



Rail Corridor Mapping With Laser Scanners

An esteemed engineering consulting firm required mapping of Monorail corridor in Chennai, India. Prior to track designing, a detailed survey of the area is undertaken to assess existing roads in the corridor that are not satisfying the corridor width condition thus, creating a need to acquire the available adjacent land. To expedite the design process, the company wanted to conduct topographical survey of the corridor spanning 57 km with a width of 75 m.

Genesys used LiDAR augmented with 360-degree Panoramic imagery for corridor mapping to aid real visual reference of assets as they are and where they are on ground. The accurate LiDAR Point Cloud data with visual evidences assist in corridor width assessment and developing necessary action plans. The accurate Point Cloud data was used to create 3D flythrough. The topographic maps were used by the firm for monorail alignment design.

Key benefits:

- Reduced turn-around time with least human dependence in data acquisition
- Better 'As-is' visual analysis of corridor neighborhood that acts as evidential proof in future dealings
- In case of unexpected delay in project execution, the data can be re-generated at low cost by running a new survey