

Mamre Road Data Centre Campus
SSD-92743706
706-752 Mamre Road, Kemps Creek
Flood Impact and
Risk Assessment

Plan Project Management

25/11/2025

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1. Introduction

This Flood Impact and Risk Assessment (FIRA) has been prepared by AT&L on behalf of Plan Project Management in support of a State Significant Development Application ([SSD-92743706](#)) for the proposed development of the **Mamre Road Data Centre Campus** located at 706-752 and 754-786 Mamre Road, 1-23 Aldington Road, Bakers Lane and portions of Mamre Road and Aldington Road, Kemps Creek (the Site).

1.1. Site / Project Area

The Site for the proposed development, 706-752 Mamre Road, Kemps Creek (Lot 10 DP 1280592), constitutes the main development site with areas across shared boundaries to the east and south (described below) utilised to facilitate roadworks and bulk earthworks:

- Gibb Group site to the east known as 1-22 Bakers Lane, Kemps Creek (Lot 40 DP 708347).
- GPT Group site to the south known as 754 Mamre Road, Kemps Creek (Ancillary works (roadworks and bulk earthworks) will also be undertaken on adjoining properties to the south (Lot 180 DP 1290397).

Additionally, power supply lead-in from Sydney-West Substation is proposed as part of the development, which traverses through multiple landholdings.



Figure 1: Site Area (imagery source: nearmap, 10 October 2025)

1.2. Project Description

The site is proposed for development under a State Significant Development Application (SSDA) as a data centre campus comprising:

- Approximately 26 shells across four-storeys data centre buildings (4x four shells and 2x five shells), including six technical office buildings, plus a campus office.

- Incoming and internal electrical substations and associated infrastructure
- Site preparation, including earthworks, stormwater, sewer, roads, and associated infrastructure.

1.3. Scope of this FIRA

This FIRA report has been prepared to document flood risk and flood impact pertaining to the proposed development of the Mamre Road Data Centre Campus. This report outlines:

- Confirmation of compliance of the proposed developments against the controls listed in the *Mamre Road Precinct Development Control Plan 2021*.
- Summary of other relevant planning documents and instruments that apply to the site.
- Summary of the flood model development (hydrology and hydraulics) under pre-development and post-development conditions.
- Assessment of flood impacts relating to the proposed development.

1.4. Key References

This FIRA references several standards and guidelines that prescribe the principles of floodplain risk management relevant to the proposed development:

- [Australian Rainfall and Runoff: A guide to flood estimation](#)
- NSW Government [Flood risk management manual](#)

1.5. Supporting Documentation

The following documentation is referred to throughout and should be read in conjunction with this report:

- a) Civil Drawings (AT&L)
- b) Civil Infrastructure (AT&L, October 2025)
- c) Earthworks Strategy Report (AT&L, October 2025)
- d) Water and Stormwater Management Plan (AT&L, October 2025)
- e) Erosion and Sediment Control Plan (AT&L, October 2025)
- f) Landscape Design package

2. Compliance with SEARs

This report responds to the NSW Planning Secretary’s Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning, Housing and Infrastructure (DPHI) in September 2025. **Table 1** below summaries the infrastructure issues relating to flooding raised in the SEARs and how they have been addressed in this report.

Table 1: Planning Secretary’s Environmental Assessment Requirements addressed in this report

Key Issue listed in the SEARs	Response
Flooding	
<i>A flood impact risk assessment (FIRA) prepared by a suitably qualified engineer in accordance with the Flood risk management guideline LU01 - Flood impact and risk assessment (2023) and section 2.5 of the MRP DCP. The FIRA must:</i>	This FIRA has been prepared in accordance with the NSW Flood Risk Management Manual and Section 2.5 of the Mamre Road Precinct DCP 2021.
<ul style="list-style-type: none"> ▪ <i>identify any flood risk on-site (mainstream and overland) having regard to adopted flood studies, the potential effects of climate change, and any relevant provisions of the NSW Flood Risk Management Manual (2023)</i> 	Assessment of on-site flood risk is outlined in Section 5 .
<ul style="list-style-type: none"> ▪ <i>assess the impacts of the development, including any changes to flood risk on-site or off-site, and detail design solutions and operational procedures to mitigate flood risk where required</i> 	Assessment of flood impact is outlined in Section 5 .
<ul style="list-style-type: none"> ▪ <i>identify flood behaviour, flood constraints and risks on the site and adjoining areas including the potential impacts of climate change for the full range of events up to and including the probable maximum flood (PMF) event, supported by suitable mapping</i> 	Flood behaviour for a range of design storm events, including the 0.2% AEP which has been simulated as a proxy for climate change (potential increase in rainfall intensity), is presented in flood maps contained in Appendix A .
<ul style="list-style-type: none"> ▪ <i>include details of proposed management measures and controls to:</i> <ul style="list-style-type: none"> ▶ <i>effectively address flood constraints to ensure the flood risks to the development and its users are acceptable</i> 	The proposed site grading, stormwater drainage and on-site stormwater detention will effectively manage flood risks.
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▶ <i>manage flood and associated emergency management impacts due to the development on existing communities and individual property owners / occupiers.</i> 	Discussion of flood emergency management is outlined in Section 6 .

3. Objectives and Development Controls

3.1. Mamre Road Precinct DCP 2021

The [Mamre Road Precinct Development Control Plan 2021](#) outlines the objectives and controls that apply to flood prone land within the Mamre Road Precinct. Compliance of the masterplans for the proposed developments against the DCP controls is summarised in **Table 2**.

