

## APPENDIX 3A: TRAFFIC INTENSITY FACTORS

(Reference: **Part 2 Environment Provisions, Chapters 7-10** and **Zone Maps**)

The Traffic Intensity Factor (TIF) establishes a threshold for determining permitted activity status. It is a means of assessing the likely traffic effects from a particular new activity and is based on the average typical daily one-way vehicle movements for that activity. Consequently, in any particular example, it may not represent the amount of traffic that is actually generated by a land use. **Appendix 3A** sets out the Traffic Intensity Factor which has been calculated for a variety of activities. The Traffic Intensity Factor which has been determined for each zone (refer to **Part 2 - Environment Provisions**) is based on an assessment of what traffic effects are appropriate in the zone.

**Note 1:** The Traffic Intensity Factor (TIF) does not apply to, or limit, existing activities and does not limit future increases in traffic generation from a site unless:

- (a) this is the subject of a condition in a resource consent; or
- (b) the effect of an increase in traffic is such that the scale, intensity, or character of the activity changes, in which case existing use rights no longer apply.

**Note 2:** A TIF has been worked out for a limited number of activities. If there is no TIF in **Appendix 3A** for the activity that is being considered, the TIF for the activity in **Appendix 3A** that is closest in scale, intensity and character to the activity being considered must be used.

**Note 3:** Having established the TIF for a particular activity from **Appendix 3A**, reference must be made to the rules for the zone in which the activity is to be located. The rules state the TIF for the zone. If the TIF for the particular activity, as listed in **Appendix 3A**, is less than the TIF for the zone, the activity is permitted. If it is up to 100% greater than the permitted TIF for the zone, the activity is a restricted discretionary activity. In considering a restricted discretionary application, the Council will restrict the exercise of its discretion to the consideration of those matters listed under **Assessment Criteria 10.10.12** (refer **Part 2, Environment Provisions**). If, however, the TIF for the activity is more than 100% above the permitted TIF for the zone, the activity is a full discretionary activity.

**Example:** A motel with 6 units has a TIF of 18 (refer to **Appendix 3A**). If it is proposed in the Residential Zone, which has an allowable TIF of 20, it is, in terms of traffic intensity, a permitted activity.

**Note 4:** A vehicle travelling to a site = one vehicle movement. A vehicle travelling to a site and then leaving to go elsewhere = two vehicle movements.

**Note 5:** Where there is more than one activity on a site the TIF is calculated separately for each activity, then added together. This not only applies where there are two or more new activities proposed, but also means that if an existing activity on a site has a TIF of, e.g. 20, and the zone permits a TIF of 40, any new activity may have a TIF of 20 before it is subject to a resource consent .

LAND USE ACTIVITY	TRAFFIC INTENSITY FACTOR (based on average daily one-way vehicle movements)
<b>Residential</b>	
Standard Residential Unit	10 per unit
Home Unit / Town House / House on Papakainga	7 per unit / house
Home Occupations	10 per unit
Pensioner Housing	2 per unit
Boarding Houses	2 per person accommodated
<b>Casual Accommodation</b>	
Home Stay/Bed & Breakfast	2 per person accommodated
Camping Grounds/Motor Camps	3 per unit and/or 2 per camp site
Motel	3 per unit
Tourist Hotel	2 per room
<b>Retail</b>	
Shops (including TAB facilities) / Shopping Centres	70 per 100m <sup>2</sup> GFA
Supermarkets	100 per 100m <sup>2</sup> GFA
Garden or Hire centres	50 per 100m <sup>2</sup> space open to public
Building Supply Outlets	30 per employee
Service Stations with Shop	500 per 100m <sup>2</sup> GFA shop
Vehicle sales, repair, service	20 per 100m <sup>2</sup> GFA

