



Appendix C:

Flood Assessment Gap Analysis

ADVERTISED PLAN

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To: Sigi Psutka-Jones

From: T. Shimamoto

Company: ARES

SLR Consulting Australia

cc:

Date: 16 December 2024

Project No. 620.041534

**RE: Cobden Battery Energy Storage System (BESS) Phase 1
Flood Assessment Gap Analysis**

Confidentiality

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1.0 Introduction

Australian Renewable Energy Services Pty Ltd (ARES) has engaged SLR Consulting Australia Pty Ltd (SLR) to undertake a flooding assessment gap analysis of the proposed development of a Battery Energy Storage System (BESS) at 89 Cobden-Port Campbell Road at Cobden, VIC. The proposed site is located in the Corangamite Shire in the Curdies River catchment and located towards the upper catchment, approximately 500m from a tributary of Curdies River, which is a perennial river. The proposed site is located approximately 2.5km south west of Cobden town. The project location is shown in **Figure 1**.

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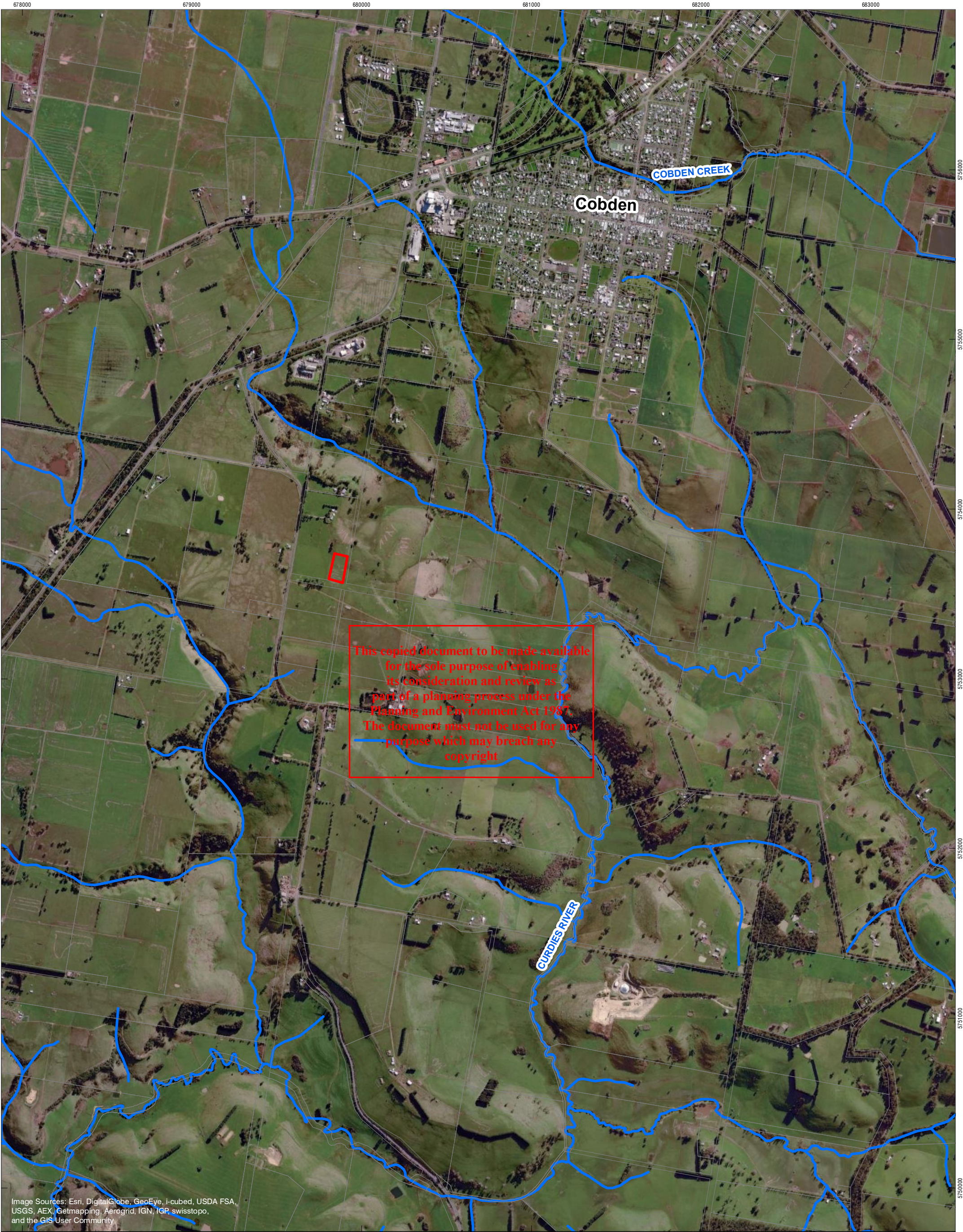


Image Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



0 0.15 0.3 0.6 km

Coordinate System: GDA2020 MGA Zone 54

Scale: 1:20,000 at A3

Project Number: 620.041534

Date: 11-Dec-2024

Drawn by: TS

LEGEND

BESS Location

Cadastre

Watercourses

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**COBDEN BESS
PHASE 1 FLOOD ASSESSMENT GAP ANALYSIS**

SITE LOCATION



FIGURE 1

2.0 Desktop Assessment

The proposed site layout was analysed for any potential flooding constraints, using topographical data obtained from Vicmap™ Elevation DEM 10m.

