

SECTION 9: PARKING AND TRANSPORTATION

9.01 ROADING AND INTERSECTIONS

9.01.1 PERFORMANCE STANDARDS – ALL ACTIVITIES

- All roads in any Residential, Commercial or Industrial zone in the district shall comply with the roading design standards set out in Part.3 of the NZS 4044 (1981) known as the "Code of Practice for Urban Land Subdivision" (refer to Table 1 below).

Table 1: Street Classification and Design Standards for Urban Roads

Classification	Type of Street	Traffic Volume	Number of Properties	Design Speed (km/hr)	Legal Road width	Carriageway width (m)		
						Parking	Traffic	Total
Local	Right of way (ROW)		2 – 3 du 4 – 6 du		4m 6m		2.7 3.5	2.7 3.5
	Cul-de-sac		< 20 du > 20 du		12m 15m		5.5 6.0	5.5 6.0
	Industrial	<200		40	17	2 - 2.5	1 - 3	8
	Residential and Industrial	>200		40	17	2 - 2.5	1 - 3	8
Collector	Residential and Industrial			50	20	2 - 2.5	2 - 3	11
Arterial	Arterial			50	22	2 - 3	2 - 3.5	13

NOTE:

- For the purposes of access to property, rights-of-way are included in the Table. Such roads are not public streets.
- This classification is a means of compliance, which may be varied under alternative design proposals
- Minimum street widths are based on a standard berm width of 4.5m. Alternative designs may incorporate greater or lesser berm width.
- Minimum carriageway widths may be reduced for collector roads by up to 3m where topography makes construction difficult.
- Where adequate provision is made for separate pedestrian traffic, and passing and street parking, lesser carriageway widths may be acceptable.
- Where carriageway width of two lanes only is provided, careful design of parking is required.
- Recommended pavement standards are in separate guidelines administered by the Council.
- Footpaths, to a width of 1.2m, shall be provided along all roads in the Residential Zone.
- The reference to 'du' in the Table is to dwelling units.

1. All roads in any Rural zone in the District shall comply with the Guide to the Geometric Design of Rural Roads – Austroads 1989, with modifications for local geometry as shown in Table 2 below; and
 - (i) The reserve width of all rural roads (other than pedestrian paths and bikeways) shall be a minimum of 20 metres;
 - (ii) The design profile for rural roads shall comply with Diagram 1 in this section.

Table 2: Geometric Design Standard

Road Function	Traffic Flow	Width (m)		Grade (max.)	Design Speed (km/h)		
		Traffic	Shoulder		Steep	Rolling	Level
Arterial	5000+	10.0	0	6.5	70	85	100
	1000 – 5000	8.5	0	8	70	80	100
	under 1000	7.0	1	8	70	80	100
Collector	100 – 500	6.0	1	10	50	70	80
	under 100	3.6 6.0	– 1.0 – 1.5	10	50	70	80
Local		3.0	1.5	12.5	30	50	70

2. The location and design of street intersections (excluding State Highways) shall comply with visibility and spacing requirements set out in Tables 3 - 5 as follows:

Table 3: Minimum Spacing between intersections

Speed Limit (km/h)	Minimum Distance (m)
100	800
80	550
70	220
60	160
50	125

Table 4: Sight Distances from Intersection

85 percentile Speed (km/h)	Sight Distance (m)	
	Optimum (Entering Sight Distance)	Minimum (Safe Intersection Sight Distance)
50	125	80
60	160	105
70	220	130
80	305	175
90	400	210
100	500	250
110	500	290
120	500	330

Table 5: Minimum Sight Distance from Access

85 percentile Speed (km/h)	Sight Distance (m) Private Access
50	45
60	65
70	85
80	115
90	140
100	170
110	210
120	250

3. The location and design of intersections on State Highways shall comply with the visibility and spacing requirements set out in Table 6 as follows:

Table 6: Location and Design of Intersections on State Highways

Posted Speed (km/h)	Min. sight distance to and from access	Minimum distances between crossings and intersections (m)						Distances (m) between	
		Approach to an intersection		Departure from an intersection		Down a side road		Crossings	Intersections
100	290	200	150	200	200	60	30	200	800
80	210	120	90	120	120	60	30	100	800
70	175	100	60	100	100	45	30	40	400
60	130	50	30	50	40	30	20	20	200
50	105	20	15	30	20	20	15	15	150