<b>LAND USE ACTIVITY</b>	<b>TRAFFIC INTENSITY FACTOR</b> (based on average daily one-way vehicle movements)
<b>Office and Commercial</b>	
Commercial premises	10 per 100m <sup>2</sup> GFA
<b>Restaurants / Bars</b>	
Fast Food with Drive-In	200 per 100m <sup>2</sup> GFA
Restaurants, Bars, Cafes	60 per 100m <sup>2</sup> GFA
<b>Industry</b>	
Industrial Units	5 per 100m <sup>2</sup> GFA
Distribution Centres	4 per 100m <sup>2</sup> GFA
Bulk Warehousing	4 per 100m <sup>2</sup> GFA
Contractors depots	4 per 100m <sup>2</sup> GFA
Port / Sea Terminal	4 per 100m <sup>2</sup> GFA
<b>Health and Education</b>	
Hospitals	50 per 100m <sup>2</sup> GFA
Home for the Aged	2 per bed
Doctors Rooms / Medical Centres / Veterinary Clinics	50 per 100m <sup>2</sup> GFA
Tertiary Education facility	30 per staff member
Schools	30 per staff member
Child Care Centres	100 per 100m <sup>2</sup> GFA
<b>Recreation</b>	
Boat Ramps	200 per ramp
Gymnasiums	50 per 100m <sup>2</sup> GFA
Tennis, squash, basketball, badminton	50 per court
Golf courses	300 per course
Cricket, football, hockey	100 per playing field or 60 per 100 spectator seats
Places of Entertainment	2 per every person facility is designed for
Places of Assembly	2 per every person facility is designed for
Other Buildings used for Social, Cultural or Recreational purposes (including Grandstands)	2 per every person facility is designed for
Marinas/moorings	2 per berth
<b>Rural</b>	
Farming	Exempt from Traffic Intensity provisions
Forestry	Exempt from Traffic Intensity provisions

## APPENDIX 3B: STANDARDS FOR PRIVATE ACCESS

(Reference: *Part 3 District Wide Provisions, Section 15.1 Traffic, Parking and Access* and *Zone Maps*)

Zone	No. of Dwelling Units	Legal Width	Carriageway Width	Maximum Gradient		Kerb	Foot-path	Storm-water Drain
				Unsealed	Sealed			
Residential	1	-	3.0	1:6	1:4	-	-	Yes
Coastal Residential	2	5.0	3.0	Refer 15.1.6.1.2(j)	1:4	-	-	Yes
Russell Township	3 - 4	7.5	3.0 with passing bays	Refer 15.1.6.1.2(j)	1:4	-	-	Yes
Point Veronica	5 - 8	7.5	5.0	Refer 15.1.6.1.2(j)	1:4	Yes	-	Yes
	9 - 14	7.5	5.0	Refer 15.1.6.1.2(j)	1:4	Yes	Yes	Yes
Commercial	1	-	3.0	1:8	1:5	-	-	Yes
Industrial	2 - 4	8.0	6.0	Refer 15.1.6.1.2(j)	1:5	-	-	Yes
Orongo Bay Special Purpose	>5	8.0	6.0	Refer 15.1.6.1.2(j)	1:5		-	Yes
Rural Production	1	-	3.0	1:5	1:4	-	-	Yes
Rural Living	2	5	3.0	1:5	1:4	-	-	Yes
Waimate North Horticultural Processing	3 - 4	7.5	3.0 with passing bays	1:5	1:4	-	-	Yes
Carrington Estate	5 - 8	7.5	5.0	1:5	1:4	-	-	Yes
General Coastal	9 - 14	7.5	5.0	1:5	1:4	-	-	Yes
Coastal Living								
South Kerikeri Inlet								
Recreational Activities								



## APPENDIX 3C: PARKING SPACES REQUIRED

(Reference: *Part 3 District Wide Provisions, Section 15.1 Traffic, Parking and Access*)

(GFA=Gross Floor Area)

**Note 1:** Where there is more than one activity on a site the parking requirement is calculated separately for each activity and then added together.

**Note 2:** If a particular activity is not referred to in this Appendix, use the closest, most similar activity for the proposal - calculating the most appropriate parking requirement to apply.