Table 2: Mamre Road Precinct DCP controls relating to flood prone land

DCP Control	Comment
<p>1) A comprehensive Flood Impact Risk Assessment (FIRA) (prepared by a qualified hydrologist and hydraulic engineer) is to be submitted with development applications on land identified as fully or partially flood affected. The FIRA should utilise Council's existing data and data arising from the Wianamatta (South) Creek Catchment Flood Study to provide an understanding of existing flooding condition and developed conditions consistent with the requirements of the NSW Flood Prone Land Policy and Floodplain Development Manual. The FIRA shall determine:</p> <ul style="list-style-type: none"> ○ Flood behaviour for existing and developed scenarios for the full range of flooding including the 5% Annual Exceedance Probability (AEP), 1% AEP, 0.5% AEP, 0.2% AEP and Probable Maximum Flood (PMF); ○ Flood Function (floodways, flood fringe and flood storage areas); ○ Flood Hazard; and ○ Flood constraints, including evacuation constraints (if applicable). 	<p>This report outlines a comprehensive Flood Impact Risk Assessment (FIRA) for the Mamre Road Data Centre Campus development at 706-752 Mamre Road, Kemps Creek.</p> <p>This FIRA adopts hydrological modelling of pre-development conditions and post-development conditions. A description of the hydrological model setup is presented in Section 4.</p> <p>Floodplain models of pre-development and post-development conditions have been developed based on topographical information and civil design of the sites.</p> <p>The sites are located outside the extent of mainstream flooding of Kemps Creek (a major tributary of Wianamatta-South Creek).</p>
<p>2) The FIRA shall adequately demonstrate to the satisfaction of the consent authority that:</p> <ul style="list-style-type: none"> ○ Development will not increase flood hazard, flood levels or risk to other properties; ○ Development has incorporated measures to manage risk to life from flooding; ○ For development located within the PMF, an Emergency Response Plan is in place; ○ Structures, building materials and stormwater controls are structurally adequate to deal with PMF flow rates and velocities (including potential flood debris); 	<p>Flood level, hazard and impact mapping is presented in Appendix A. A discussion of changes to flood levels and hazard as a result of the proposed developments is discussed further in Section 5.2.</p> <p>Under proposed conditions all flow up to the peak 1% AEP would be conveyed through the Sites without inundating any of the proposed lots.</p> <p>The proposed development sites are located outside the extent of the mainstream (Kemps Creek) PMF.</p> <p>The site are not subject to mainstream PMF flooding from Kemps Creek or Wianamatta-South Creek.</p> <p>The site is partially inundated by overland flows in the local PMF. Any buildings affected by inundation due to the local catchment PMF would be designed to accommodate the force of floodwaters.</p>

DCP Control	Comment
<ul style="list-style-type: none"> ○ <i>Development siting and layout maintains personal safety during the full range of floods and is compatible with the flood constraints and potential risk;</i> ○ <i>The impacts of sea level rise and climate change on flood behaviour has been considered;</i> ○ <i>Development considers Construction of Buildings in Flood Hazard Areas and accompanying handbook developed by the Australian Building Codes Board (2012); and</i> ○ <i>Fencing does not impede the flow of flood waters/overland flow paths.</i> 	<p>The site layout and building finished floor levels have been designed to accommodate several planning, design, engineering and environmental constraints, including flood risk. The proposed Masterplans maintain personal safety and are compatible with flood constraints and potential flood risks.</p> <p>Sea level rise is not a relevant consideration for flooding in the Mamre Road Precinct.</p> <p>The 0.2% AEP design event has been simulated and assessed to estimate the potential increase in 1% AEP flood extent due to climate changed induced increases in rainfall intensity (NB: the 0.2% AEP design rainfall intensities are greater than the 1% AEP design intensities by approximately 20-25%).</p> <p>Detailed design of the buildings within the site will consider the National Construction Code standard.</p> <p>There will be no fencing across overland flow paths within the two development sites.</p>
Flood Constraints	
<p>3) <i>New development in floodways, flood fringe and/or flood storages or in high hazard areas in the 1% AEP flood event considering climate change is not permitted.</i></p>	<p>The site is located outside the extent of mainstream PMF flooding.</p>
<p>4) <i>Development applications are to consider the depth and nature of flood waters, whether the area forms flood storage, the nature and risk posed to the development by flood waters, the velocity of floodwaters and the speed of inundation, and whether the development lies in an area classed as a 'floodway', 'flood fringe area' or 'flood storage area'.</i></p>	<p>Under the developed condition scenario, all flows up to the 0.2% AEP will be conveyed through the site without interacting with any of the built form (warehouses and offices). Flood function has not been mapped for overland flow paths through the sites.</p>
Subdivision	
<p>5) <i>Subdivision of land below the flood planning level will generally not be supported.</i></p>	<p>The entirety of the site is located above the flood planning level of mainstream (Kemps Creek) flooding.</p>
<p>6) <i>Subdivision must comply with Designing safer subdivisions guidance on subdivision design in flood prone areas 2007 (Hawkesbury-Nepean Floodplain Management Steering Committee).</i></p>	<p>This guideline relates to development on the mainstream Hawkesbury-Nepean floodplain and is therefore not considered relevant to the Mamre Road Precinct.</p> <p>The site is located outside the extent of mainstream PMF flooding.</p>
New Development	
<p>7) <i>Finished floor levels shall be at 0.5m above the 1% AEP flood.</i></p>	<p>The proposed stormwater drainage network (major and minor systems) within the Mamre Road Data Centre Campus has been designed to satisfy this requirement.</p>

