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8 Tate Street
Wollongong
NEW SOUTH WALES 2500

Figure 17: Landforms located within the Project Approval Area.

Date: 23 June 2011

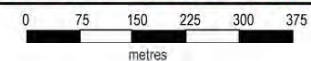
File number: 11633

Location: ..P:\11600s\11633\Mapping\FINAL_Report Figures April 2011\11633 F17_Landforms.WOR

Drawn by: ANP

Checked by: GLR

Acknowledgements:
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Scale: 1:7,500 at A3
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1994
Grid: Map Grid of Australia, Zone 58



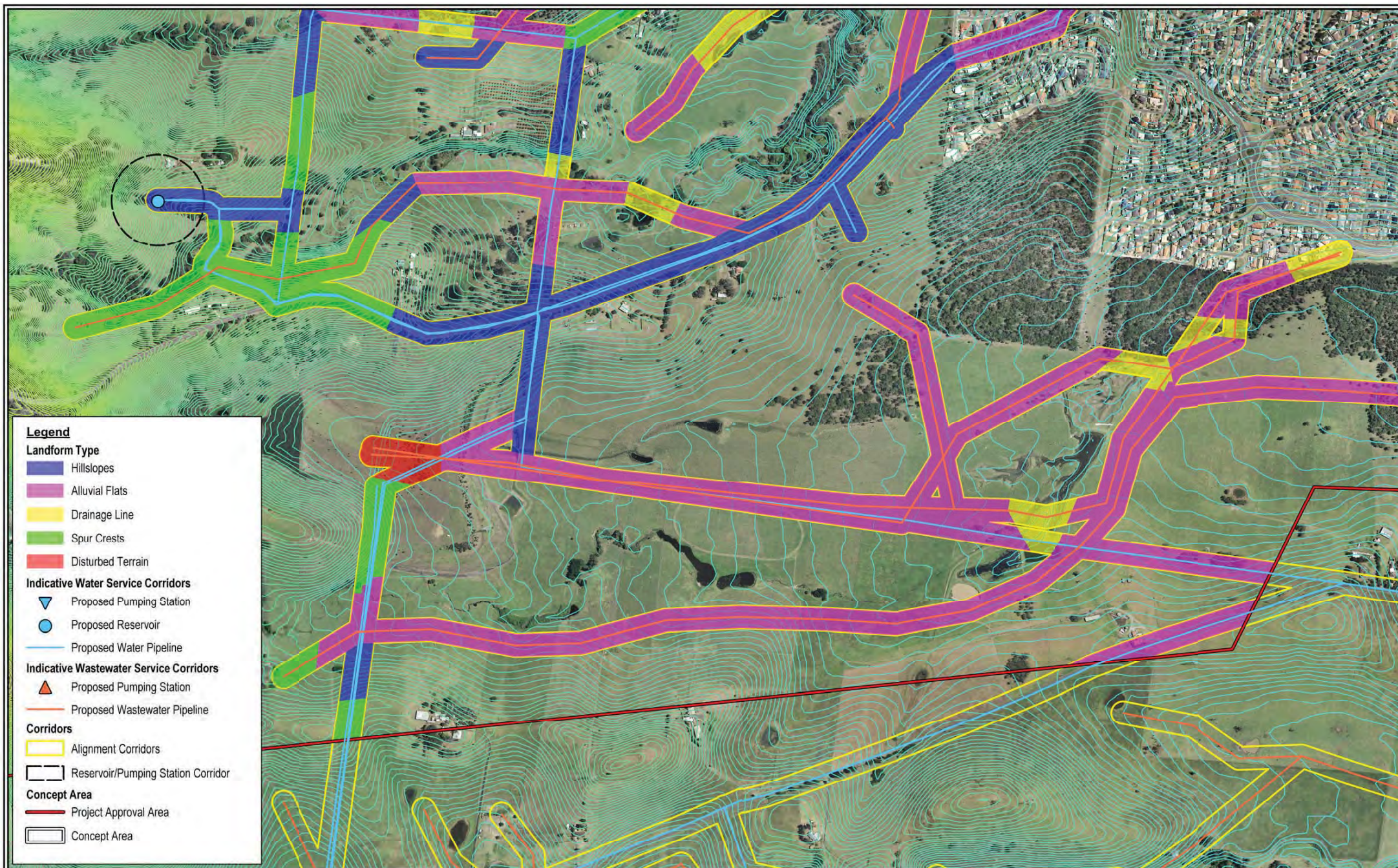


Figure 18: Landforms located within the Project Approval Area.