LAND USE ACTIVITY	CAR PARKING SPACES REQUIRED
<b>Residential</b>	
Standard Residential Unit	2 per unit
Home Unit / Town House	2 per unit
Home Occupations	1 per non residential employee
Pensioner Housing	1 per one bedroom unit
Boarding Houses	1 per 2 persons accommodated
<b>Casual Accommodation</b>	
Home Stay/Bed & Breakfast	1 per 2 persons accommodated
Camping Grounds/Motor Camps	1 per unit / camp site, plus 1 per 2 employees
Motel	1 per unit plus 1 per 2 employees
Tourist Hotel	1 per 2 rooms plus 1 per 2 employees
<b>Retail</b>	
Shops (including TAB facilities) / Shopping Centres	1 per 25m <sup>2</sup> GFA
Supermarkets	1 per 25m <sup>2</sup> GFA
Garden or Hire centres	1 per 100m <sup>2</sup> space open to public
Building Supply Outlets	4 per 100m <sup>2</sup> of GFA
Service Stations with Shop	1 per 35m <sup>2</sup> GFA shop plus 2 for every 3 employees present on site at any one time
Vehicle sales, repair, service	1 per 150m <sup>2</sup> vehicle display area plus 4 for each repair / lube bay plus 1 per each remaining 50m <sup>2</sup> GFA
<b>Office and Commercial</b>	
Commercial premises	1 per 40m <sup>2</sup> GFA
Catteries/kennels	1 per 10 animals which can be accommodated
<b>Restaurants / Bars</b>	
Fast Food with Drive-In	1 per 10m <sup>2</sup> GFA
Restaurants, Bars, Cafes	1 per 10m <sup>2</sup> GFA plus 1 per 15m <sup>2</sup> outdoor area or 1 space for every 4 persons the restaurant is designed to accommodate, whichever is greater
<b>Industry</b>	
Industrial Units	1 per 50m <sup>2</sup> GFA
Distribution Centres	1 per 50m <sup>2</sup> GFA
Bulk Warehousing	1 per 100m <sup>2</sup> GFA
Contractors depots	1 per 100m <sup>2</sup> GFA
Port / Sea Terminal	1 per 2 employees
<b>Health and Education</b>	
Hospitals	1 per every 3 beds plus 5 per operating theatre plus 1 per remaining 25m <sup>2</sup> GFA
Home for the Aged	1 per every 5 people facility is designed for plus 1 per 2 employees
Doctors Rooms / Medical Centres	1 per 20m <sup>2</sup> GFA
Tertiary Education facility	1 per 3 persons facility is designed for
Schools	2 per classroom
Child Care Centres	1 per every 4 children

LAND USE ACTIVITY	CAR PARKING SPACES REQUIRED
<b>Recreation</b>	
Boat Ramps	15 (for car & trailer) per each 3m width of ramp
Gymnasiums	3 per 100m <sup>2</sup> GFA
Tennis, Squash, basketball, badminton	3 per court
Golf courses	2.5 per 1ha
Cricket, football, hockey	12.5 per 1ha devoted to the activity
Bowls	125 per 1ha devoted to the activity
Places of Entertainment	1 per every 4 persons designed to be accommodated
Places of Assembly	1 per every 5 persons facility is designed for, provided that where a church and hall are erected on the same site the maximum requirement shall be the maximum requirement for the church or hall, which ever is the greater.
Other Buildings used for Social, Cultural or Recreational purposes (including Grandstands)	1 per every 4 persons facility is designed for
Marinas	0.8 per every 1 berth
Swing/Pile Moorings	0.5 per every 1 mooring
<b>Rural</b>	
Farming	Exempt from parking requirements
Forestry	Exempt from parking requirements

## APPENDIX 3D: MANOEUVRING & PARKING SPACE DIMENSIONS

(Reference: *Part 3 District Wide Provisions, Section 15.1 Traffic, Parking and Access*)

(all dimensions in metres)

Parking Angle	Width of Parking Space	Kerb Overhang	Depth of Parking Space	Manoeuvring Spaces	Total Depth One Row	Total Depth Two Rows
90° Regular Users <sup>(1)</sup>	2.4 <sup>(2)</sup>	1.0	4.9	7.1	12.9	16.9
	2.5	1.0	4.9	6.7	11.6	16.5
	2.6	1.0	4.9	6.3	11.2	16.1
	2.7	1.0	4.9	5.9	10.8	15.7
	≥2.75	1.0	4.9	5.9	10.8	15.7
90° Casual Users <sup>(1)</sup>	2.5	1.0	4.9	8.1	13.0	17.9
	2.6	1.0	4.9	7.1	12.0	16.9
	2.7	1.0	4.9	6.7	11.6	16.5
	≥2.75	1.0	4.9	6.6	11.6	16.4
75°	2.4 <sup>(2)</sup>	1.0	5.2	6.5	11.7	16.9
	2.5	1.0	5.2	6.0	11.2	16.4
	2.6	1.0	5.2	5.7	10.9	16.1
	2.7	1.0	5.2	5.0	10.2	15.4
	≥2.75	1.0	5.2	4.3	9.5	14.7
60°	2.4 <sup>(2)</sup>	1.0	5.2	4.6	9.8	15.0
	2.5	1.0	5.2	4.1	9.3	14.5
	2.6	1.0	5.2	3.5	8.7	13.9
	2.7	1.0	5.2	3.3	8.5	13.7
	≥2.75	1.0	5.2	3.2	8.4	13.6
45°	2.4 <sup>(2)</sup>	0.8	4.9	2.9	7.8	12.7
	2.5	0.8	4.9	2.7	7.6	12.5
	2.6	0.8	4.9	2.5	7.4	12.3
	2.7	0.8	4.9	2.4	7.3	12.2
	≥2.7	0.8	4.9	2.3	7.2	12.1
30°	2.4 <sup>(2)</sup>	0.6	4.0	2.4	6.4	10.4
	2.5	0.6	4.0	2.4	6.4	10.4
	2.6	0.6	4.0	2.4	6.4	10.4
	2.7	0.6	4.0	2.3	6.3	10.3
	≥2.75	0.6	4.0	2.3	6.3	10.3
Parallel	5.9	0.4	2.5	3.6	6.1	8.6
	6.1	0.4	2.5	3.3	5.8	8.3
	6.3	0.4	2.5	3.0	5.5	8.0