9.02 ACCESS – ALL ACTIVITIES

9.02.1 PERFORMANCE STANDARDS – ALL ACTIVITIES

1. The location and design of new vehicle access points shall comply with visibility requirements set out in Table 5 above and design requirements set out in Diagrams 2 and 3 in this section.
2. The location of any new vehicle access point to a State Highway shall comply with the requirements set out in Table 6 above and Diagrams 4 – 7 in this section. All tanker access shall comply with the requirements set out in Diagram 3 in this section.

9.03 PARKING – ALL ACTIVITIES

9.03.1 PERFORMANCE STANDARDS – ALL ACTIVITIES

1. All activities in the district shall provide the following onsite parking:
 - (i) All food serving and entertainment activities (including activities in public halls and churches) 1 space for every 5 people the building or facility is designed to accommodate, or 1 space per 30 m² of gross floor area, whichever is greater;
 - (ii) All health care activities (excluding administration activities) 1 space for every bed, or 2 spaces for every medical practitioner (including nursing staff) on site at any one time, whichever is greater;
 - (iii) All educational activities (excluding administration activities) 1 space for every classroom used solely to teach students under the age of 16, and 5 spaces for every other classroom;
 - (iv) All accommodation (for travellers or permanent residents, but not including administration activities or home occupations) 1 space for every accommodation unit or dwelling unit or 0.5 spaces for each bedroom, whichever is greater;
 - (v) All industries; 0.5 space for every person on site at any one time, or one space for every 100m² of gross floor area, whichever is greater.
 - (vi) All activities (excluding temporary activities) not listed in i. - v. above, including administration activities, home occupations, offices and retail activities: 1 space per 30 m² of gross floor area.
2. The size, shape, materials and layout of all parking and loading spaces used by the public (including service vehicles and handicapped) shall be sufficient to allow every vehicle and occupant to come and go without inconveniencing the movement or safety of any other vehicle or person or posing a hazard to the environment and shall conform with Diagrams 8 & 9 in this section.

3. Parking areas shall be graded, drained, kerbed and surfaced to an all weather standard.
4. Any parking area which contains more than 3 spaces shall provide sufficient manoeuvring space on site to allow vehicles to both enter and exit the site in a forward direction.
5. Except for parking associated with residential activities, required parking shall be located in a position that is obvious to the public, without the use of signs.
6. Where a parking lot contains more than 4 spaces, it shall be designed, contoured and landscaped so that it is screened from any adjacent residential activity that is in a Residential or Rural Zone.
7. Boundaries of parking areas for more than 4 vehicles adjacent to public roads shall be landscaped.
8. Parking requirements may be waived in circumstances where a financial contribution is paid towards the provision of public car parks in town centres.

9.04 SERVICE VEHICLE ACCESS

9.04.1 PERFORMANCE STANDARDS - ALL ACTIVITIES

1. All activities shall provide sufficient offstreet service vehicle access, loading and parking facilities to meet all foreseeable loading and unloading needs.
2. The manoeuvring space used by vehicles to gain access from a public road to any required loading space shall accommodate the minimum turning radii contained in Table 7 as follows:

