PROJECT SCOPE

This project scope included creating a point cloud of the existing as-built environment, creating 2D/3D red line mark ups for fabrication purposes, capture of critical tie-in points to high accuracy (+/- 1mm) using dimensional control and providing 3D CAD modelling of existing structures and piping to assist design requirements.

Terrestrial Laser Scanning (TLS) was utilised to capture point cloud data of the identified areas of interest. Surveyors used a Laser Scanner Leica P40 and TS-15, minimising time on-site and realising millimetre accuracies needed for precise dimensional control flanges and nozzles surveys.

Working in congested working areas and needing to work flexible hours around BHP's day-to-day operations did not affect our ability to deliver this project safely, on-time and to our client's expectation.

Land Surveys had delivered multiple contracts on the BHP Kwinana Refinery site since September 2016, utilising two qualified Surveyors to complete the various tasks (laser scanning and dimensional control).

Under the supervision of our Project Manager, our team of CAD modellers conducted desktop office work to deliver the final product (3D CAD model), fully integrated and consolidated onto the local grid system.