

LATERAL LOADING TESTS ON TRACK USING LAB 25

Information was needed on the ability of curved tracks to withstand the higher forces expected when train speeds are increased. A special laboratory vehicle which could simulate such forces had been developed and this report describes tests carried out both on test tracks and on the West Coast Main Line.

It concludes that track is generally able to carry the expected forces but that important exceptions require clarification by further investigation.

It is highly desirable that further information be obtained on:

- Comparison between the effect on track, particularly its permanent displacement, of loading with Lab 25 and the passage of vehicles at high speed.
- The identification of weak sections of track.
- The influence of tamping lift, and other variations in maintenance techniques, on the resultant strength of the track.
- The benefit to be gained by artificially consolidating the track.
- The rate at which track is consolidated by traffic, following tamping and reballasting.