Table 7: Minimum Turning Radius

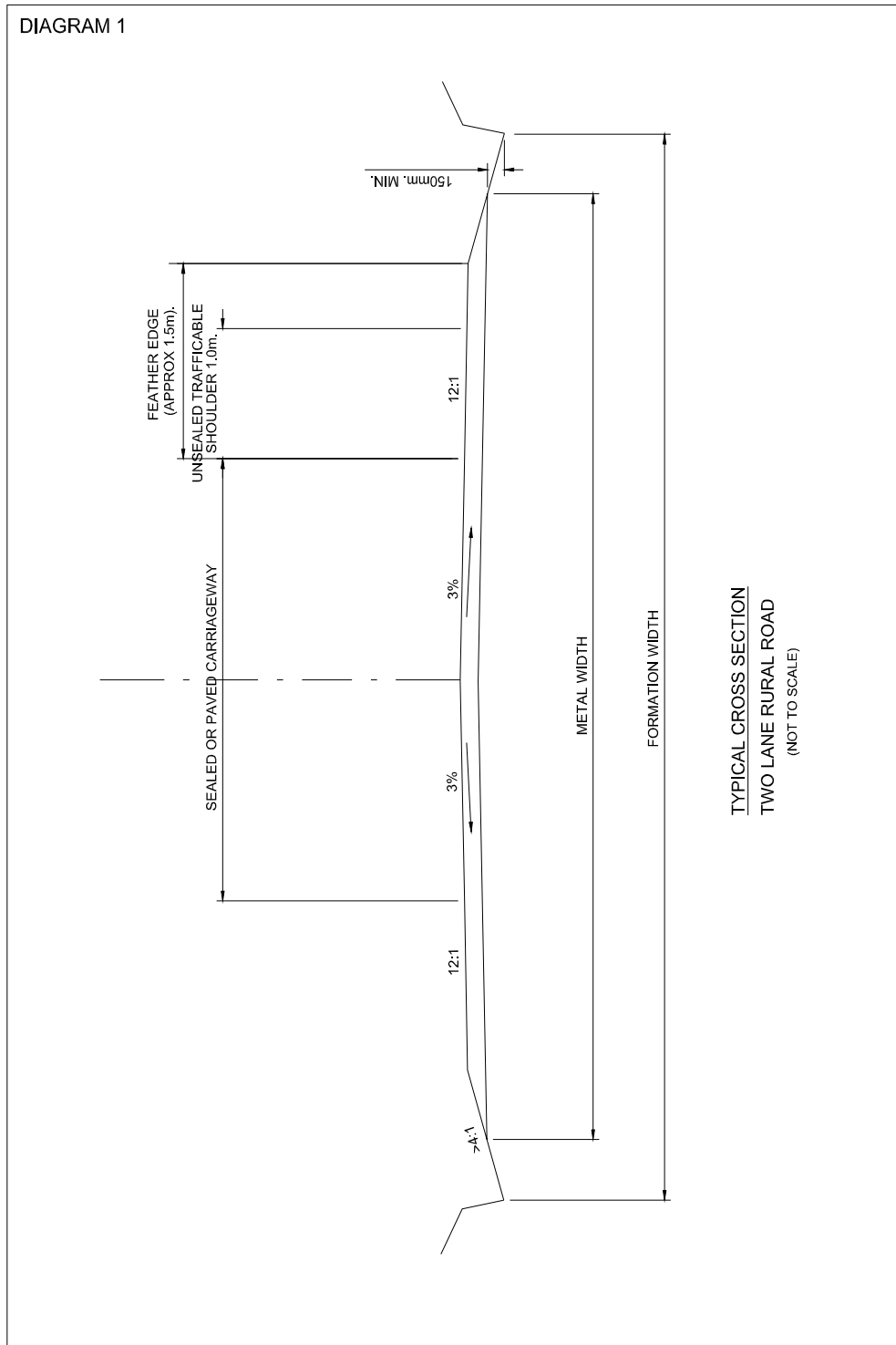
Main Service Vehicle Type	On-Road Purposes (metres)	On-Site Manoeuvring and Parking (metres)
Cars & Light Vehicles	9	6.3
Single unit and semi-trailer vehicles	12.5	10
B Train	12.5	10

3. No service bay, storage area or loading space (other than a stock loading and unloading facility) shall be located in a manner which requires any vehicle to manoeuvre within the public street to use it.
4. Any activity that is proposed on a site that is adjacent to a service lane shall provide at least one loading space, clear of the service lane, that will be accessible to vehicles using the proposed service lane when constructed.

9.05 THE RAILWAY

9.05.1 PERFORMANCE STANDARDS - ALL ACTIVITIES

1. At level crossings, the sightlines of motorists within 30 metres of any track shall be a minimum of 140 metres along that track in both directions (refer to Diagram 10 in this section).
2. No structures or vegetation shall interfere with the visibility standard set out in 9.05.1(1).
3. The access, departure and breakover angles at level crossings shall be a maximum of 1 in 5 (See Diagram 11 in this section).
4. The access drive grade change shall be a maximum of 1 in 5 at a minimum of 3 metres from the kerb (See Diagram 11 in this section).