DCP Control	Comment
<p>8) Flood safe access and emergency egress shall be provided to all new and modified developments consistent with the local flood evacuation plan, in consultation with Council and the State Emergency Services (SES).</p>	<p>The proposed development site is located outside the extent of the mainstream (Kemps Creek) PMF.</p>
<p>Storage of Potential Pollutants</p>	
<p>9) Potential pollutants stored or detained on-site (such as on-site effluent treatment plants, pollutant stores or on-site water treatment facilities) shall be stored above the 1% AEP flood. Details must be provided as part of any development application.</p>	<p>Storage of diesel for emergency power generation in the event of a mains power outage will be stored in above-ground tanks within bunded areas. No other potential pollutants will be stored on the site.</p>
<p>Overland Flow Flooding</p>	
<p>10) Development should not obstruct overland flow paths. Development is required to demonstrate that any overland flow is maintained for the 1% AEP overland flow with consideration for failsafe of flows up to the PMF.</p>	<p>Flood mapping that demonstrates overland flow conveyance will be maintained for storm events up to and including the 1% AEP is presented in Appendix A.</p>
<p>11) Where existing natural streams do not exist, naturalised drainage channels are encouraged to ensure overland flows are safely conveyed via vegetated trunk drainage channels with 1% AEP capacity plus 0.5m freeboard. Any increase in peak flow must be offset using onsite stormwater detention (OSD) basins.</p>	<p>Naturalised trunk drainage channels are proposed adjacent to the future Southern Link Road and proposed Parcels E and F (east of Road 1). Details of the proposed trunk drainage channels are outlined in the Water and Stormwater Management Plan that supports the SSDA for the Mamre Road Data Centre Campus.</p>
<p>12) OSD is to be accommodated on-lot, within the development site, or at the subdivision or estate level, unless otherwise provided at the catchment level to the satisfaction of the relevant consent authority.</p>	<p>On-site stormwater detention basins and tanks have been incorporated into both development sites. Refer to the Water and Stormwater Management Plan (AT&L, 2023) and Civil Drawing packages for both sites for details.</p>
<p>13) Stormwater basins are to be located above the 1% AEP.</p>	<p>All proposed OSD basins and tanks will be located outside the extent of mainstream flooding of Kemps Creek.</p>
<p>14) Post-development flow rates from development sites are to be the same or less than predevelopment flow rates for the 50% to 1% AEP events.</p>	<p>OSD has been sized to demonstrate compliance with this objective. Refer to the Water and Stormwater Management Plan (AT&L, 2023) and Civil Drawing packages for both sites for details.</p>
<p>15) OSD must be sized to ensure no increase in 50% and 1% AEP peak storm flows at the Precinct boundary or at Mamre Road culverts. OSD design shall compensate for any local roads and/or areas within the development site that does not drain to OSD.</p>	<p>Refer to the Water and Stormwater Management Plans and Civil Drawing packages that demonstrate no increase in peak flows for all storm events between and including the 50% AEP and 1% AEP.</p>
<p>Filling of Land At or Below the Flood Planning Level</p>	
<p>16) Earthworks up to the PMF must meet the requirements of Clauses 33H and 33J of the WSEA SEPP as well as Sections 2.5 and 4.4 of this DCP.</p>	<p>The development site is located above the level of the mainstream (Kemps Creek) PMF and therefore there will be no filling within the extent of the mainstream PMF.</p>

DCP Control	Comment
<p><i>17) Filling of floodways and/or critical flood storage areas in the 1% AEP flood will not be permitted. Filling of other land at or below the 1% AEP is also discouraged, but will be considered in exceptional circumstances where:</i></p> <ul style="list-style-type: none"> <i>o The below criteria have been addressed in detail in the supporting FIRA;</i> <i>The purpose for which the filling is to be undertaken is adequately justified;</i> <i>o Flood levels are not increased by more than 10mm on surrounding properties;</i> <i>o Downstream velocities are not increased by more than 10%;</i> <i>o Flows are not redistributed by more than 15%;</i> <i>o The cumulative effects of filling proposals is fully assessed over the floodplain;</i> <i>o There are alternative opportunities for flood storage;</i> <i>o The development potential of surrounding properties is not adversely affected;</i> <i>o The flood liability of buildings on surrounding properties is not increased;</i> <i>o No local drainage flow/runoff problems are created; and</i> <i>o The filling does not occur within the drip line of existing trees.</i> 	<p>The development site is located outside the extent of mainstream floodways and critical flood storage areas.</p>

3.2. Mamre Road Flood, Riparian Corridor and Integrated Water Cycle Management Strategy

To support the rezoning of the Mamre Road Precinct, Sydney Water developed the [Mamre Road Flood, Riparian Corridor and Integrated Water Cycle Management Strategy](#) (FRCIWCM) (August 2021). The Strategy outlines how stormwater, potable water, wastewater, recycled water, trunk drainage and riparian zones should be managed to achieve the Western Parkland City vision and objectives as they relate to development of the Mamre Road Precinct. In terms of flood planning the FRCIWCM Strategy considers:

- Compatibility of the proposed land use with flood risk.
- Effectiveness and consistency of flood management approaches across the catchment.
- Allocation of sufficient land for stormwater, riparian habitats and flood management on private lots and in the public domain.

Flood mapping showing the peak 1% AEP flood extent, depth and provisional hazard presented in the FRCIWCM are reproduced below as **Figure 2** and **Figure 3**.

