

alongside the Blackadder Creek in Midvale, Western Australia, the Movida subdivision is a large residential development in the northeastern suburbs of Perth.

Douglas Partners was initially engaged to undertake a geotechnical and preliminary acid sulphate soil investigation for the proposed Movida development to provide general advice on site classification, site preparation, acid sulphate soil risk and other design parameters. Douglas Partners' initial work for the project included reviewing the results of investigations previously undertaken by others, followed by undertaking approximately one week of field work to collect suitable soil samples for the assessment of the site classification in accordance with the updated Australian Standards, as well as undertaking numerous in-situ permeability tests along the proposed drainage corridors of the development.

Findings from the investigation improved the site classification from that previously recommended by others and allowed the Project Civil Engineers to optimise earthworks to achieve a combination of Class A and Class S lots. In addition to the original scope of works, Douglas Partners was engaged to return to the site and undertake a detailed investigation of a seasonally waterlogged part of the site. The detailed investigation identified an irregular zone of low permeability material at the interface of two major geological units causing the westerly flowing groundwater to become trapped, or 'dammed' and forced to intersect the ground surfaces in winter months. The model of the underground feature was provided to the civil engineers with recommendations on strategies to manage the groundwater with respect to the proposed development.

Douglas Partners' assistance was also requested to maximise the efficiency of the earthworks, providing advice on alternative filling materials, confirming adequacy of the results of the earthworks and confirming final site classification.

"This project is a remarkable example of synergy between the project civil engineer, the developer, Douglas Partners, and subsequently the earthworks contractor, ultimately achieving major cost benefits to the developer"

Fred Verheyde - Principal

Peet Stratton Pty Ltd

YEAR 2014 - continuing

SCOPE OF WORK

- Geotechnical investigation
- Permeability assessment
- Subsoil surface monitoring
- Eathworks supervision



