

FORESTRY COMMISSION ROAD SPECIFICATION

The current specification for forest roads in the public sector is as follows:

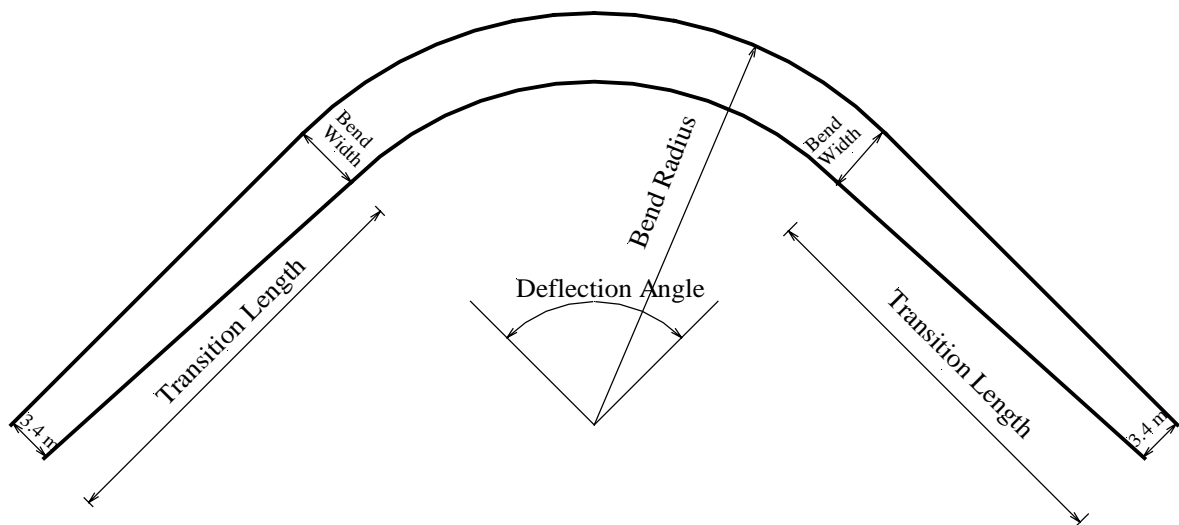
Design speed	25 km/h.
Design Loading	Full C&U (currently 44 tonnes)
Road Width	3.4 m (+/- 200mm) - widened on inside of bends to suit radius.
Felled width	25 m recommended.
Max gradient	10% with small lengths (<200m) up to 12.5% allowable with caution.
Min gradient	2% recommended.
Facilities	Passing places, turning places, harvesting facilities supplied as required.
Road construction depth	Chosen by relation to CBR of sub-grade. Varies from 150mm to >850mm.
Construction	Normally waterbound. Material as available.
Surfacing	As required. Good quality material. Normally waterbound, occasionally bituminous. Depends to some extent on classification.
Cross slope (camber or crossfall)	4.5% recommended minimum. Above 8% only to be used with care.
Geotextiles	Used occasionally for particular reason
Culverts	Minimum size 300mm although 450mm preferred. Spacing as required.
Road classification	Class A Main road Class B Spur road Class C Other road

Class C not normally used for harvesting.

HORIZONTAL BEND RECOMMENDED WIDTHS AND GRADIENTS

Outside Radius	Minimum Widths For Maximum Angle of Deflection (°)				Transition Straight Length	Maximum Desirable gradient on outside radius
	15	45	90	180		
Running surface width						
m	m	m	m	m	m	%
90	3.8	3.8	3.8	3.8	-	10
60	4.0	4.0	4.0	4.1	20	8
45	4.0	4.2	4.5	4.5	20	7
30*	4.0	4.7	5.0	5.1	25	6.5
25		4.8	5.1	5.3	30	5
20		5.0	5.6	5.9	30	4.5
15			6.3	7.0	40	4
10****				10.0	40	5 on diagonal

- * Preferred minimum radius
 ** Figures based on experience

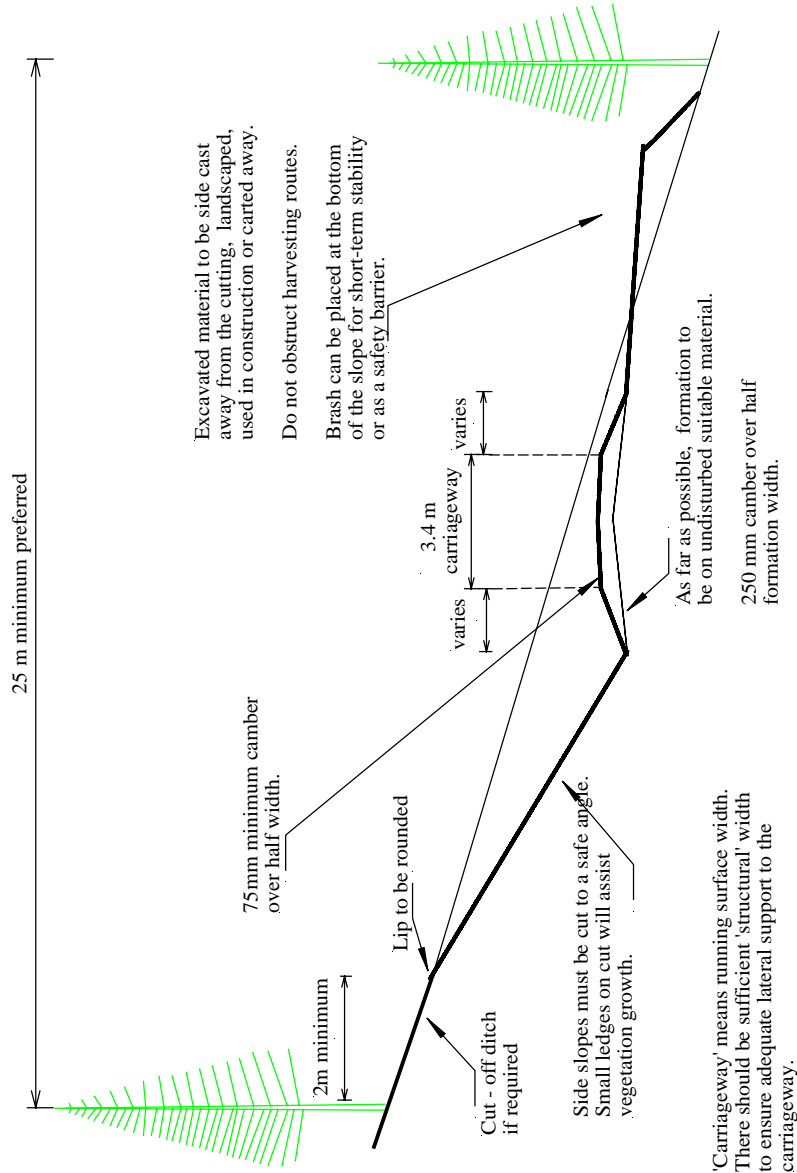


Bend Widening

- **** Absolute minimum hairpin

EXAMPLE CROSS SECTION

Typical Road Cross - Sectional Details



Cross Fall up to 20 Degrees