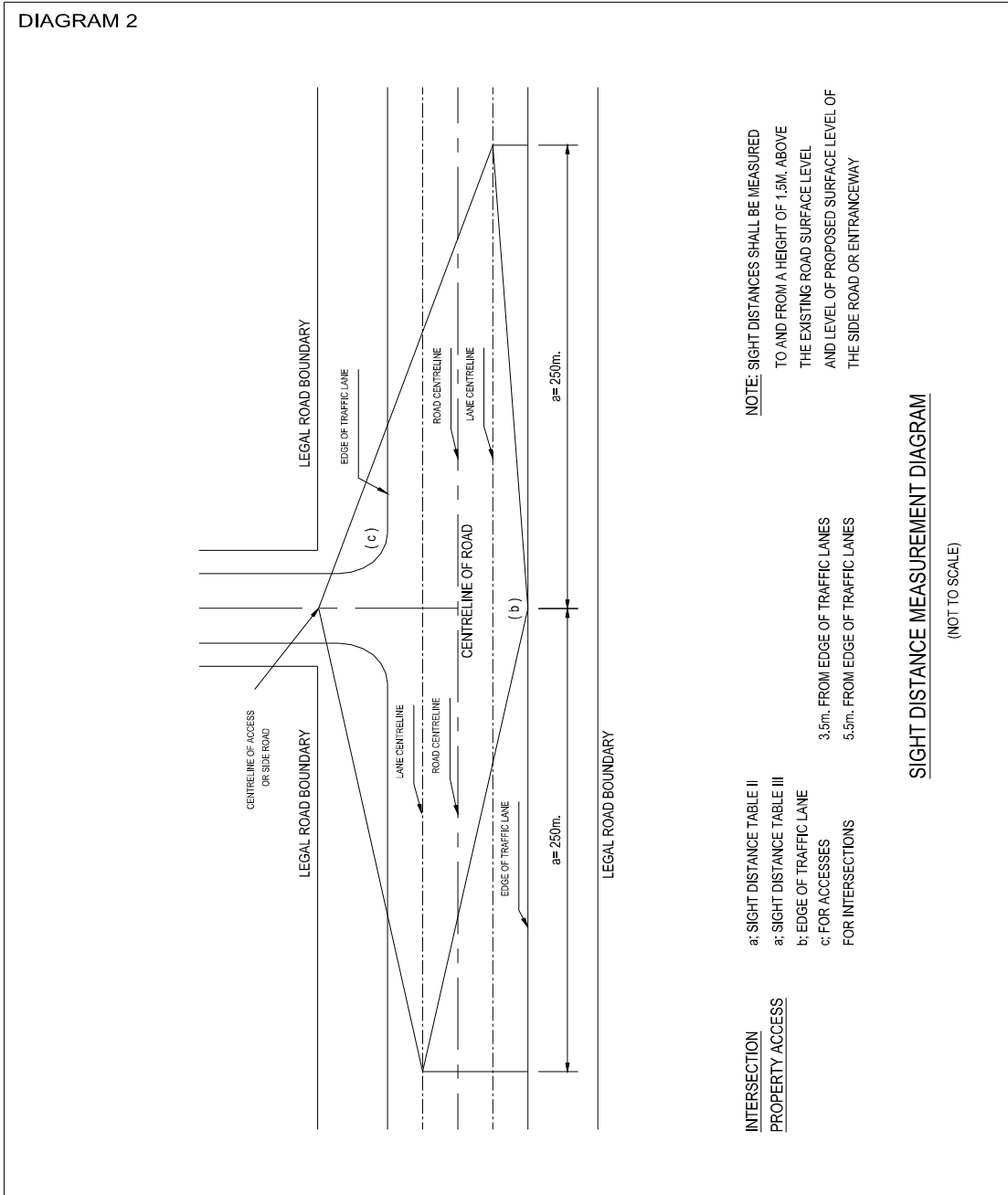
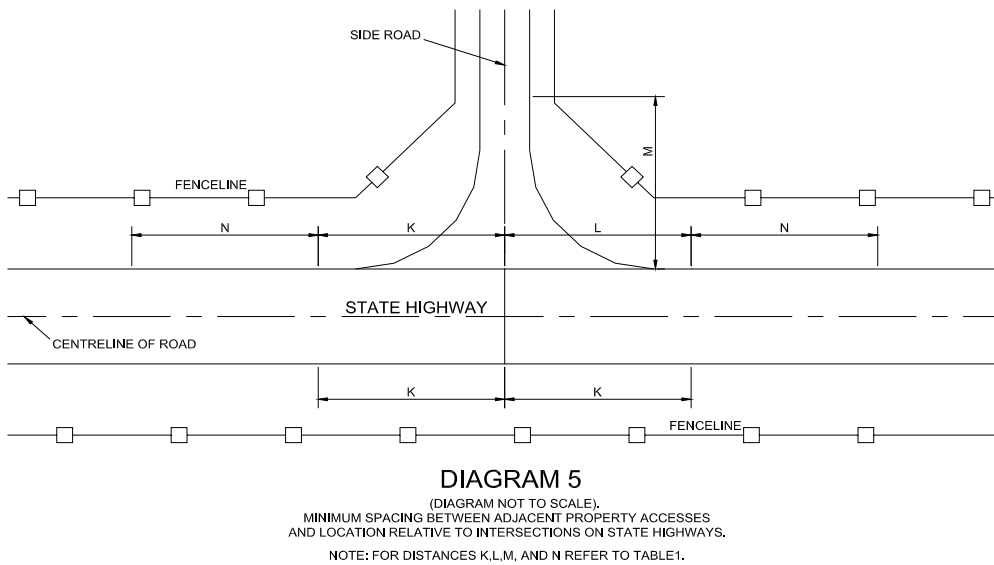
