

Planning & Recording prior to Signal Sighting

Route Assessment & Asset Logging



Fully integrated with the G-RASTx Process

- Manage several projects with any number of routes
- Multiple users each with their own discreet references and logs
- Switch between original footage & proposed scheme for assessment and planning
- Images, files and associated notes can be linked to any known or proposed location
- Screen capture with notes superimposed
- Basic height, offset & point to point measurements
- MRD and other calculations
- Multiple Chainage and GPS Co-ordinate readouts
- Forms the basis of the Signal Sighting Tool

The Route Assessment Process

Filming

The G-RAT can use high definition footage from a wide variety of sources, however, Gioconda prefers to use its own skilled camera operators to ensure the very best quality footage. Our bespoke camera rig obtains a viewpoint close to the driver's eye line, without impeding their actual view during filming. A calibrated set-up ensures that measurements and overlays are accurate and repeatable.

Chainage Correlation

Once route filming is completed, GPS data and known locations are associated to specific frames – this is key to accurate chainage measurements. However, a common problem is the inaccuracy and differences between chainages used by the different design disciplines. The G-RAT system goes some way to highlighting these errors and our internal set-up tools are unique in that we can either work to true distance travelled (PWAY meterage) or a derived chainage (Schemeplan meterage). In all cases the measurements are in metre units.

The Route Assessment Tool (G-RAT)

Utilising the HD footage, the user can check proposed locations where new installations are proposed and associate screen captures (with overlaid sketches & notes) to this recorded location. On site photographs or other documents can also be linked with these locations.

The G-RAT can also be used as a simple survey tool for Asset Logging - the ruler function enables visual offset & height measurements and surveying the position of Signals, LOCs, & trackside assets is very simple and can help to reduce the content required by detailed on site survey. Typically the design team will use the G-RAT to assess the position of proposed signalling prior to issuing draft Scheme Plans & Sighting Forms. Through this process it is possible to reduce the iterations of schemeplan issue and move more quickly to a Signal Sighting Committee. The G-RAT is an ideal tool for Grip stages 2 – 4 scheme development.



Object Management

When preparing for a desktop signal sighting session we recommend the use of Object Management to associate external files with key locations in the videos, allowing the user to attach Images, Documents, Drawings, SSFs etc giving easy access to these items at meetings & SSCs.