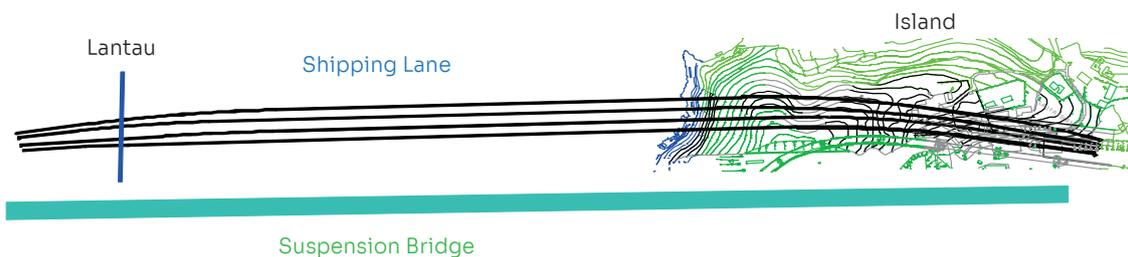


Hong Kong



Lucas Drilling contracted to install four product lines from Lantau to another island off Hong Kong. Each of the parallels needed to be spaced equally within the right of way and could not deviate beyond the right of way tolerance. The right of way was under a major shipping lane to Hong Kong and within 30 meters of the (now) longest suspension bridge in the world. It carries both traffic and two way trains.

Normal tracking methods had been attempted but the very short distance from entry to the shoreline inhibited good azimuth calibration. The exit side from the shoreline to within 80 meters of exit was hilly jungle where it was impossible to lay out ranging cables. After drilling the first two parallels using gyroscopic methods, they called for ParaTrack 2.

Using a cable installed inside one of the existing product lines, ParaTrack 2 data was used to guide the third and fourth crossing. Very significant magnetic interference was noted with azimuth swinging along with the train frequency. AC interference was also very significant but using averaging techniques, the operator was able to gain enough steering data to complete the crossings.

Now, ParaTrack Operations gives contractors the confidence, after installing a surface or underground cable All the Way from Entry to Exit, to guide the pilot hole with positive control throughout the crossing.

Call Prime Horizontal for Information about ParaTrack Guidance Services.