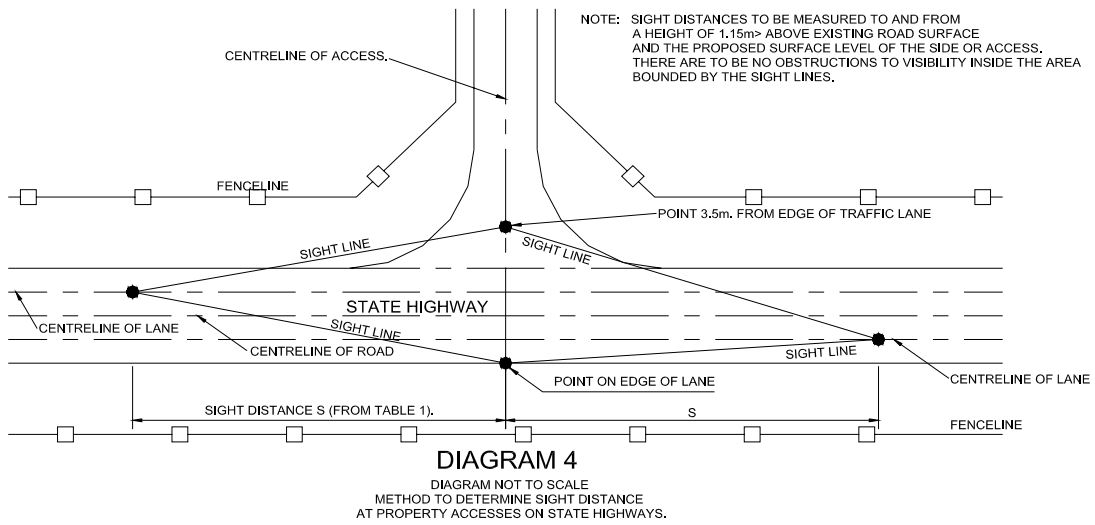
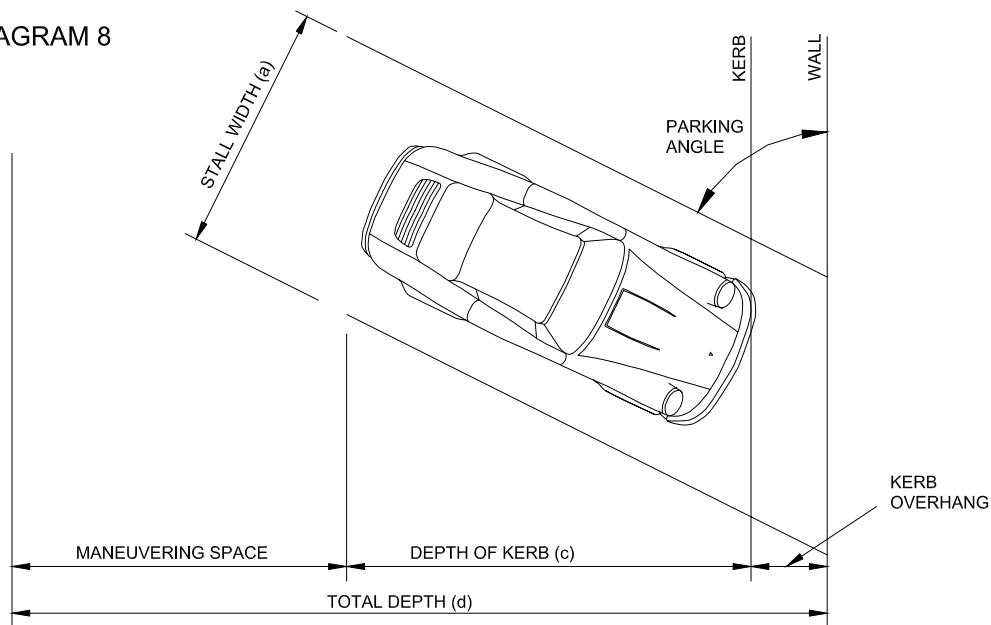


