

Project:

Alignment Engineering





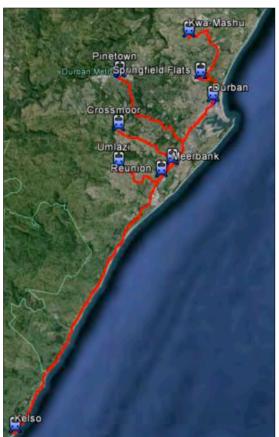




Sub-Consultancy Services of Alignment Engineering for SIYAYA Consulting Engineers (Pty) Ltd. in South Africa

PRASA provided Aereal Survey Data for all Mainlines in South African Disctricts as Capetown, Durban, Johannesburg (Gauteng).



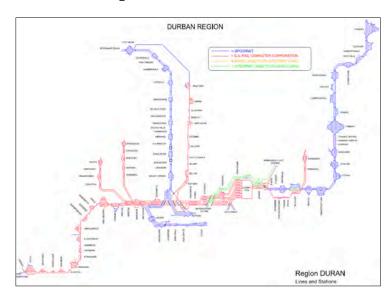


Based on this Aereal Survey Data a realignment of the meter gauge lines was established to raise the line speed to 120 km/h following the new alignment code.



Gauteng region

- Lidar survey, approx. total length 435 km,
 200m wide corridor
- Including 122 Stations



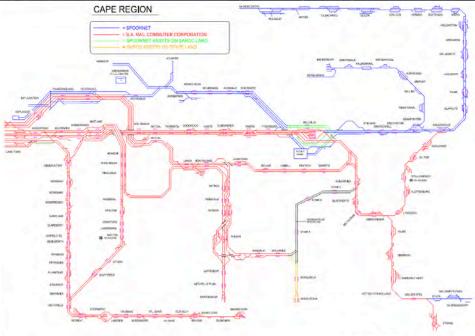
Durban region

- Lidar survey, approx. total length 130 km, 450m wide corridor
- Including 84 Stations

Alignment Engineering – Sub-Consultancy Services of Alignment Engineering for SIYAYA Consulting Engineers (Pty) Ltd. in South Africa **2/5**

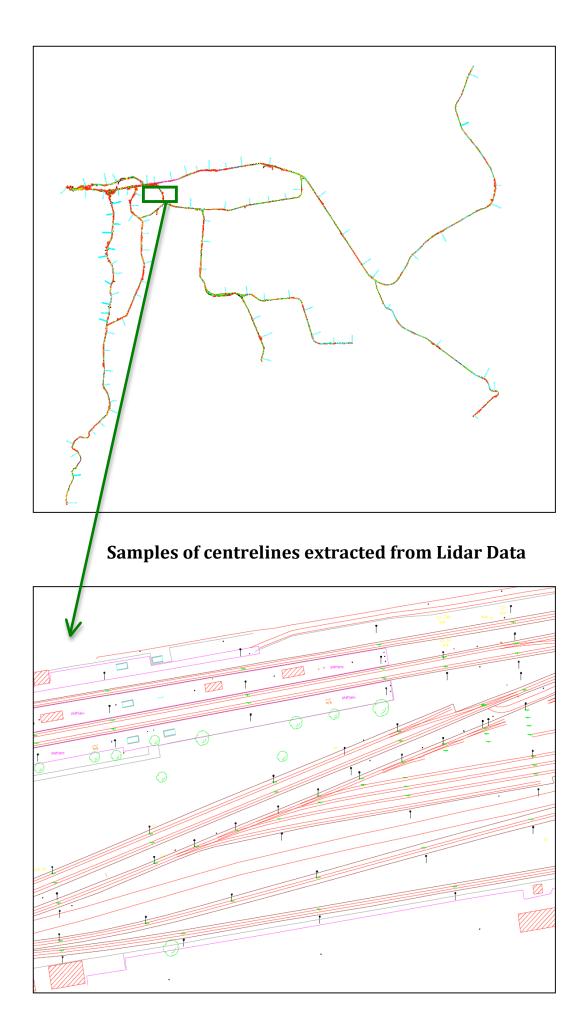
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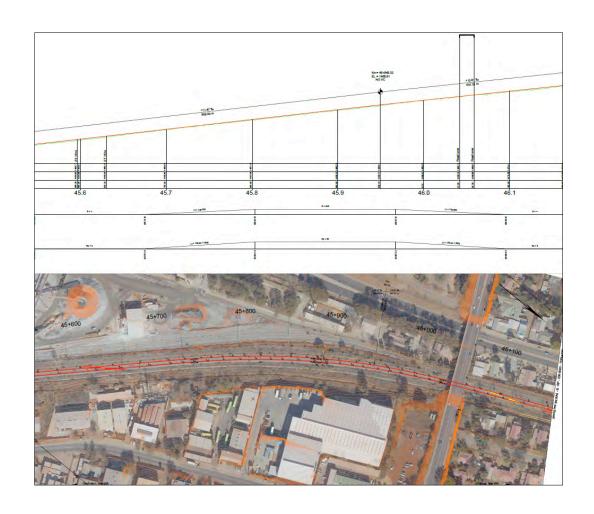




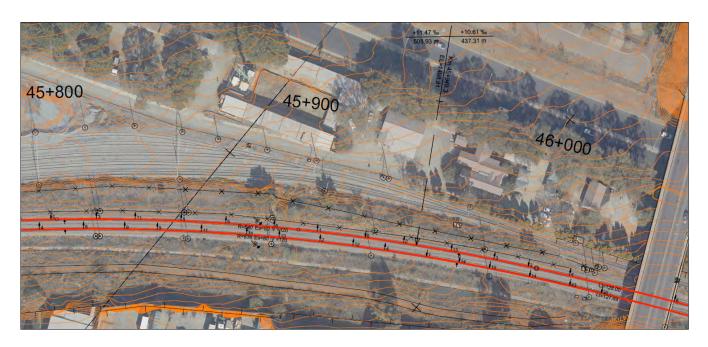
Cap region

- Lidar survey, approx. total length 200 km, 200m wide corridor
- Including 131 stations





New alignment, sample of drawing (speed 120 km/h)



New alignment, sample of track displacement