

PERMANENT WAY
NOTES

TABLE OF
COMPONENTS

BULL-HEAD
PLAIN LINE

JOINT SLEEPERS	EXTENT YARDS	RAILS			F'PLATES PRS.	F'BOLTS		CHD. SLEEPERS			KEYS EA.	EXTENT CHS.
		60'0"	59'9"	TOTAL EA.		FOR LONG PLATES EA.	FOR SHORT PLATES EA.	ORDY. EA.	JOINT EA.	TOTAL EA.		
JOINT SLEEPERS ARE USED ONLY IN THE MAIN AND RELIEF LINES OF THE FOLLOWING ROUTES :-	20	2	-	2	2	8	4	22	2	24	48	1
DIDCOT - AYNHO JCN.	40	4	-	4	4	16	8	44	4	48	96	1 1/2
PADDINGTON - PLYMOUTH (VIA BATH AND VIA WESTBURY)	60	6	-	6	6	24	12	66	6	72	144	2 1/4
OLD OAK COMMON TO CHESTER.	80	8	-	8	8	32	16	88	8	96	192	3 1/4
WOOTTON BASSETT TO SWANSEA (VIA BADMINTON, AND FROM BRISTOL)	120	12	-	12	12	48	24	132	12	144	288	5 1/4
	140	14	-	14	14	56	28	154	14	168	336	6 1/4
NEWPORT, PONTYPOOL RD HEREFORD AND SHREWSBURY.	160	16	-	16	16	64	32	176	16	192	384	7 1/4
	180	18	-	18	18	72	36	198	18	216	432	8 1/4
TORQUAY BRANCH (ALLER JCN. TO KINGSWEAR)	200	20	-	20	20	80	40	220	20	240	480	9
* USE DISCONTINUED 1961. N.B. JOINT SLEEPERS ARE NOT USED FOR RESLEEPING.	220	20	2	22	22	88	44	242	22	264	528	10
	440	40	4	44	44	176	88	484	44	528	1056	20
SHORT FISHPLATES	660	60	6	66	66	264	132	726	66	792	1584	30
THE USE OF SHORT (2-HOLE) FISHPLATES HAS BEEN DISCONTINUED EXCEPT FOR MAINTENANCE PURPOSES.	880	80	8	88	88	352	176	968	88	1056	2112	40
	1100	100	10	110	110	440	220	1210	110	1320	2640	50
	1320	120	12	132	132	528	264	1452	132	1584	3168	60
	1540	140	14	154	154	616	308	1694	154	1848	3696	70
	1760	160	16	176	176	704	352	1936	176	2112	4224	80
	1980	180	18	198	198	792	396	2178	198	2376	4752	90
J.I./41303 17th. May 1946	2200	200	20	220	220	880	440	2420	220	2640	5280	100
"SPECIALS"	4400	400	40	440	440	1760	880	4840	440	5280	10560	200

SPECIAL, 59'-9", RAILS ARE TO BE ORDERED TO THE NUMBER SHOWN ABOVE, EVEN IF THE TRACK IS STRAIGHT. IF THE TRACK IS CURVED THE NUMBER MAY HAVE TO BE INCREASED TO THE FOLLOWING :-

$$\text{NUMBER OF "SPECIALS"} = 20 \times \frac{\text{LENGTH OF CURVE}}{\text{RADIUS OF CURVE}}$$

N.B. MINIMUM CURVE WHICH CAN BE LAID WITH 60'-0" AND 59'-9" RAILS IN EQUAL NUMBERS IS 17 CHS. RADI FOR SHARPER CURVES EITHER 5' (00) or 4' (850) SPECIALS (59'-7 1/2") MUST BE USED OR THE JOINTS MUST BE STAGGERED OR SHORTER RAILS MUST BE USED.

NUMBER OF SLEEPERS PER RAIL LENGTH

THE NO. OF WOOD OR CONCRETE SLEEPERS PER 60 FT RAIL LENGTH

IS AS FOLLOWS: [CIRC. No. 12/268]
A, B, B1, C (RELYABLE WITH NEW MATERIALS) ROUTES, PASSENGER LINES ONLY

IN STRAIGHT TRACK & IN CURVES OVER 40° RADIUS } 24

IN CURVES OF 40°-20° RADIUS, AT WATER TROUGHS, IN TUNNELS OVER 1/2 MILE LONG, & ON SOFT FORMATION } 25

IN CURVES UNDER 20° RADIUS, & IN SEVERN, PATCHWAY & C. SODBURY TUNNELS } 26

N.B. IN ALL OTHER LINES } 24

J/52947 8/5/57