DIAGRAM 4 AND 5



REPRODUCED FROM TRANSIT NEW ZEALAND SPECIFICATION.

DIAGRAM 8



TYPE OF PARKING		STALL WIDTH (a)	STALL DEPTH		AISLE WIDTH (c)	TOTAL DEPTH	
PARKING ANGLE	TYPE		From Wall (b)	From Kerb (c)		One Row (d)	Two Row
0 °	Parallel	2.4 min	See Note 1		3.5	5.9	8.3
30 °	Nose in	2.4 min	4.2		3.5	7.7	11.9
45 °	Nose in	2.4 min	4.9		3.5	8.4	13.3
60 °	Nose in	2.4	5.4		4.5	9.9	15.3
		2.5			4.1	9.5	14.9
		2.6			3.5	8.9	14.3
2.7	3.5	8.9	14.3				
75 °	Nose in	2.4	5.4		6.6	12.0	17.4
		2.5			6.3	11.7	17.1
		2.6			5.2	10.6	16.0
2.7	4.6	10.0	15.4				
90 °	Nose in	2.4	5.1		8.7	13.8	18.9
		2.5			7.7	12.8	17.9
		2.6			7.0	12.1	17.2
		2.7			6.8	11.9	17.0

1. Parallel parking spaces (Parking Angle = 0) shall be 6.0m long except where one end of the space is not obstructed, in which case the length of a space may be reduced to 5.0m
2. Minimum aisle and access way widths shall be 3.0m for one way flow, and 5.5m for two way flow
Recommended aisle and access way widths are 3.5m for one way flow, and 6.0m for two way flow.
3. Maximum kerb height = 150mm.
4. Stall depth computed from 90 percentile vehicle dimensions. A 200mm separation from walls has been added.
5. Aisle width from M.O.T Traffic Engineering Section analysis.