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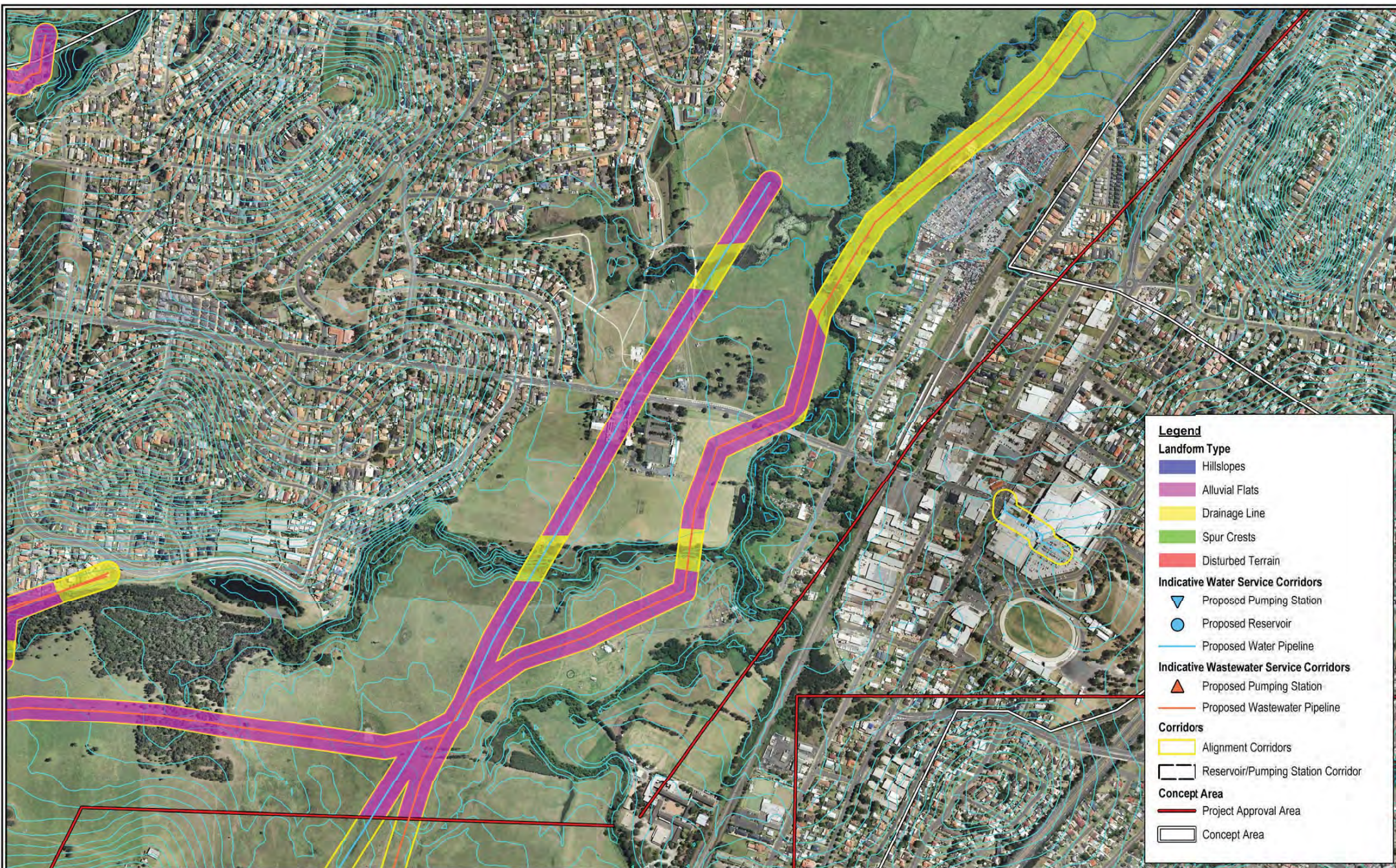
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0 75 150 225 300 375
metres

Scale: 1:7,500 at A3
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1994
Grid: Map Grid of Australia, Zone 56





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Figure 19: Landforms located within the Project Approval Area.