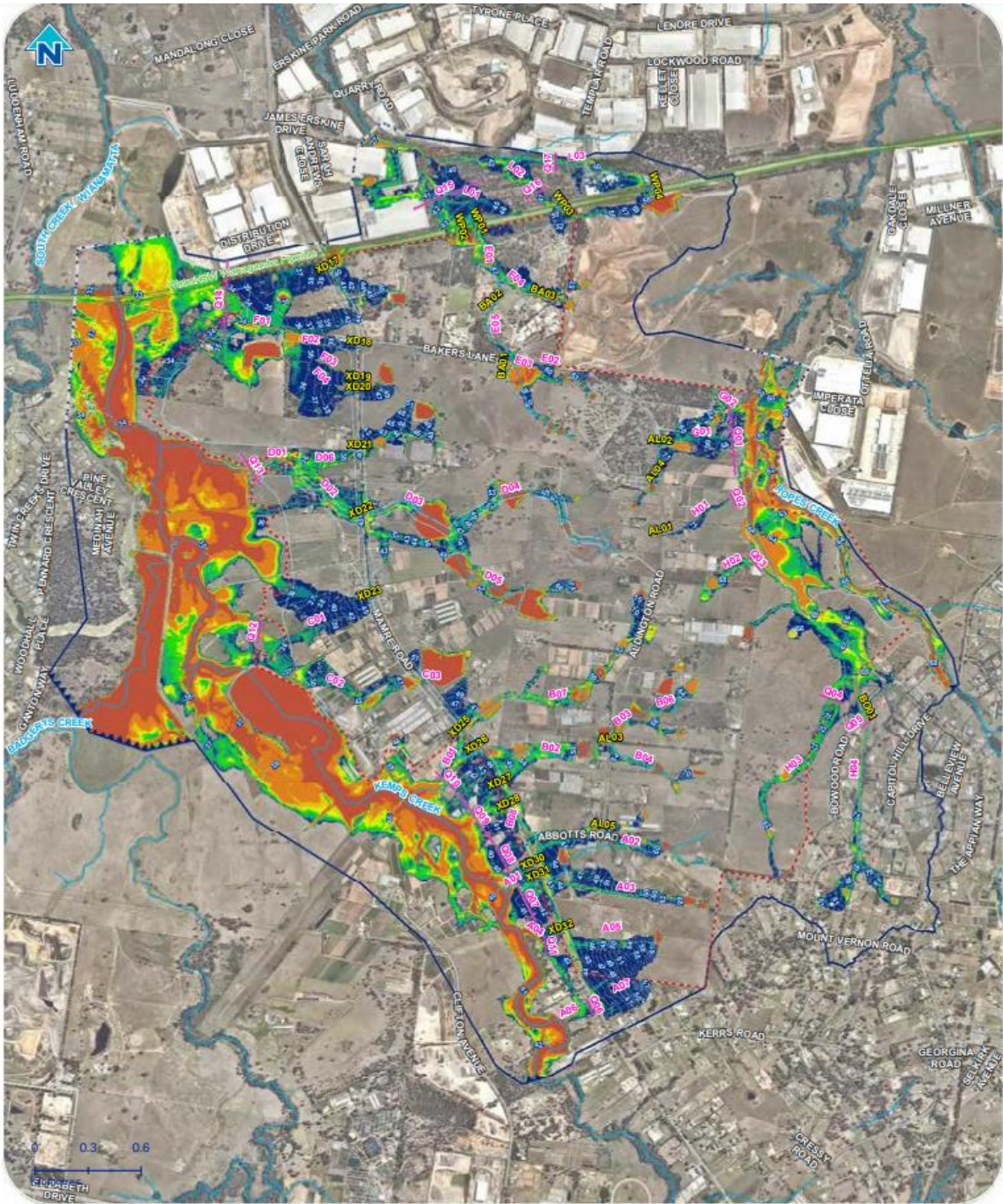


FIGURE A-10 FLOOD DEPTH - 1% AEP - EXISTING CONDITIONS

LEGEND

- Mamre Road Precinct
- Hydraulic Model Boundary
- Modelled Pipes
- Inflow Boundary
- Outflow Boundary
- Watercourse
- Cadastre
- Proposed Zoning Boundary
- X01- Reporting Location
- 1m Flood Level Contour (mAHD)

Depth (m)	
	<math><0.05</math>
	0.05 - 0.1
	0.1 - 0.2
	0.2 - 0.3
	0.3 - 0.4
	0.4 - 0.5
	0.5 - 1
	>1

NOTE - ONLY 1% AEP FLOODING IS SHOWN IN LOCAL CATCHMENTS
1% AEP IS NOT SHOWN IN SOUTH, KEMPS OR SOUTH CREEK



Map is indicative only and not to scale
Imagery © Nearmap, 2020.
Sydney Water does not guarantee accuracy, completeness or currency of this spatial information



Figure 2: 1% AEP Flood Depth – Pre-development conditions (Sydney Water, 2021)

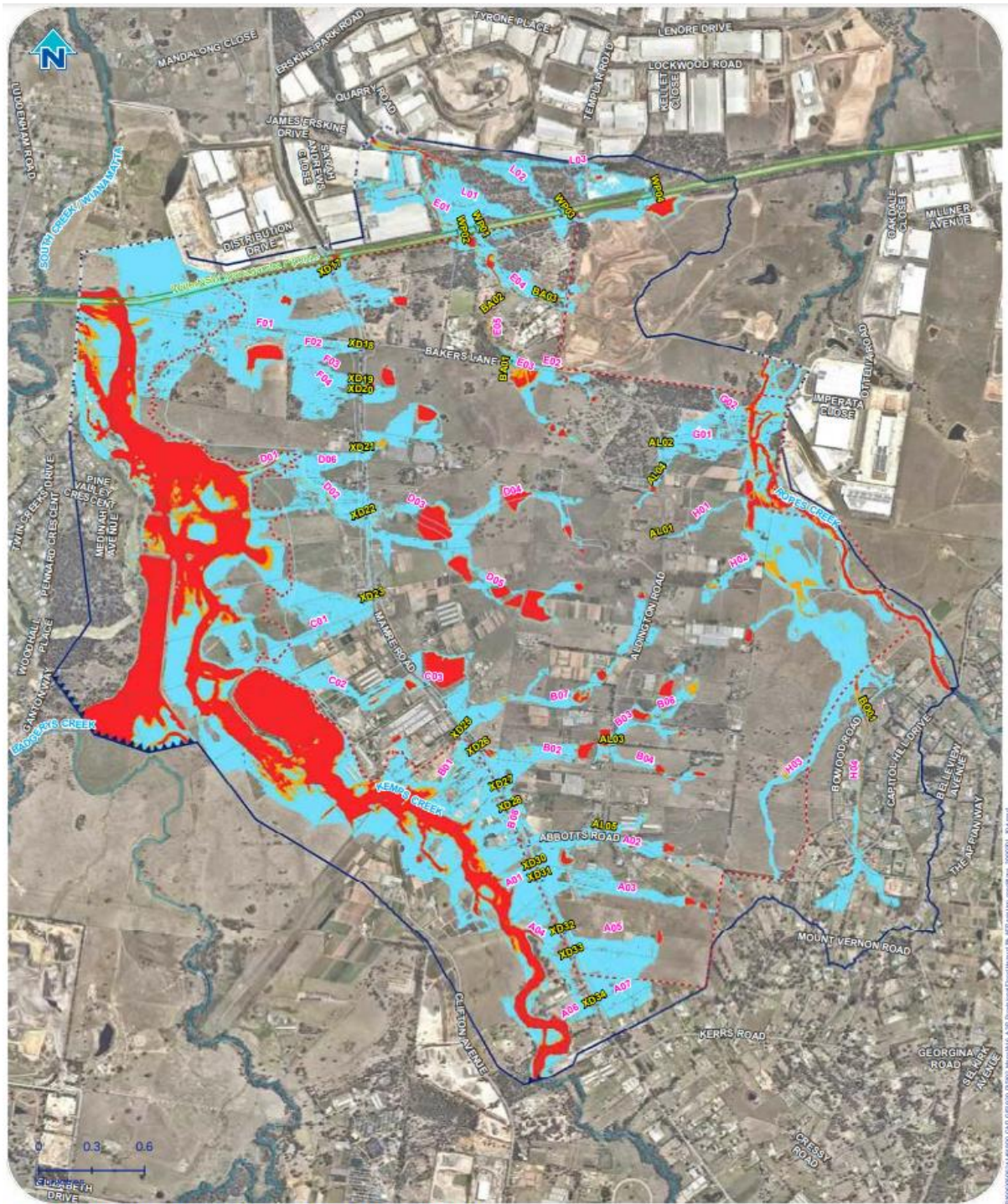


FIGURE A-16 PROVISIONAL FLOOD HAZARD - 1% AEP - EXISTING CONDITIONS

LEGEND

- - - Mamre Road Precinct
- ▲▲▲ Inflow Boundary
- X01 Modelled Pipes
- Watercourse
- - - Outflow Boundary
- Hydraulic Model Boundary
- Proposed Zoning Boundary
- Cadastre