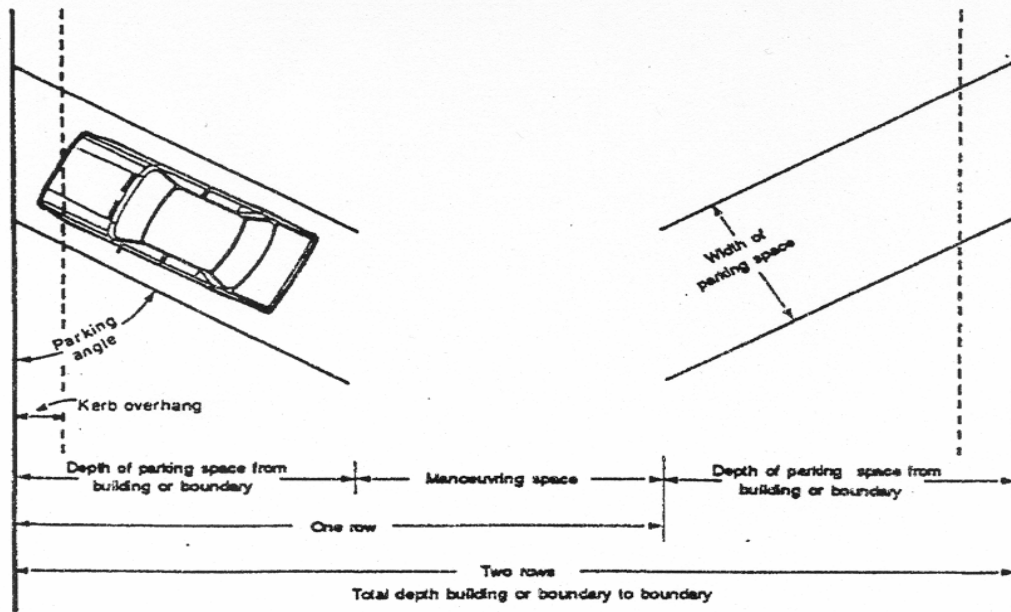
(1) Regular users are people whose regular use gives them a familiarity with the building that permits smaller safe clearances between vehicles and parts of buildings. Casual users are people (usually short-term visitors) who would not be familiar with the building layout.

(2) Stall widths of 2.4m should generally only be used where users are familiar with the car park. This stall width does not meet the requirements of the Building Code for Casual Users.

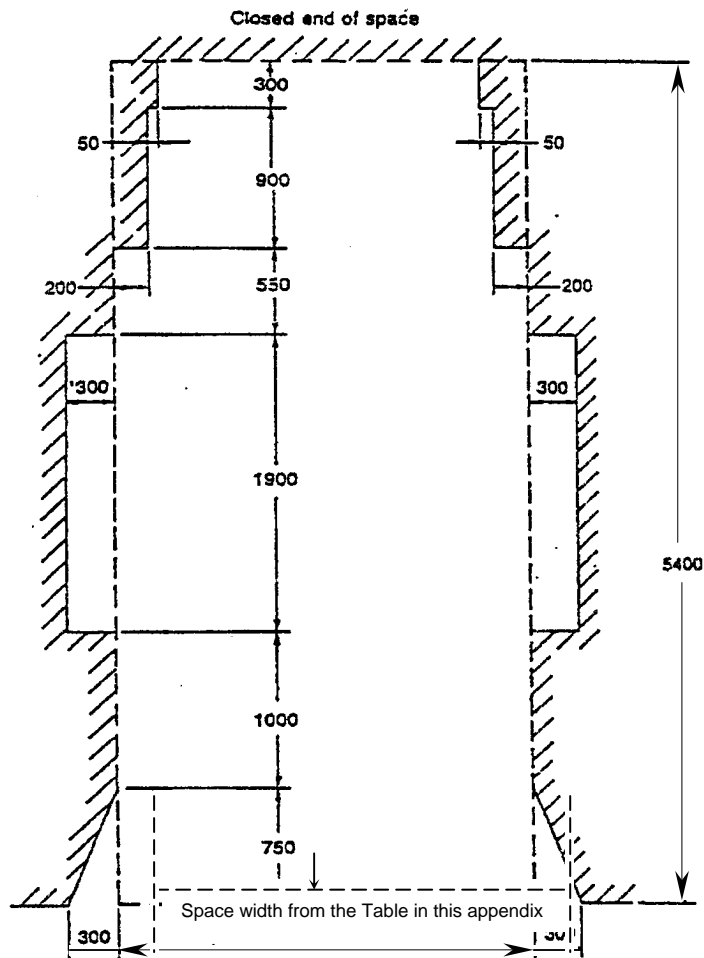
### Notes:

- Minimum aisle widths are 3.6m for a one-way aisle, and 5.5m for a two-way aisle. Where an aisle serves more than 50 spaces, it should be designed as a circulation route in which case the minimum width for a two-way aisle increases to 6.5m. Note that the Building Code requires an extra 0.8m width where pedestrians use a vehicle circulation route.
- Stall widths shall be increased by 0.3m where they abut obstructions such as columns or walls.
- All overhang areas shall be kept clear of objects greater than 150mm in height.
- Where parallel end spaces have direct access through the end of the stall the length of the stall may be reduced to 5.4m.
- One-way traffic is assumed for angle spaces.
- Car park height shall be at least 2.3m over the full area of the space, except where special provision is made to divert over height vehicles, in which case the minimum height may be reduced to 2.1m.
- Note that the Building Code may require car park spaces to be provided for people with disabilities. Details of the requirements for these spaces may be found in the Building Code or NZS 4121.
- Linear interpolation is permitted for stall width, parking angle and aisle width.
- Car park spaces which comply with the preferred design envelope shown below are deemed to comply with the dimensions in this Appendix.

**Manoeuvring and Parking Space Dimensions:**



**Preferred Design Envelope around Parked Vehicle to be kept clear of Columns, Walls and Obstructions:**

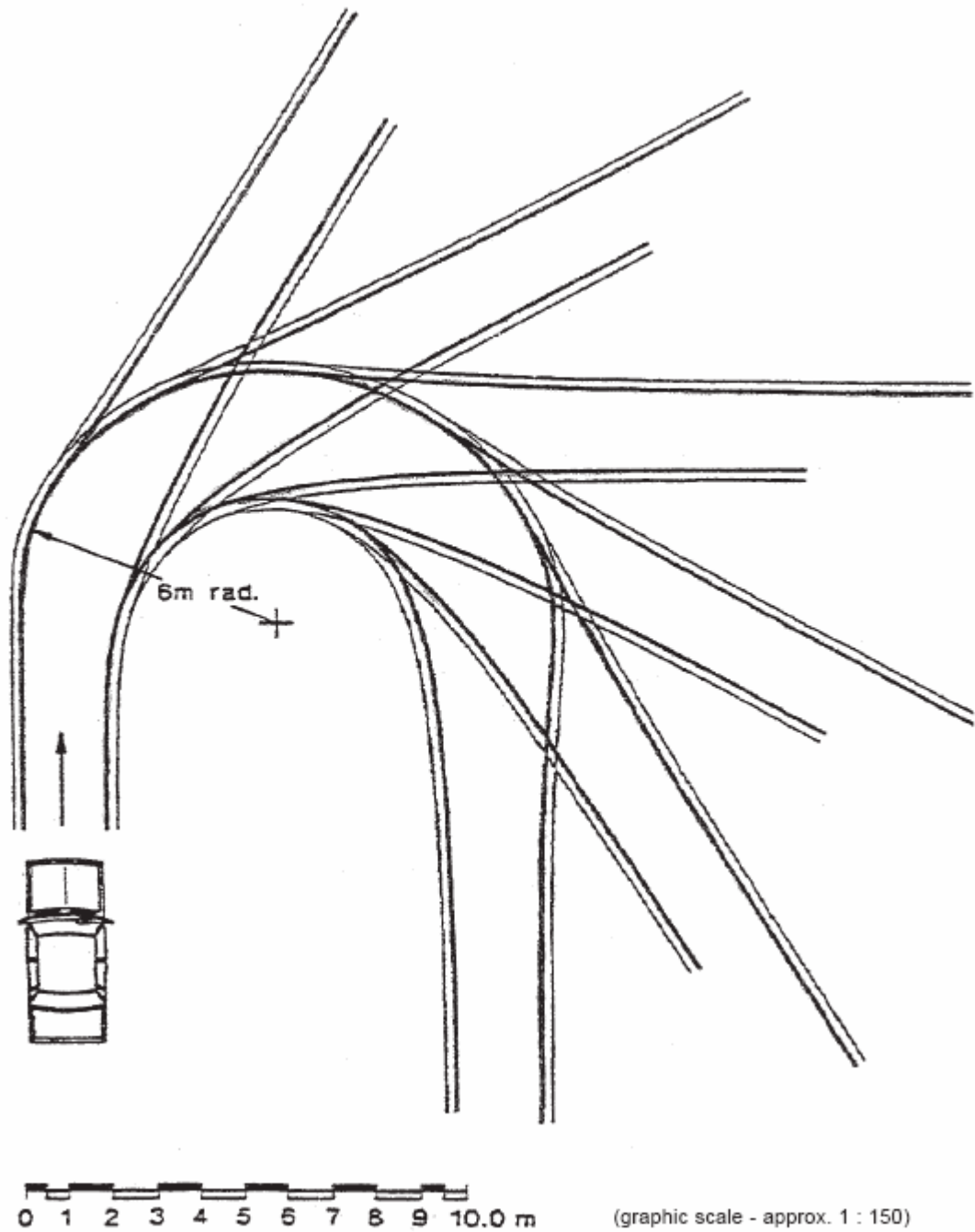


DIMENSIONS IN MILLIMETRES

**Note:** The preferred design envelope provides for structural elements to be clear of all four side doors whereas the standard provides for the opening of the front door only (when nose in).