Date: 23 June 2011

File number: 11633

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Drawn by: ANP

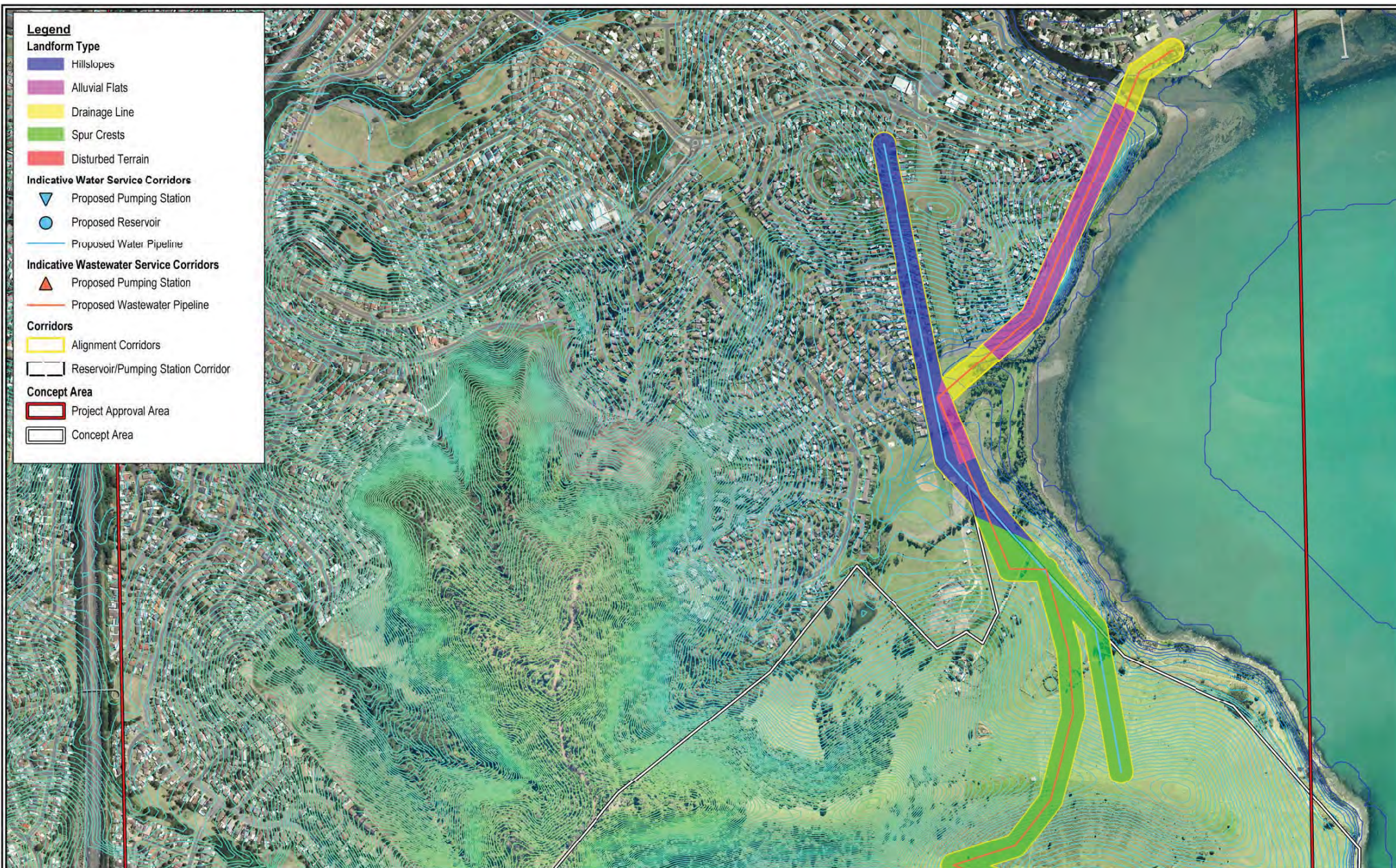
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0 75 150 225 300 375
metres

Scale: 1:7,500 at A3
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1994
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Figure 20: Landforms located within the Project Approval Area.