CAR MANEUVERING AND PARKING SPACE DIMENSIONS

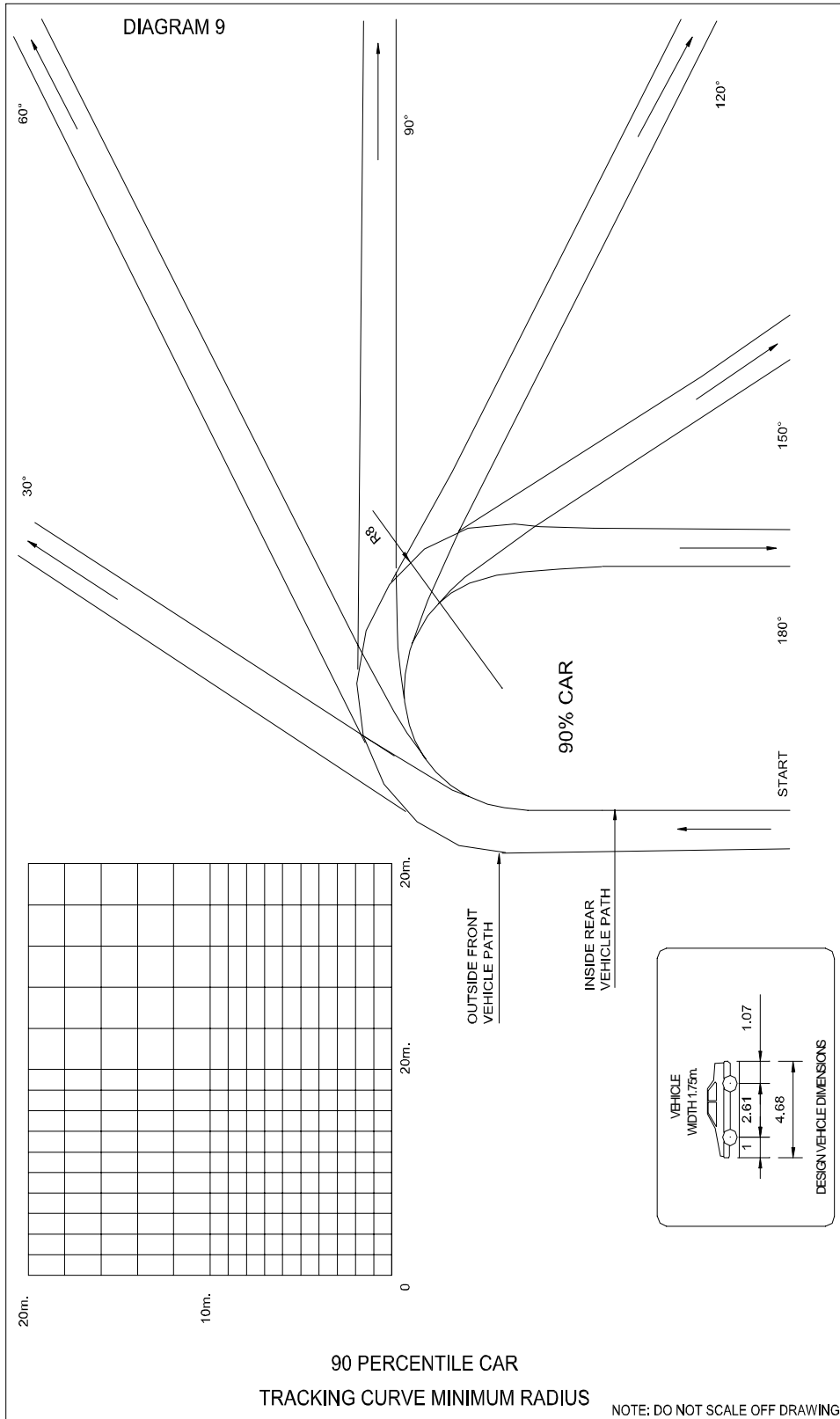
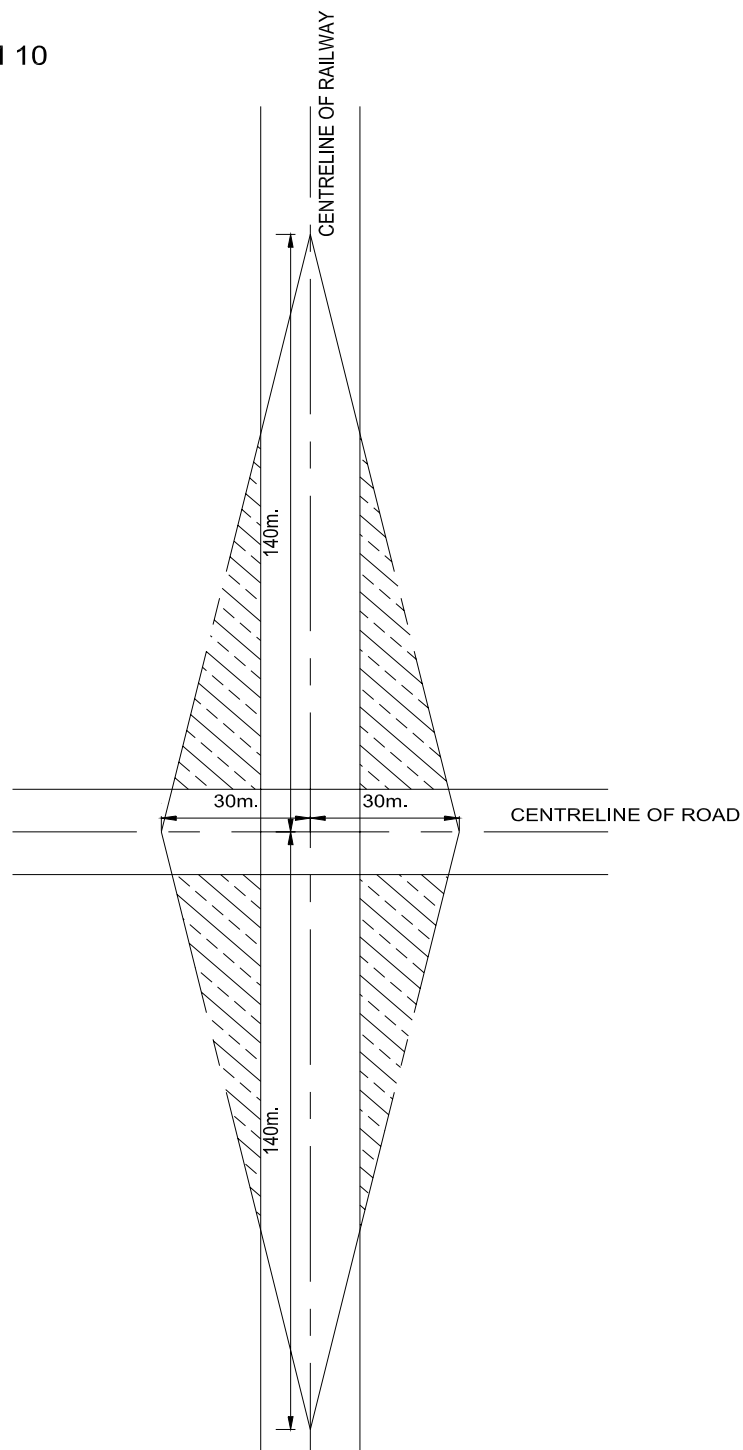
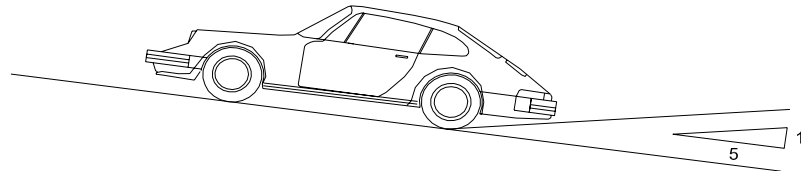