## APPENDIX 3E: VEHICLE TRACKING CURVES

85 Percentile Motor Car:

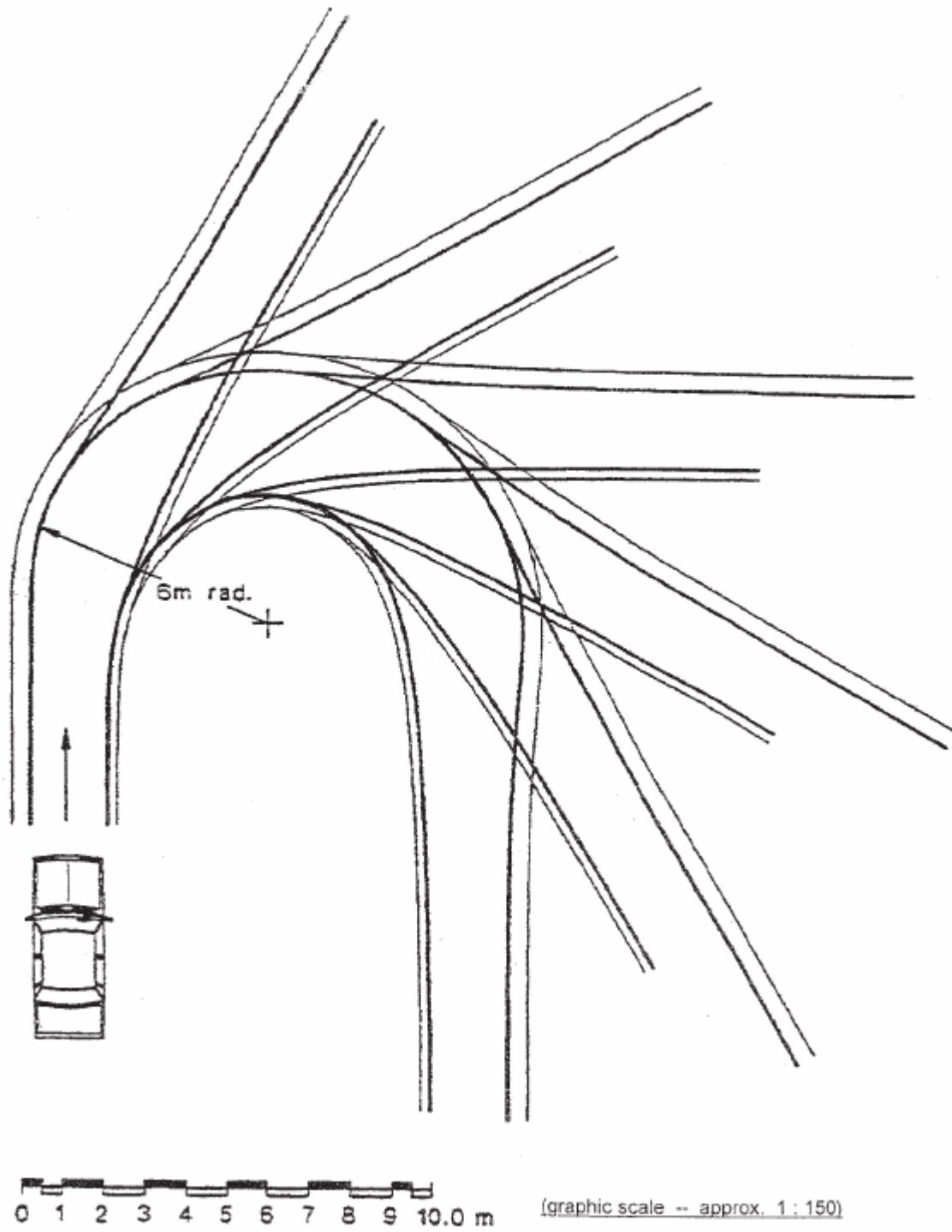


denotes the B85 base dimension swept path.