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File number: 11633

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Location: ..P:\11600s\11633\Mapping\FINAL_Report Figures April 2011\11633 F20_Landforms.WOR

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0 75 150 225 300 375
metres

Scale: 1:7,500 at A3
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1994
Grid: Map Grid of Australia, Zone 56





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Figure 21: Landforms located within the Project Approval Area.

Date: 23 June 2011

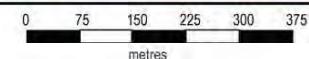
Drawn by: ANP

File number: 11633

Checked by: GLR

Location:..P:\11600s\11633\Mapping\FINAL_Report Figures April 2011\11633 F21_Landforms.WOR

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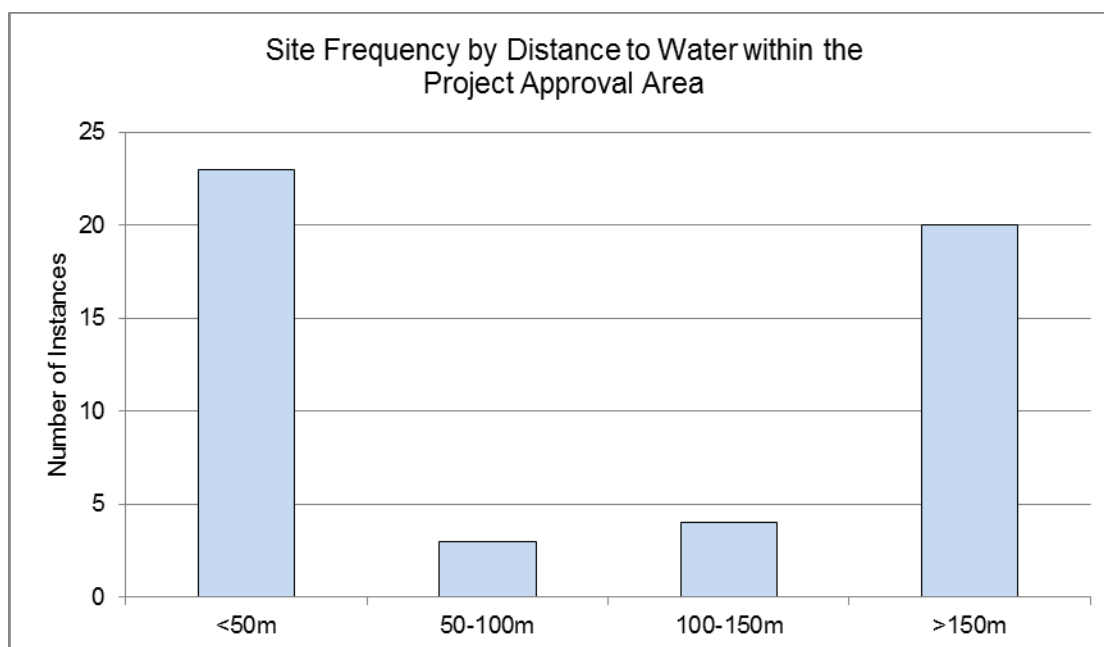


Scale: 1:7,500 at A3
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1994
Grid: Map Grid of Australia, Zone 56