Provisional Flood Hazard

- Low
- Intermediate
- High
- X01 Reporting Location

Sydney WATER

NOTE - ONLY 1% AEP FLOODING IS SHOWN IN LOCAL CATCHMENTS 1% AEP IS NOT SHOWN IN SOUTH, KEMPS OR SOUTH CREEK



Map is indicative only and not to scale
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Figure 3: 1% AEP Provisional Hazard – Pre-development conditions (Sydney Water, 2021)

3.3. Penrith LEP and DCP

The Penrith Local Environmental Plan (LEP) imposes standards to control development, or implements a state or local policy outcome. [Clause 5.21 \(Flood planning\) in the Penrith LEP](#) states that development consent must not be granted to land within the flood planning area. The LEP includes mapping defining the flood planning area, which is reproduced below as **Figure 4**. The Mamre Road Data Centre Campus is located outside the extent of the Flood planning area defined in the Penrith LEP.

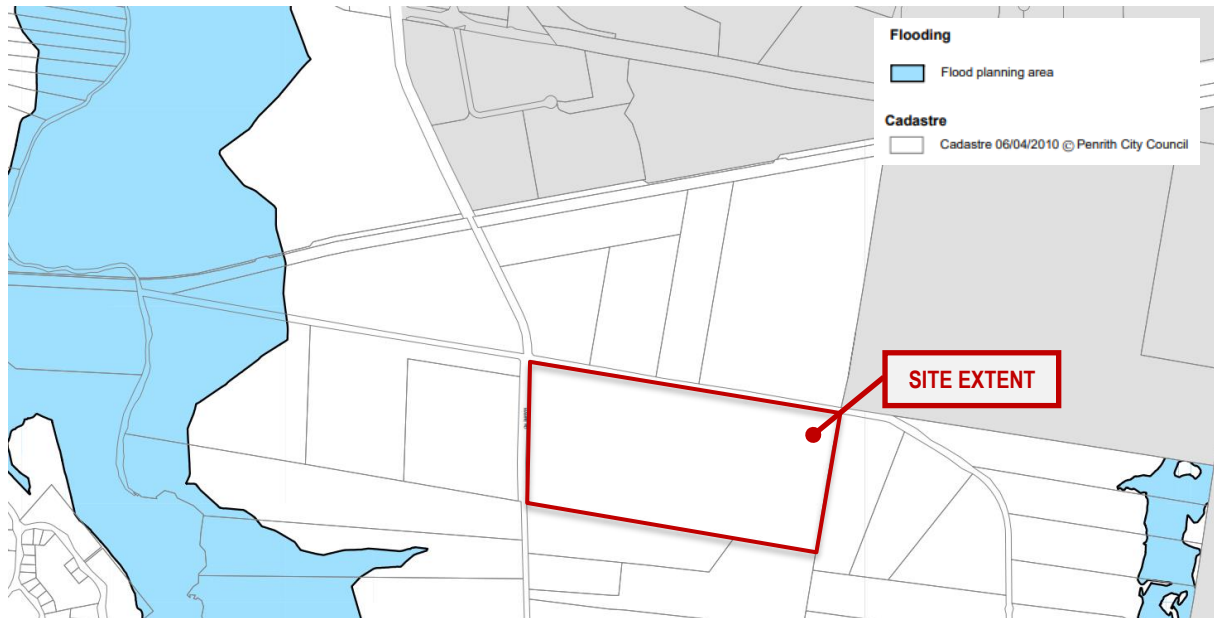


Figure 4: Extract of Penrith LEP 2010 Flood Planning Map

4. Hydraulic model setup

4.1. Overview

A TUFLOW model has been setup and analysed for two scenarios:

- **Existing conditions**, with the site assessed as undeveloped. This scenario incorporates recent changes to the catchment, including:
 - ▶ Subdivision and development works at The Yards estate (657-769 Mamre Road), located on the western side of Mamre Road and directly opposite the site.
 - ▶ Stage 1A upgrade of Mamre Road, including intersection works at Bakers Lane.
- **Developed conditions**, with the revised existing conditions model as the basis and including the extent of proposed development works within the site, including:
 - ▶ Bulk earthworks to facilitate development of the site.
 - ▶ Estate Road 01 (north-south) and Road 02 (east-west), including stormwater drainage.
 - ▶ A naturalised trunk drainage channel adjacent to proposed Parcels E and F and the future Southern Link Road.

The TUFLOW model has been simulated and assessed for the following design storm events:

- 5% AEP (design storm event for 'minor' system drainage, including stormwater pits and pipe in public road reserve)
- 1% AEP (Defined Flood Event, and design storm event for 'major' system drainage, including overland flow paths within public roads and naturalised trunk drainage channel).
- 0.2% AEP (adopted as a proxy to assess the potential impact of climate change on flood producing rainfall events, i.e., a potential increase in rainfall intensity).
- Probable Maximum Flood (PMF) event.

Assessment of mainstream flooding of Kemps Creek / South Creek has not been undertaken as the development site is not prone to mainstream flooding.

