETE THE REQUIRED INFORMATION BELOW AND ATTACHED A LOCALITY PLAN (SCALE 1:100 000)

ROUTE NUMBER

ROAD NUMBER

DESTINATIONS: From to

LOCATION FROM THE START-/END POINT OF ROAD (underline the applicable point of orientation)

OR

LOCATION BETWEEN-/AT KILOMETER MARKER AND

3. DESCRIPTION

.....

.....

.....

4. GENERAL INFORMATION (Mark with X)

KINDLY SUBMIT 3 COPIES OF SIZE A2 LAYOUT DRAWINGS WITH THIS APPLICATION THAT CONTAINS THE FOLLOWING INFORMATION
FOR ANY OVERHEAD/UNDERGROUND UTILITY SERVICES: LOCALITY PLAN (Scale 1:100 000), TERRAIN LAYOUT (Scale 1:500),
CROSS-SECTIONAL DIAGRAMS (Scale 1:50) AND OTHER DETAILS (Scale 1:10 - Scale 1:25). THE DRAWINGS MUST CONTAIN
SUFFICIENT DIMENSIONS TO SHOW THE PLACEMENT OF THE SERVICES WITHIN AND/OR OUTSIDE THE ROAD RESERVE. THE
DEPARTMENT MAY REQUIRE ANY OTHER SPECIAL DRAWINGS FOR THE ATTACHMENT OF SERVICES TO BRIDGE STRUCTURES AND
GEOMETRIC LAYOUT DRAWINGS FOR ACCESSSES.

WATER ☐ SEWER ☐ GAS ☐ ELECTRICITY ☐ TELECOMMUNICATION ☐ ACCESS ☐

OTHER (Specify): ☐

SERVICE TYPE

Crossing Overhead	Crossing Underground
Parallel Overhead	Parallel Underground

CONSTRUCTION METHOD:

Excavation	Auger Drilling	Pipe Jacking
Attachment	Other (Specify):	

5. DETAIL OF SERVICE PARALLEL TO PROVINCIAL ROAD

From Km	To Km	Distance within <input type="checkbox"/> / outside <input type="checkbox"/> Road Reserve Boundary	Buried <input type="checkbox"/> Depth (m)	Overhead <input type="checkbox"/> Height (m)

6. DETAIL OF SERVICE THAT CROSSES THE PROVINCIAL ROAD

THROUGH OR ABOVE ROAD PAVEMENT					THROUGH CULVERT		
Kilometer Point	Buried <input type="checkbox"/>		Overhead <input type="checkbox"/>		Size, Type & Class of sleeve / duct	Number of cells, Type and Cross- Sectional Area of stormwater structure	Cross-Sectional Area of the service / sleeve
	Depth or height in meters (m) below or above	Service Type & Size	Distance of structures from the centerline of the road				
		Telecom Cable					
		Power Cable					
		Pipe line					

7. SERVICE ATTACHED TO BRIDGE-/CULVERT STRUCTURES

Kilometer Point	Bridge-/Culvert Number	Name of Bridge / River / Spout

8. ADMINISTRATIVE MATTERS

Your Reference: Your Drawing No:

9. DECLARATION BY SERVICE OWNER / REPRESENTATIVE

I ACCEPT ALL CONDITIONS IMPOSED IN TERMS OF ANY AGREEMENT BETWEEN THE DEPARTMENT OF POLICE,
ROADS AND TRANSPORT OF THE FREE STATE PROVINCIAL GOVERNMENT, CHIEF DIRECTORATE ROADS
I AM AUTHORISED TO SIGN ON BEHALF OF THE SERVICE OWNER

PRINT NAME SIGNATURE DATE

THANK YOU



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