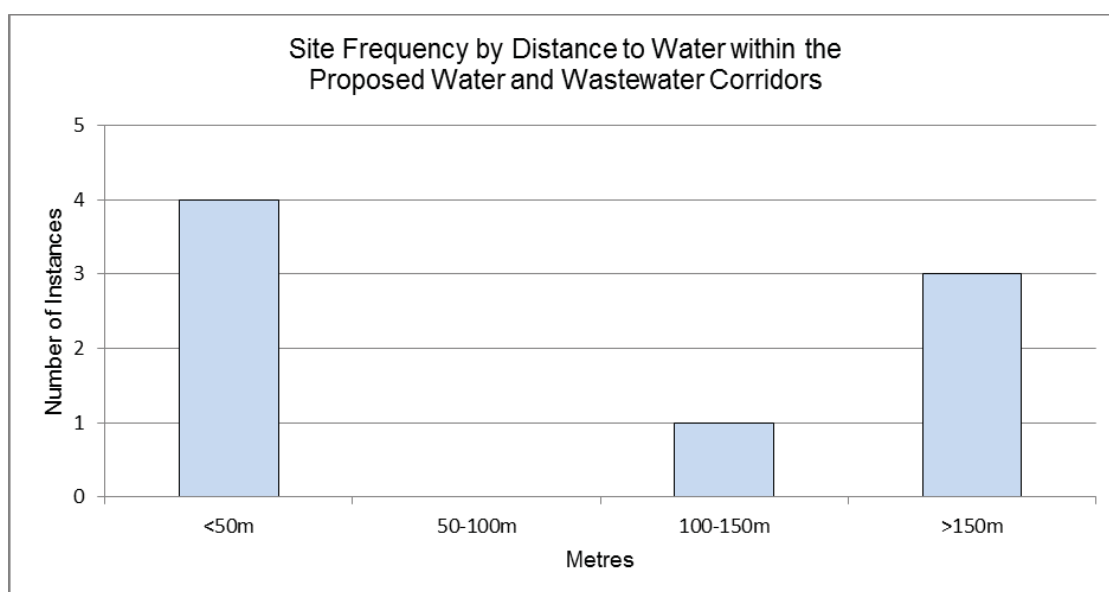


10.3.3 Site distance from water sources

Sites have been located at variable distances from water within the Project Approval Area (Graph 8 and Graph 9). Sites are most commonly located either less than 50m ($n=23$, 46%), or greater than 150m ($n=20$, 40%), from water sources, reflecting the presence of sites located within both alluvial flat and hill slope landforms.



Graph 8: Site frequency by distance from water within the Project Approval Area.



Graph 9: Site frequency by distance from water within the proposed water and wastewater corridors.

10.3.4 Aboriginal Archaeological Site Patterning

In summary, the dominant site type of the archaeological record in the region are artefact scatters and isolated artefacts, reflecting the local site patterns of site distribution across the coastal plain (Lampert 1971; Dallas & Sullivan 1995; Sefton 1980; Navin Officer 2000; AMBS 2006). Higher densities of artefacts and accumulation of shell midden material can be attributed to significant occupation events, or the results of repeated visitation of low intensity activity in an area resulting in the accumulation of numerous artefacts. Lower density sites are generally considered to be single events, one-off site use or artefacts discarded whilst moving through the landscape.

The Project Approval Area would have provided many natural resources for the local Aboriginal inhabitants to exploit. Ethno-historical information indicates that the region was intensively occupied by the Dharawal language group. Tangible evidence of such occupation will be reflected across the landscape in the form of shell middens, open stone artefact sites, isolated artefact occurrences and burial sites.

