

## MEDIA RELEASE

### Shire of Esperance

PO Box 507 Esperance WA 6450  
T: (08) 9071 0666 F: (08) 9071 0600  
E: [shire@esperance.wa.gov.au](mailto:shire@esperance.wa.gov.au)  
[www.esperance.wa.gov.au](http://www.esperance.wa.gov.au)



11 June 2019

# Geophysical Report

The Shire engaged ASST Pty Ltd to undertake geophysical surveys at Lot 12 Kirwan Road in order to satisfy work requirements 5 and 6 of the Endorsed Environmental Scoping Document. Work Requirements 5 and 6 are to identify any shallow bedrock and identify the presence of karst-like features in the spongolite.

ASST conducted Ground Gravity, Multichannel Analysis of Surface Waves, Frequency Domain Electromagnetic and Electrical Resistivity Surveys between the 14<sup>th</sup> March and 21<sup>st</sup> May 2019. The area surveyed was the proposed landfill cell location.

Important conclusions within the report include:

- A few northwest-southeast subtle lineaments (a linear feature in the sub-surface) were identified. These have been interpreted as slight variations in density within sandy soils. These lineaments are not expected to have an influence on hydrological conditions.
- A potential paleo channel in the south west corner appears to be related to a thickening of unconsolidated near surface sands with low clay content. Future tracer tests and a bore to the Werrilup formation, being undertaken as Priority 2 works, will assist in determining the cause and depth extent of this paleo channel.
- The datasets acquired over the survey area suggest that the site conditions are fairly uniform. There is no evidence in the data or the drillhole logs that points to a karst environment.
- The exposed granite outcrop situated in the south west may be related to a possible granite tower, however as no resistivity lines showed evidence of hard rock condition, it would need to have steep slopes if it is a tower of bedrock. This theory needs to be tested as it will have an influence on ground water modelling.

The Shire will now move onto completing the Priority 2 works outlined in the Environmental Scoping Document:

- Assessing the aquifer through an appropriate tracer test, and
- Installing a monitoring bore into the Werrilup Formation.

CEO Matthew Scott said, "This testing is part of the 41 work requirements that were identified in the endorsed Environmental Scoping Document. All testing completed so far has supported this site as a suitable location for a landfill facility. Investigation work will continue to meet all the requirements set out by the EPA to progress."

ASST's report is available on the Shire's [website](#).

**Ends**

---

## MEDIA CONTACT:

Lauren Darge (08) 9071 0626