

ISP and PLANS

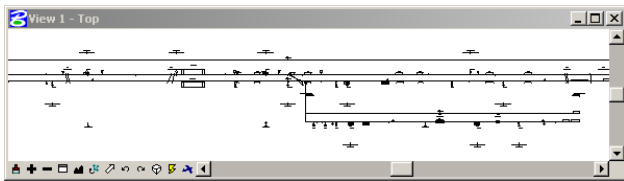
The principle of the Intelligent Scheme Plan is to create a drawing of a railway network where the lines and symbols are more than dumb graphical representations of real-world objects. Lines and symbols in an Intelligent Scheme Plan 'know' what they are. For example, a signal 'knows' which track it is associated with and what the distance to the next and previous signals are.

Some of the benefits of an Intelligent Scheme Plan are:

- Time consuming tasks are reduced or eliminated so drawing and re-drawing times are reduced.
- Time saved on drawing and re-drawing can be spent on refining the design and trying alternative layouts.
- Less time is invested in individual layouts so radical changes can be considered later in the design process.
- Better quality designs can be created in less time.

IMPORT DIRECTLY INTO PLANS

ISP uses any combination of measurement train data, Ordnance Survey MasterMap and even Google Earth imagery to create a layout plan that can imported directly into both Westinghouse and Balfour Beatty PLANS.



Is this a PLANS layout plan or an ISP layout plan?

The imported layout plan is just like a normal PLANS file. Signals can be moved or changed, route boxes created and the LOW used to take measurements.

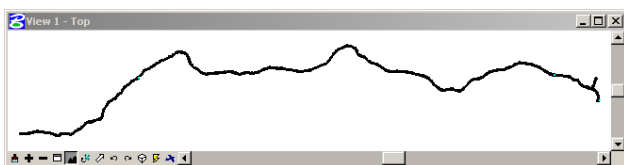
CREATING AN ISP LAYOUT PLAN

Being able to quickly create a PLANS layout plan from an ISP layout plan is great – but how do you create an ISP layout plan in the first place?

An ISP layout plan can be quickly created by using data from any combination of four sources:

- Measurement train
- OS-MasterMap
- Manual or GPS track side survey
- Google Earth (or other aerial photography)

The quickest way to create an ISP layout plan is to use the track centre lines and surveyed asset data from the measurement train to create a detailed and accurate three dimensional representation.



Entire Newcastle Carlisle route from measurement train data

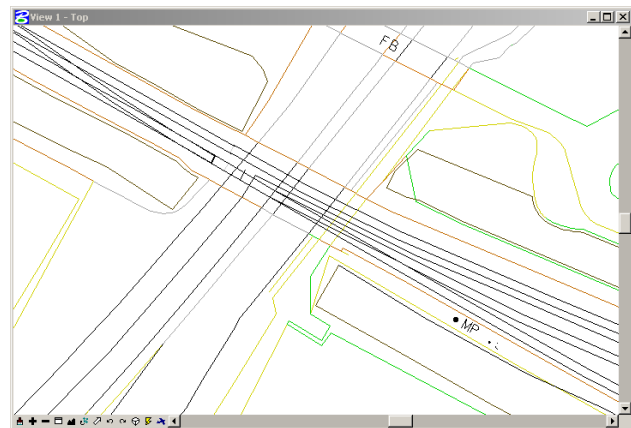
Features like signals, platforms and speed boards are all there in the drawing - but at this scale they are too small to see.

Use Google Earth to create a quick layout plan. Tracks and major features such as bridges and stations can be easily identified.



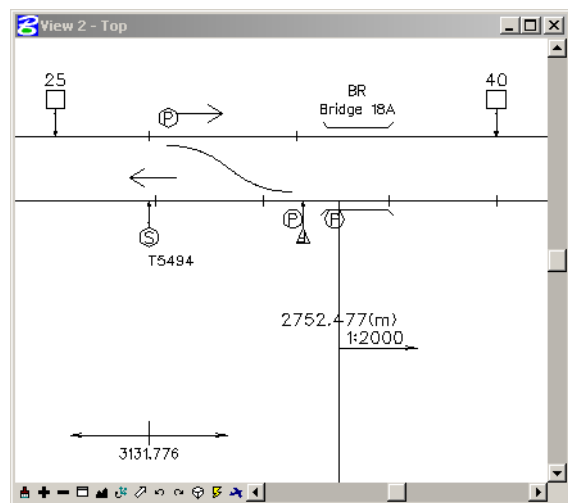
The junction in Google Earth

Use OS-MasterMap Topo data to create a more detailed view. Notice the ½ milepost near the bottom right corner.



The junction in OS-MasterMap Topo

Combine all three sources of information to create a detailed plan in ISP, complete with scales and measurements.



A junction detail in ISP

You can now import this ISP layout plan into PLANS.