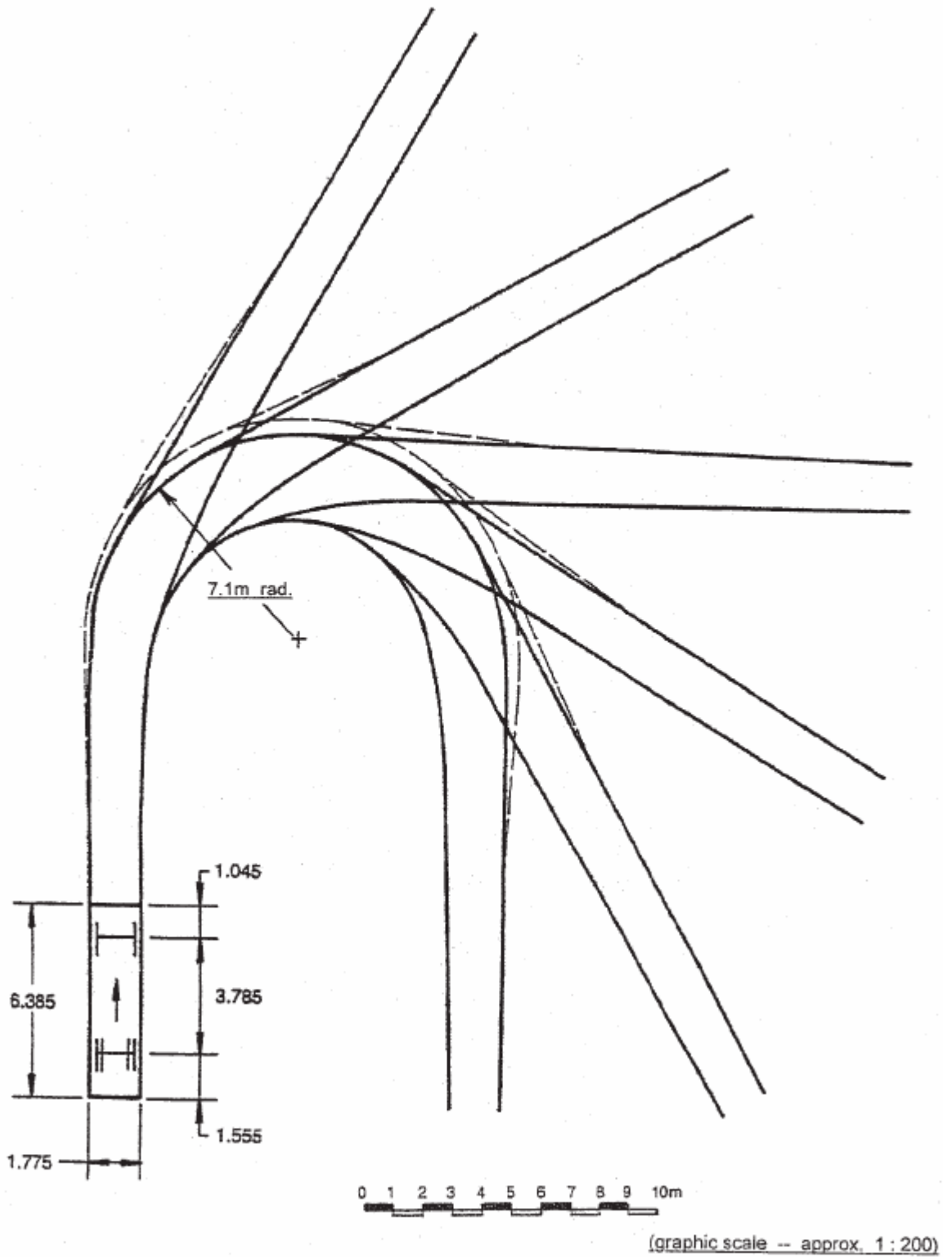
denotes the B85 design template which includes 2x300mm manoeuvring clearances only.

