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Roads not to be

obstructed.

Cuttings.

Drains

Embankments.

No public or private road that crosses or intersects the Railway or works thereof, shall be obstructed by excavation or otherwise, until the Contractor shall have provided such temporary roads as may be necessary for the traffic. The cuttings are to have a base at formation level of 10 feet in rock,

11 feet in loose rock, and 13 feet elsewhere, and are to be made in accordance with plan and section attached; but should the Engineer require any of the cuttings or banks to be made with different slopes from those shown on Drawing No. 2, the difference in cost shall be added to or deducted from the contract sum. alteration to be ordered in writing.

A drain is to be cut along the bottom of slopes of cuttings, except in rock; this drain to average 5 cubic feet per lineal yard. Catchwater drains are to be dug above the top of one slope of cuttings, at a distance of from a quarter of a chain to a chain from the top of slopes; these ditches are to average 5 cubic feet per lineal yard, and are to be true and regular to the inclinations directed; no stumps or roots to be left in them.

The embankments must be carried forward uniformly of the proper shape, with such an addition to the heights and widths as a due allowance for the shrinking of the material requires, so as to avoid as far as practicable the necessity for making subsequent additions either to the heights or widths of the embankments, to bring them to the correct levels and dimensions.

Whenever the foundation of an embankment is on sloping ground, the Contractor, if required, must at his own expense cut steps and benches under the base of the embankment.

The top of embankment at formation level is to be 10 feet wide; the slopes to be trimmed off to an inclination of one and a half horizontal to one vertical, and to be maintained full and true until the completion of the contract.

The Contractor shall, unless otherwise directed by the Engineer, take care not in any way to interfere with or divert the existing drainage areas, and shall leave such stops or stanks in the side cuttings, and take such other precautions, as the Engineer shall think necessary for that purpose.

Behind and around culverts and abutments of bridges, the embankments

shall be wheeled in and carefully rammed.

PITCHING.

8. Where required, the outer slope of the embankment shall be protected by a course of pitching formed of concrete blocks 2 feet square and 6 inches thick, or of approved stone 1 foot deep to the extent of 6,000 square yards, and of pitching 6 inches deep to the extent of 14,355 square yards.

From 4 miles 17 chains to 4 miles 34 chains, and from 4 miles 50 chains to 4 miles 74 chains, the top of the pitching is to be levelled, and a parapet 1 foot 6 inches wide erected on top to a height of 1 foot 6 inches of rubble masonry laid

in cement or of cement concrete.

Where specified in list of breast walls, walls to retain the outer edge of beach road are to be erected of stone laid dry, with a batter of 3 inches to a foot, or the existing walls made good; these walls are to be similar in materials, dimensions, and character to the existing walls along the road.

DITCHES AND DRAINS.

9. When the line crosses swamps of a peaty nature, catchwater drains are to be cut on the upper side of the line obliquely across the valleys, so as to tap the These ditches shall not exceed, on an average, one and one-third surface water. cubic yard per lineal yard, and are to be made at the commencement of the work, and cleaned out from time to time as may be ordered.

STREAM DIVERSIONS.

10. All stream diversions are to be grubbed out as described for cuttings, and excavated with regular slopes and inclinations, as will be set out.

ROAD ALTERATIONS.

11. At the places shown on the plan and section, and wherever necessary, the present roads are to be diverted.

Punning.

Parapets.

Pitching.

Breast walls.

Road alterations.