APPENDIX 5

Linear creep coefficients as defined in equations (8.41), (8.42) and (8.43) ($v = 0.3$)

	Ellipticity	$-C_{11}$	$-C_{22}$	$C_{23} = -C_{32}$	$-C_{33}$
$\frac{a}{b}$ (i)	0.2	3.56	2.65	0.62	4.68
	0.4	3.72	2.91	0.83	2.42
	0.6	3.90	3.17	1.04	1.74
	0.8	4.08	3.46	1.27	1.38
	1.0	4.29	3.73	1.50	1.18
$\frac{b}{a}$	0.8	4.58	4.11	1.82	1.01
	0.6	4.99	4.65	2.29	0.86
	0.4	5.80	5.59	3.27	0.70
	0.2	7.93	8.45	6.76	0.57
	$1.0^{(ii)}$	5.16	4.32	$\left\{ \begin{array}{c} 2.04 \\ -1.44 \end{array} \right\}$	1.84
	$\text{All}^{(iii)}$	3.52	2.47	–	–

Note: (i) a is the semi-axis of the ellipse of contact in the rolling direction.
(ii) Approximate values from equations (8.34), (8.36), (8.38) and (8.39).
(iii) Strip theory, equation (8.50).

From Kalker (1967a).