2.1 Potential Flooding Constraints

The existing level at the site is approximately 134.2 to 136.8 mAHD (refer to **Figure 2**). The river bed east of the site is at approximately 36mAHD, and the bed level of the nearest tributary is approximately 56mAHD. The topography is relatively steep (10 %) between the site and the Curdies River tributary. It is highly unlikely that this site would experience any river flooding from Curdies River or its tributaries.

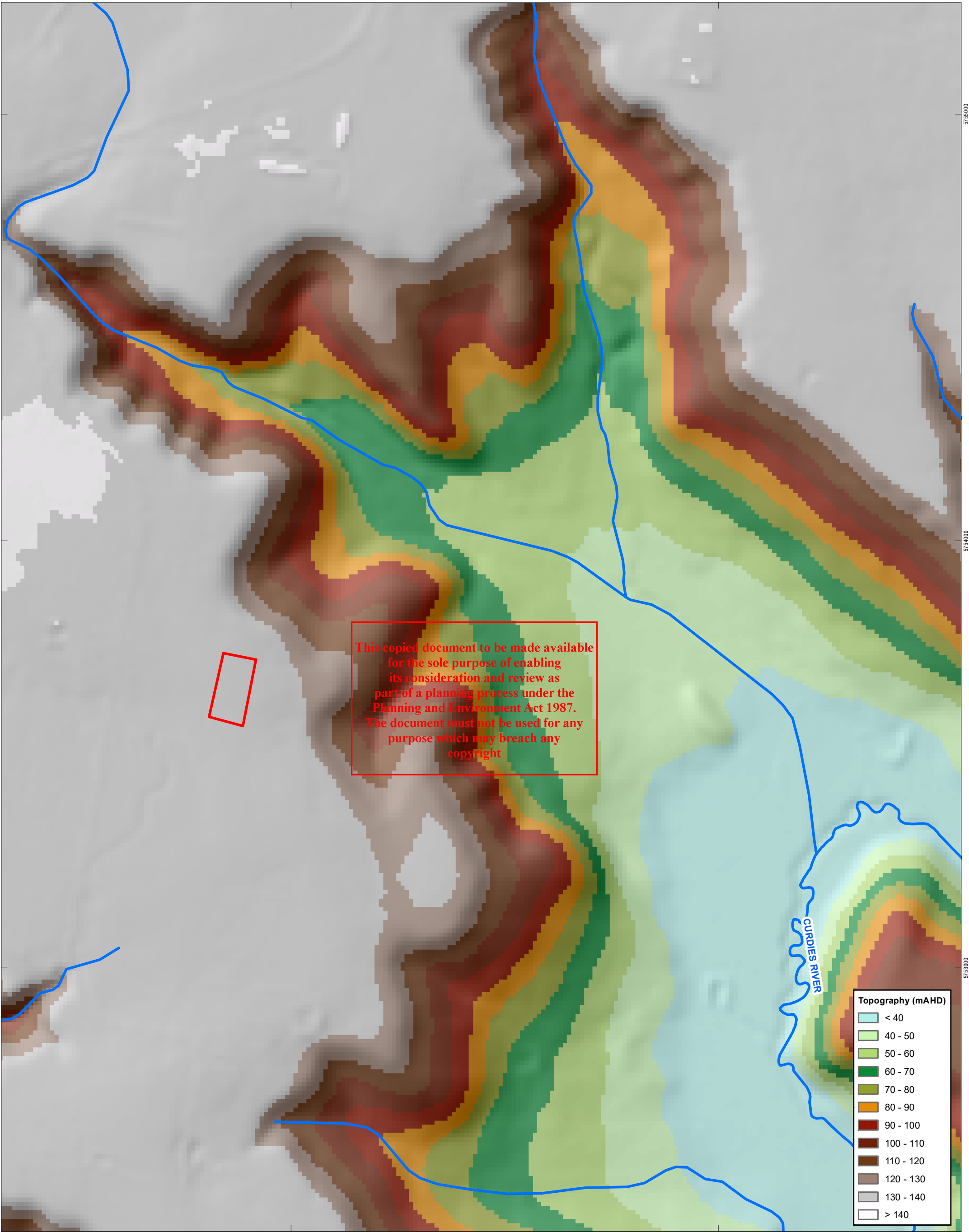
There is higher elevation topography to the north west of the site of up to 146mAHD. The terrain is relatively flat until approximately 135mAHD and steepens towards the Curdies River. There is likely to be some sheet flow from the local catchment but this will flow downstream towards the Curdies River and not likely to affect the site significantly.

There is no information available on the Probable Maximum Flood (PMF) extent.

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0

62.5

125

250

Meters

LEGEND

 BESS Location

 Watercourses

Coordinate System: GDA2020 MGA Zone 54

Scale: 1:8,000 at A3

Project Number: 620.041534

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COBDEN BESS
PHASE 1 FLOOD ASSESSMENT GAP ANALYSIS

SITE TOPOGRAPHY

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FIGURE 2

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3.0 Regulatory Requirements

The floodway overlay (FO) and land subject to inundation (LSIO) overlay are provided on the VicPlan website. These are either waterways, major flow paths, or riverine/coastal areas affected by the 1% Annual Exceedance Probability (AEP) flood or any other area specified by the floodplain management authority. These overlays from the VicPlan website are not located near the proposed site.

Corangamite Shire Council has no additional requirements related to energy storage facilities and flood levels, but the flood immunity AEP is assumed to be at least 1% AEP.

4.0 Conclusions

Based on the topographical information reviewed, due to the proposed site being at a higher elevation than its surroundings, it can be concluded that there is low flood risk to the site. Therefore Phase 2 (baseline flood modelling) and Phase 3 (flood impact assessment) of the flood assessment is not required.

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