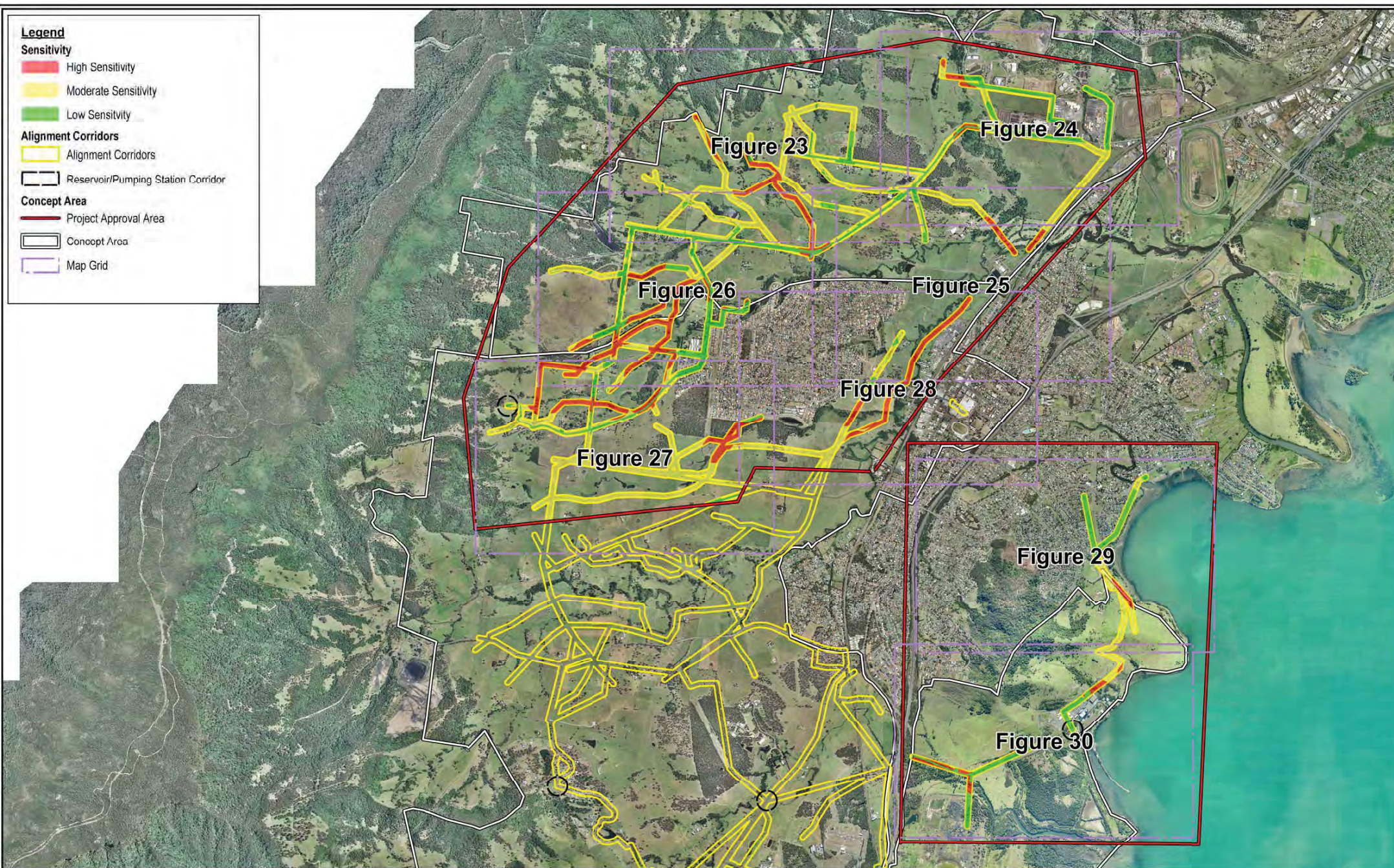
The Project Approval Area is characterised by both the coastal plain landscape and the escarpment foothills, comprising erosional, residual, and alluvial soils landscapes. The depths of erosional and residual soils are generally shallow across ridge lines and associated slopes and therefore subject to erosional processes, resulting in the exposure or movement of archaeological material. Alluvial deposits, however, provide high archaeological potential in regards to the preservation of cultural material, particularly within the Duck Creek and Mullet Creek corridors.

Previous archaeological work has not only focussed on specific development activities but has recognised the archaeological and cultural landscape values of the locality. All of the previous studies provide a general overview of Aboriginal archaeological site modelling and predictive behaviour within the current Project Approval Area. In general, previous archaeological work indicates that areas of archaeological potential will occur where disturbance has been limited, the most likely site type to be encountered will be midden sites and low to moderate density stone artefact occurrences.

11.0 ABORIGINAL ARCHAEOLOGICAL SITE DEFINITIONS AND PREDICTIVE MODEL

A comprehensive Aboriginal archaeological predictive model is provided in Part 1 – Section 7. This predictive model covers both the wider Concept Area, thereby incorporating both the Project Approval Area and the proposed water and wastewater corridors. As a result, the predictive model is not reproduced here.

Areas of archaeological potential identified through the predictive model are shown in Figure 22 through to Figure 30.



Legend

Sensitivity

- High Sensitivity
- Moderate Sensitivity
- Low Sensitivity

Alignment Corridors

- Alignment Corridors
- Reservoir/Pumping Station Corridor

Concept Area

- Project Approval Area
- Concept Area
- Map Grid



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Figure 22: Areas of Archaeological sensitivity within the Project Approval Area - Overview

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0 0.35 0.7 1.05 1.4 1.75
 kilometres

Scale: 1:35,000 at A3
 Map Projection: Transverse Mercator
 Horizontal Datum: Geocentric Datum of Australia 1994
 Grid: Map Grid of Australia, Zone 58


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