

NI Railway: Track Renewals



Project Summary

Overview

20km of condition led track and drainage renewals between Coleraine to Londonderry, including partial remodelling of Coleraine station junction and Bann (bascule) lifting bridge

Services Undertaken

Validation of the outline design (GRIP 3) and preparation of the detailed Permanent Way design (GRIP 4+5), for full renewal of the track and drainage systems

Plain line design, switch and crossing design, direct track fastening design and structure clearance analysis

The track design over Bann River bridge was extremely complex as it needed to accommodate a novel rail joint system that allowed the bridge lift and also accommodate the expansion and contraction of the rails over the bridge

Designs were prepared in line with NI Railway standards

Value Added by Novus Rail

Minimisation on the scope of track work to be undertaken and ensuring compliant structure clearances at Entry into Service stage, along with the prompt delivery of high quality Permanent Way design submissions

Key Project Specifics

- North Ireland Railway network
- 20km of track renewal design
- Bascule (lifting) bridge track fastening design
- New guard rail systems over underbridges
- New adjustment switches at underbridges
- Increased line running speeds throughout
- Switch and crossing remodelling designs
- Track drainage design
- Direct fastening design
- Formation design
- Structure gauging analysis
- CWR Stressing plans
- Provision of setting out data