DIAGRAM 10

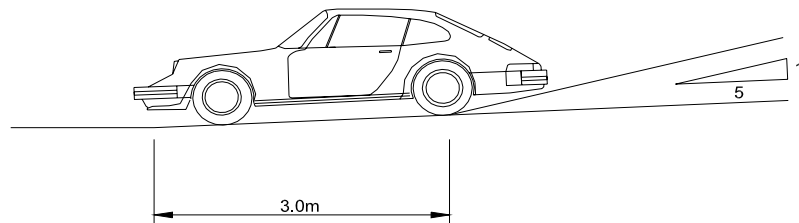


RAILWAY CROSSING SIGHT DISTANCE DIAGRAM

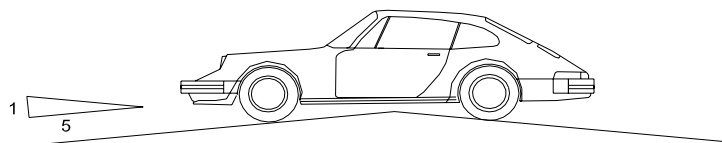
DIAGRAM 11



DEPARTURE ANGLE
1 IN 5 MAX.



ACCESS DRIVE GRADE CHANGE
1 IN 5 MAX. AT 3.0m MIN. FROM KERB



BREAKOVER ANGLE
1 IN 5 MAX.

CRITICAL ACCESS CONDITIONS FOR MOTOR VEHICLES
NOT TO SCALE