4.2. Catchment hydrology

Catchment hydrology has been modelled using a combination of ILSAX and RAFTS models within the DRAINS software package. An ensemble of storm durations and temporal patterns was modelled in DRAINS to determine the critical storm durations at the points of discharge from the site. Modelling assumptions are outlined below:

- Intensity Frequency Duration (IFD) data and pre-burst rainfall depths were derived from the Bureau of Meteorology Datahub in accordance with ARR2019.
- The Probable Maximum Precipitation (PMP) intensities and temporal distribution were determined using the Bureau of Meteorology *Generalised Short Duration Method* (1994).
- Sub-catchment delineation and flow paths have been determined from LIDAR data and survey information. Sub-catchment impervious areas were derived from a combination of Google Street Maps and Nearmap aerial imagery (2025).
- For undeveloped catchments, the RAFTS storage routing model has been adopted to estimate peak flows for the range of design storm events assessed. The initial and continuing loss values are consistent with guidance provided by Sydney Water as follows:
 - ▶ Impervious area initial loss = 1mm
 - ▶ Impervious area continuing loss = 0
 - ▶ Pervious area initial loss = 41mm

- ▶ Pervious area continuing loss = 2.3mm/hr
- For developed catchments, the ILSAX hydrological model has been adopted to estimate peak flows for the range of design storm events assessed. ILSAX model parameters are consistent with the values adopted in the Western Sydney Engineering Design Manual as follows:
 - ▶ Paved (impervious) area depression storage: 1mm
 - ▶ Supplementary area depression storage: 1mm
 - ▶ Grassed (pervious) area depression storage: 5mm
 - ▶ Soil type: 3

The resultant critical storm durations for the range of design events modelled is summarised in **Table 3**.

Table 3: Critical storm durations

Design Storm Event	Critical storm duration (minutes) – Existing condition	Critical storm duration (minutes) – Developed condition	
		Western catchment	Eastern catchment
5% AEP	20	20	120
1% AEP	20	20	120
0.2% AEP	20	20	45
PMF	15	15	45

4.3. Terrain data

The 3D surface for existing and developed conditions was generated from a combination of:

- LiDAR Data of the existing topography surrounding the site and catchment area from ICSM (2019).
- Detailed topographic survey covering the extent of Mamre Road adjacent to the site.
- A design surface of The Yards development at 657-769 Mamre Road (provided by Costin Roe). It is noted that this surface does not represent as-construction conditions but is considered reasonably representative of the developed topography of The Yards site.
- Design surface of the Stage 1A upgrade works at Mamre Road, including intersection works at Bakers Lane (provided by MU Group). It is noted that this surface does not represent as-construction conditions but is considered reasonably representative of the developed topography of Mamre Road.
- Subdivision and civil works design surface developed by AT&L, consistent with the Civil Works package of drawings.

The existing conditions model was modified as follows to simulate the proposed developed conditions:

- The 2.0 m topographic grid was updated to include the proposed site digital elevation model as depicted in the Civil Works package documented by AT&L.
- Inclusion of the proposed box culverts under the future Southern Link Road (3 x 750 x 750) between the naturalised trunk drainage channel and the southern side of Bakers Lane.
- Mannings roughness values were updated to represent the design surface.
- Inflow hydrographs were updated to represent the design catchments.

4.4. Model boundary conditions

The hydraulic model domain and boundary condition has been adopted to cover up to the Warragamba Pipelines in the north and Gudyung Close (within The Yards) to the west.

4.5. Channel and floodplain roughness

A summary of the adopted surface roughness values is presented in **Table 4**.

Table 4: Mannings n roughness values

Surface Type	Manning's Roughness Value
Paved roads	0.020
Rural Residential lot areas	0.040
Industrial/commercial	0.035
Ponds	0.030
Graded Soil	0.030
Pasture, moderate vegetation	0.050
Medium density vegetation	0.060
Thick Vegetation	0.100
Naturalised trunk drainage channel, advised by Sydney Water	0.080
Residential Low Density	0.100
Buildings	3.000

4.6. Model validation

Model validation has been undertaken by comparing results of the TUFLOW modelling against the results contained in the *Mamre Road Flood, Riparian Corridor and Integrated Water Cycle Management Strategy* (FRCIWCM) (Sydney Water, August 2021). The process for the validation was as follows:

- Establish hydrology, peak flows and hydrographs at critical inflow locations for the four modelled events.
- Establish TUFLOW model using defined parameters for channel and floodplain roughness and downstream boundary condition.
- Compare results of TUFLOW modelling with the Sydney Water (August 2021) mapped flood levels and extents.

The comparison of the flood levels and extents between the modelling developed by AT&L and the Sydney Water flood maps generally shows good alignment and consistency. The predicted flood extent in the 5% AEP, 1% AEP and the 0.2% AEP is consistent between the two models (noting the Sydney Water FRCIWCM report did not include PMF model outputs).

Given the differences between this Assessment and the Sydney Water FRCIWCM in terms of modelling techniques, parameters, estimated model accuracy and model components (in particular, base topography west of Mamre Road) these differences between the model results documented in this Addendum and the Sydney Water FRCIWCM report are considered acceptable for the base model and for continuation of post-developed scenario modelling.

5. Flood Assessment

Mapping of TUFLOW model results for peak water level, depth, hazard and afflux for the 5% AEP, 1% AEP, 0.2% AEP and PMF events is included in Attachment A.

5.1. Existing conditions

The TUFLOW model results indicate shallow sheet flow flooding from the site towards Mamre Road and Bakers Lane, which is generally within the H1 hazard category for events up to and including the 0.2% AEP.

The model results indicate flooding towards the intersection of Mamre Road and Bakers Lane, however it is noted that stormwater drainage elements that have been included in the recent intersection upgrade works have not been incorporated into the existing or developed conditions model. It is therefore likely that the extent of flooding shown in the mapping would not represent the peak flood extents based on the capacity of the recently installed stormwater drainage elements.

5.2. Developed conditions

The TUFLOW model results present the extent of flooding outside the site, as well as within the proposed trunk drainage channel between Parcels E and F and the future Southern Link Road. It is noted that apart from the naturalised trunk drainage channel adjacent to Parcels E and F, overland flow within the development site has not been represented in the TUFLOW model domain, but will be considered as part of the detailed design of the estate road network and campus-wide drainage system to ensure design criteria for gutter flow width and ponding depth are satisfied.

The 1% AEP flood level difference map included in **Attachment A** demonstrates that in Developed conditions, peak flood extents will be generally less than existing conditions outside the site. Exceptions to this include localised increases in the drainage channel north of Bakers Lane (which is contained within a heavily vegetated portion of the property at 61-109 Bakers Lane (containing Trinity Catholic Primary School and Emmaus Catholic College). We note that this land is likely to be redeveloped in future as it is largely zoned IN1 General Industrial and significant portions of the property have been allocated for future regional stormwater infrastructure as per Sydney Water's *Mamre Road Precinct Stormwater Scheme Plan* (most recently updated May 2024).

