

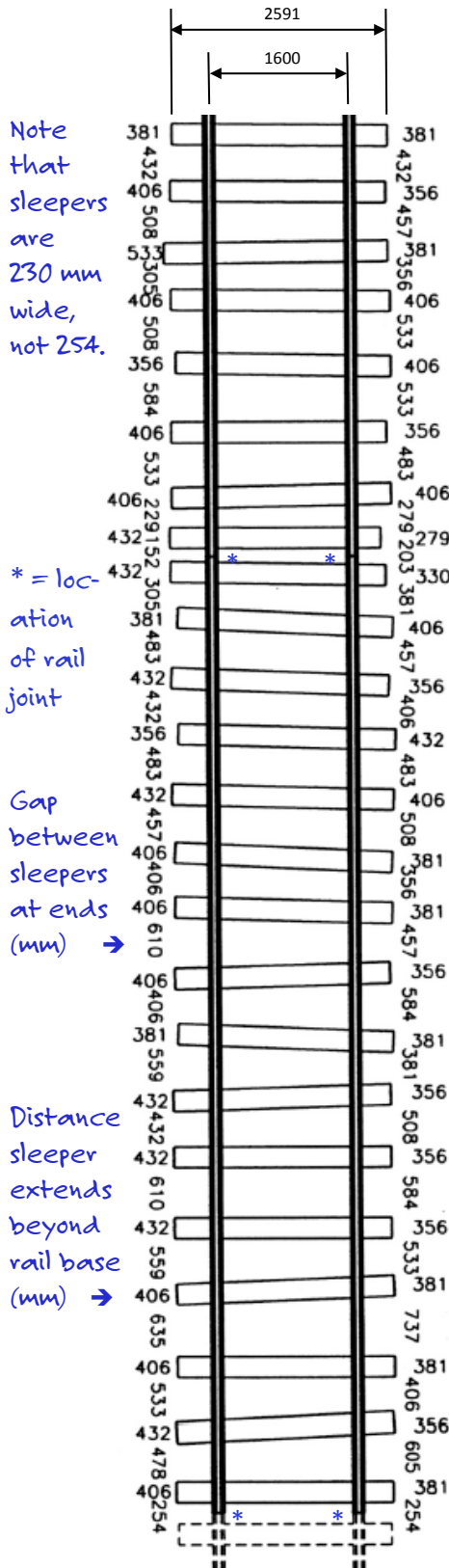
# SAR 1600 mm broad gauge track – unballasted developmental ‘mainline’ measured near Waikerie, 1985

These data sheets are downloadable free from [http://www.sap4group.org.au/downloads\\_and\\_links.html](http://www.sap4group.org.au/downloads_and_links.html)

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Dimensions shown are millimetres, full size. (Measurements were taken in inches, with a tolerance of about ± half an inch; the mm figures shown are simply the result of metric conversion without rounding.)



## Features of this drawing

The track was secondary mainline. Rail was in 16.7 metre lengths. Joints were square (perpendicular).

With one exception, the two sleepers adjacent to each of the two pairs of joints shown were particularly close, with gaps of 152 to 381 mm. The exception was a badly skewed sleeper 478/605 mm from its neighbour.

Sleeper size (timber): 2590 mm x 230 mm (not the usual 254) x 127 mm thick. Rail weight: worn 80 pounds/yard (= 30 kg/m = code 55 in HO).

The origin of this “main” line as a developmental line early in the 20th century was reflected in its still being without ballast – see both photographs on page 5-12 of the covering article to these data sheets. The track was laid on tan-coloured sandy mallee loam about 400 mm above the surrounding land. For the most part in this section, the sandy loam was flush with sleeper tops at their middle, sloping down to about 80 mm at the sleeper ends; but in some patches the sand was never within 50–70 mm of the sleeper tops. Light rust stains were on tops of the sleepers, about 150 mm either side of rails.

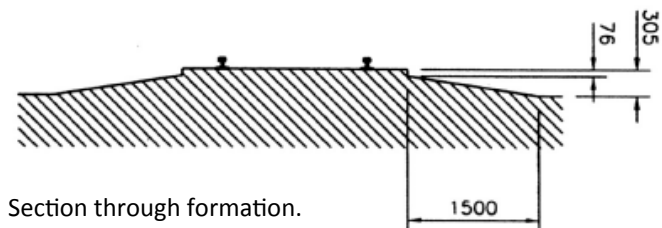
Tufts of grasses at times grew in the track, but natural vegetation only started 1.5–2 metres from the ends of sleepers.

## Ensure this drawing is the right size

Having an exact-scale drawing is especially useful when making a jig to ensure accuracy of sleeper spacing. The original was drawn to HO scale (1:87.1). However, your computer and printer may not reproduce it at this scale exactly. You can easily correct this. After printing this page, measure the actual length of the line labelled “2591”. It should be 29.75 mm long at 1:87.1 scale. Calculate the percentage setting needed to correct it and reprint or photocopy at this new setting.

## Simulating broad gauge at 16.5 mm

This drawing is for 1600 mm broad gauge track. In HO scale that equates to a gauge of 18.37 mm. If you want to retain a gauge of 16.5 mm but give the impression of broad gauge, see the notes in the ‘Typical broad gauge track with timber sleepers’ data sheet.



Excluding sleepers adjacent to rail joints: average gap between sleepers 508 mm; average sleeper centre lines 737 mm.