

North South Corridor Ground Investigation Studies

The Department for Infrastructure and Transport engaged the Kleinfelder and Aurecon team to undertake the North South Corridor (NSC) Torrens to Darlington (T2D) project Phase 2 and Phase 3 Ground Investigation Studies to inform the design of the construction of the T2D stage of the overall NSC project. The T2D forms the final 10.5km stage of the 78km NSC motorway project and the largest site contamination investigation ever commissioned in Adelaide.

PROJECT RESULTS

Strong relationships with subcontractors and a highly engaged project team fostered collaboration that led to site efficiencies and proactive health and safety initiatives. Night work was necessary due to many of the drilling locations, and the team completed this work safely. Providing an integrated cross-disciplinary team to collect quality data also resulted in cost saving efficiencies. The Australasian Land & Groundwater Association (ALGA) recognised Kleinfelder and Aurecon's work on the project, awarding it the 2022 Industry Excellence Award for Best Australian Investigation and Environmental Outcome.



UNDERSTANDING THE PROJECT REQUIREMENTS

The ground investigation studies for both phases of the project required the production of Geotechnical Investigation Reports, Environmental Contamination Investigation Reports, and Hydrogeological Reports.

SCOPE OF WORK

Kleinfelder managed and coordinated all site contamination and hydrogeological work, including ensuring service clearance of all investigation locations along the busy arterial route. The team drilled over 250 boreholes, installed 46 groundwater wells at depths of up to 75mbgl to characterise the hydrogeological regime, and investigated the nature and extent of potential contamination and geotechnical properties. Some 2,300 soil samples were collected, with 1,030 soil samples analysed for a broad suite of potential contaminants of concern, allowing pre-classification of construction spoil. All groundwater wells were developed prior to sampling. Significant resources, including cloud-based field data collection and dedicated data management staff, were employed to ensure data collection was of the highest standard.