Overall, the TUFLOW modelling described in this FIRA indicate negligible adverse impacts on flood levels downstream of the Mamre Road Data Centre Campus. Ultimately, works beyond the extent of the site will further alter flow patterns and will improve the conveyance of surface water runoff within the Mamre Road Precinct. These works will include:

- Development of the Yiribana Logistics Estate to the south of the Mamre Road Data Centre Campus (NB: development consent was granted in September 2023 and construction is in progress).
- Upgrade of Mamre Road to six lanes (three northbound and three southbound). It is understood that these works could commence as soon as 2026.
- Development of the Yiribana West site (south of The Yards), which will incorporate an 18 metre wide naturalised trunk drainage channel adjacent to the southern boundary of The Yards.

6. Flood Emergency Response

The results of TUFLOW modelling indicate that the local catchment PMF is likely to cause inundation of the eastern part of the site (Parcels E and F) due to proposed run-on from the external catchments east of the site. It is noted that this land forms part of the proposed development by Gibb Group, and as part of those works the land would be re-graded and drainage installed such that the flood behaviour in events exceeding the 1% AEP and up to the PMF would change. Any changes would be subject to assessment as part of the DA / SSDA approval for the 1-51 Aldington Road Estate.

Due to the rapid response time between the onset of a storm event and potential inundation of the Mamre Road Data Centre Campus, off-site evacuation may not be practical and may pose a greater risk to occupants than sheltering in place. Given the nature of the proposed development, being four-storey data centre buildings and a three-storey Central Operation and Support Hub Building (all of which will have the second storey being located above the level of the PMF), shelter in place is considered a reasonable emergency management response strategy to cater for the safety of occupants, clients and visitors.

Prior to occupation and operation of the proposed data centre, a site specific Flood Emergency Response Plan (FERP) will be prepared to address emergency management considerations applicable to the operation of the Data Centre Campus for a range of flood events up to the PMF. As a minimum, the FERP will address the following:

- Time of onset of flooding from the local catchment and available warning time.
- Period of isolation in the event of inundation due to the PMF.
- Evacuation capability (number of people to be evacuated, time and location of evacuation)
- Compatibility with any existing emergency management strategies, including the Penrith City Local Flood Plan (NSW SES, February 2022).
- Vulnerability of occupants, clients and visitors (including persons with impaired mobility).
- Suitability of flood-free location for sheltering (second storey office spaces).
- Availability of services for the period of isolation.
- Structural adequacy and building requirements.

7. Conclusion

Based on the assessment of flood risk and flood impact documented in this report, the proposed development of the Mamre Road Data Centre Campus at 706-752 Mamre Road, Kemps Creek satisfies the relevant objectives and controls for flood prone land outlined in Section 2.5 of the Mamre Road Precinct DCP. With measures to convey and attenuate surface water runoff within the development site, the site is appropriate for development as per the proposed Master Plan for which consent is being sought under SSD-92743706.

Appendix A – Flood Assessment Mapping



Level 10, 124 Walker St
 North Sydney, NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Client:
PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Existing Scenario
 5% AEP Event
 Flood Depth**



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-E-020-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