99 Percentile Motor Car:

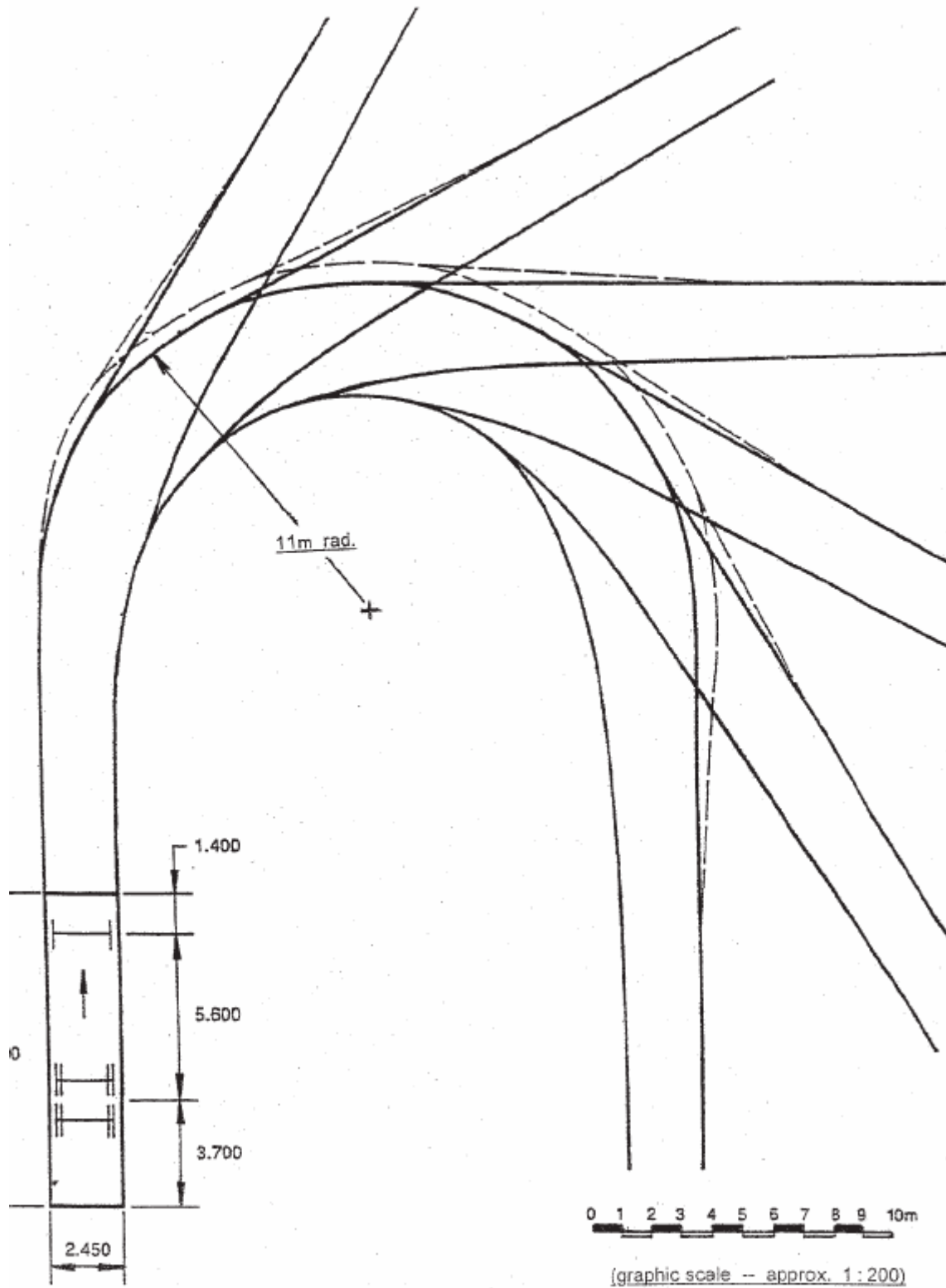


- denotes the B99 base dimension swept path.
- denotes the B99 design template which includes manoeuvring and circulation clearances. 300mm on the inside and 600mm on the outside

Tangential Curve Template – Small Rigid Vehicle (Radius 7.1m):



**Tangential Curve Template – Heavy Rigid Vehicle (Radius 11m):**



DIMENSIONS IN METRES

Tangential Curve Template – Articulated Vehicle (Radius 11m):

