



ELECTRICITY DISTRIBUTION ENGINEERING SERVICES LTD

Case Study 1

Detailed Cable Design

Project Title: 132kV Network Pinch Points

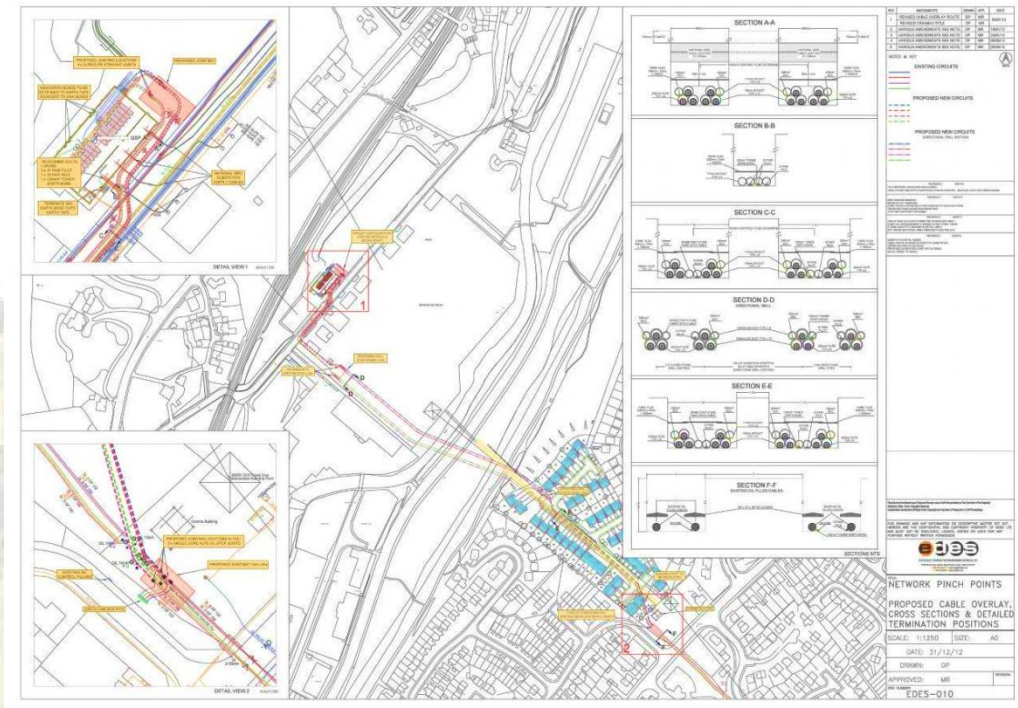
Client: Distribution Network Operator North West (DNO)



Outline Project
Description:

4No 132kV circuits routed from 275kV substation via cable bridge across river and canal had been identified as being at high risk to potential loss of customer supply if vandalised.

DNO had given this project high priority to facilitate timely removal of circuits on cable bridge and replacement with underground circuits as a priority



EDES Involvement:

Cable design from first principles for new cable route installed by directional drilling under existing 275kV substation, river and canal.

- Design work includes determination of all parameters for
- hydraulic design of oil-filled cable system,
 - cable pulling tensions,
 - topography and profiles,
 - circuit rating
 - decommissioning of bridge and safe expulsion of retained oil-filled cable sections

- Design involvement also included
- production of project budgets,
 - design and production of specifications for procurement of cables and ancillary components, for cable installation and decommissioning works