



## Switch and Crossing Surveys

### THE TASK

TPS was commissioned to undertake land surveys at four locations across Central Scotland where rail junctions were to be upgraded to enable faster trains to pass through. The result of the surveys provided a template to test a new type of modular S&C junction. The installation of this junction across the network would contribute to the development and improvement of the rail system, improving speed and efficiency for rail users.

### THE DESIGN AND THE SERVICE

We used the latest Leica one-second robotic total stations to enable the highest possible accuracies. Cross sections were surveyed at 10m intervals along the length of the track. The surveys were related to Ordnance Survey National Grid using GPS observations, and levelled using digital levels.

Rail work always carries a significant Health and Safety risk and therefore it was imperative that method statements and risk assessments were approved and signed by all staff. We were responsible for the creation of all safety documents and the provision of rail protection staff. All TPS staff are fully PTS trained.

### THE RESULT

The success of this project has meant that the design for the new type of modular S&C junction will be used in all future installations on the entire UK rail network.

#### CLIENT:

Parsons Brinkerhoff

#### PROJECT VALUE:

£40k

#### SERVICES:

- Survey of Rail Crossings & Junctions

#### TYPE:

Rail