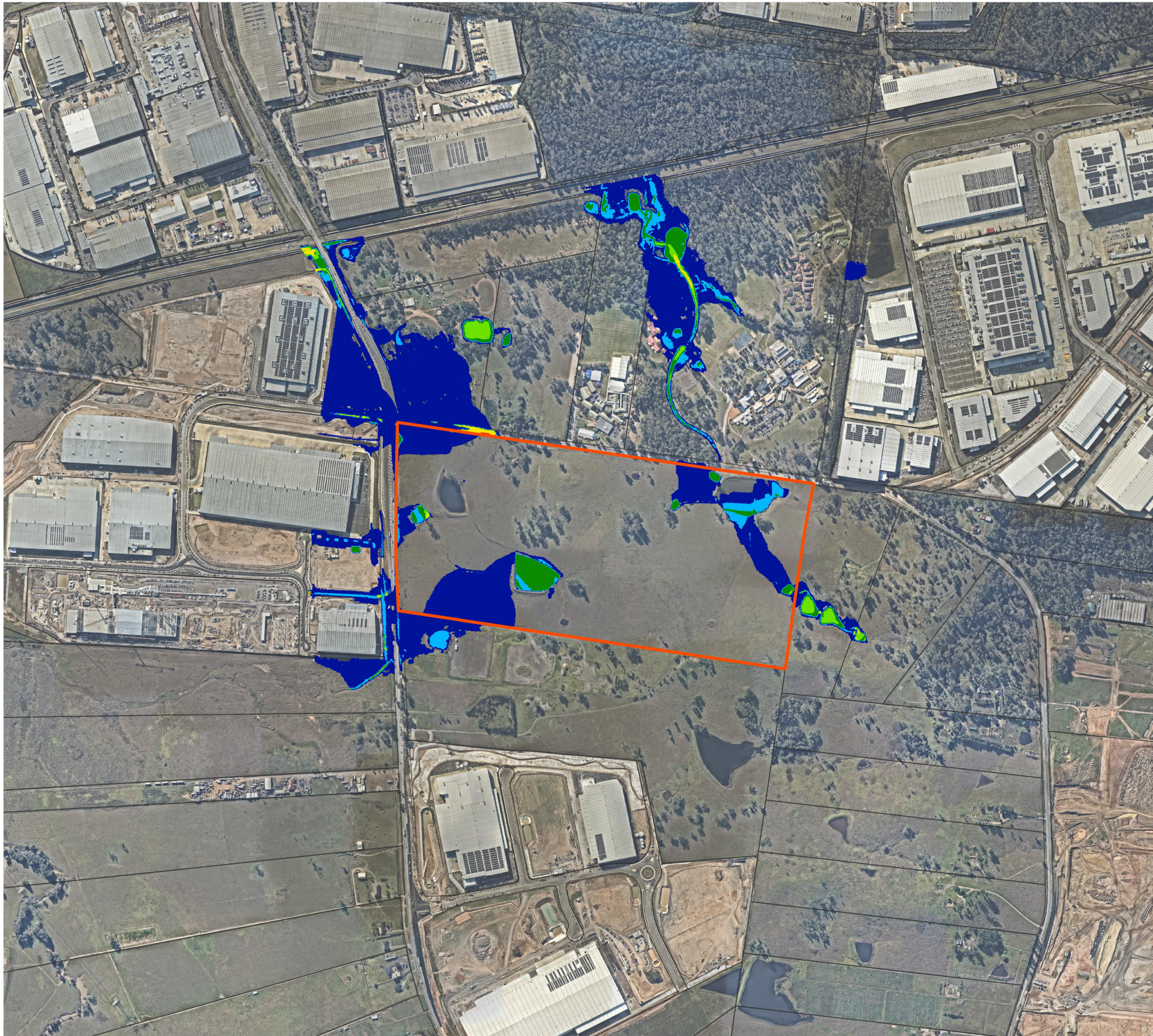
Legend

— FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

Band 1 (Gray)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00



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Client:
PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Existing Scenario
 5% AEP Event
 Flood Hazard**

Scale at A3

 1:10,000 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk
 Management Guide FB03 thresholds

Drawing Name:
25-1282-E-020-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

- Legend**
- FLOOD HAZARD
 Band 1 (Gray)
- <= 0
 - H1
 - H2
 - H3
 - H4
 - H5
 - H6

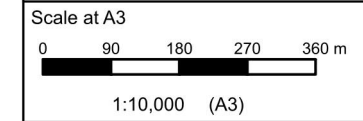


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Existing Scenario
 1% AEP Event
 Flood Depth**



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-E-100-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

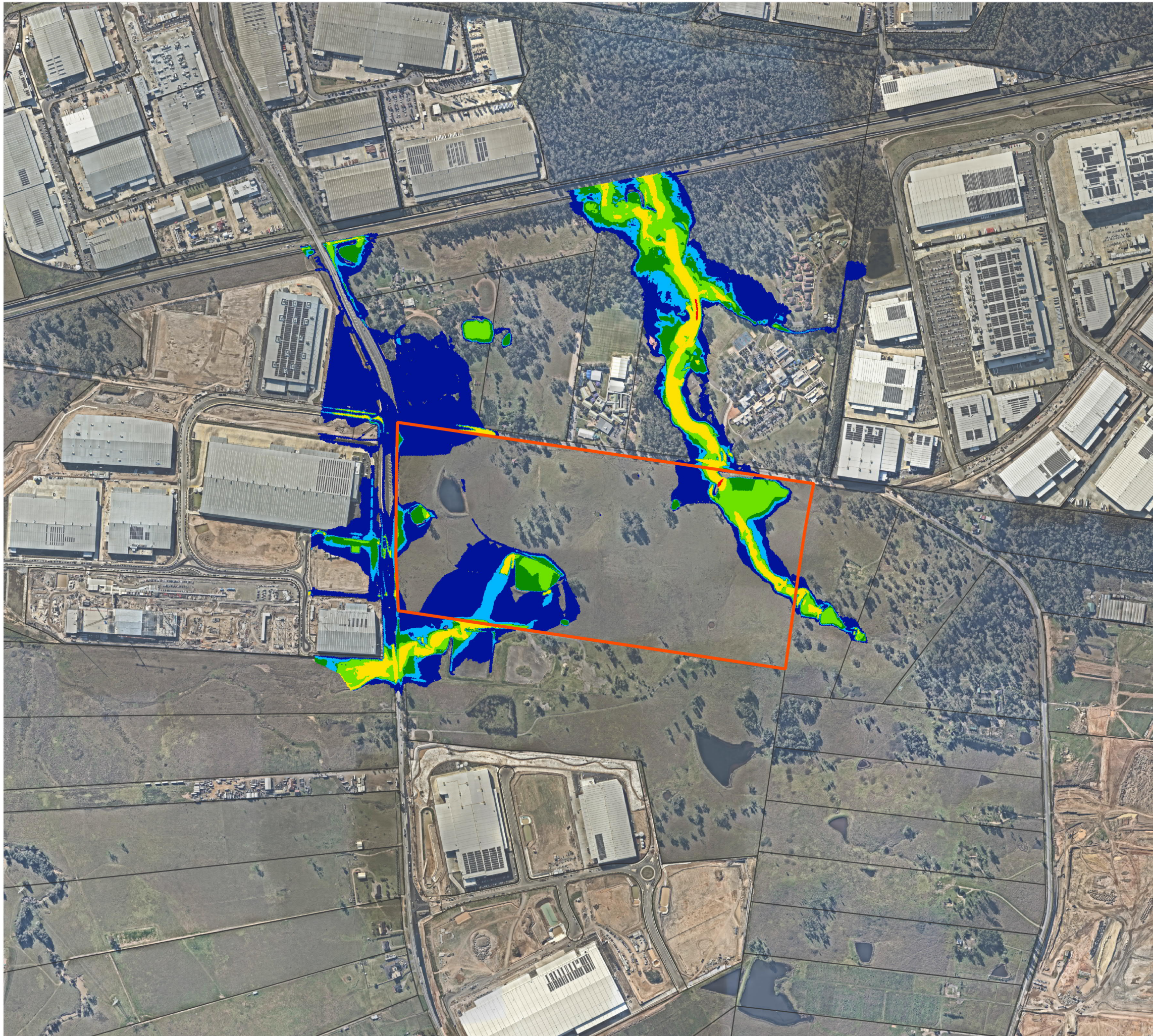
Legend

— FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

Band 1 (Gray)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00

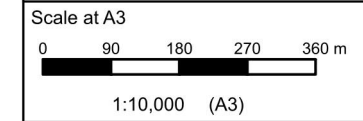


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Drawing Title:
**Existing Scenario
 1% AEP Event
 Flood Hazard**



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk
 Management Guide FB03 thresholds

Drawing Name:
25-1282-E-100-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

- Legend**
- FLOOD HAZARD
- Band 1 (Gray)
- <= 0
 - H1
 - H2
 - H3
 - H4
 - H5
 - H6

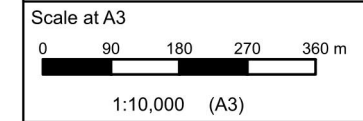


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Existing Scenario
 0.2% AEP Event
 Flood Depth**



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-E-500-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

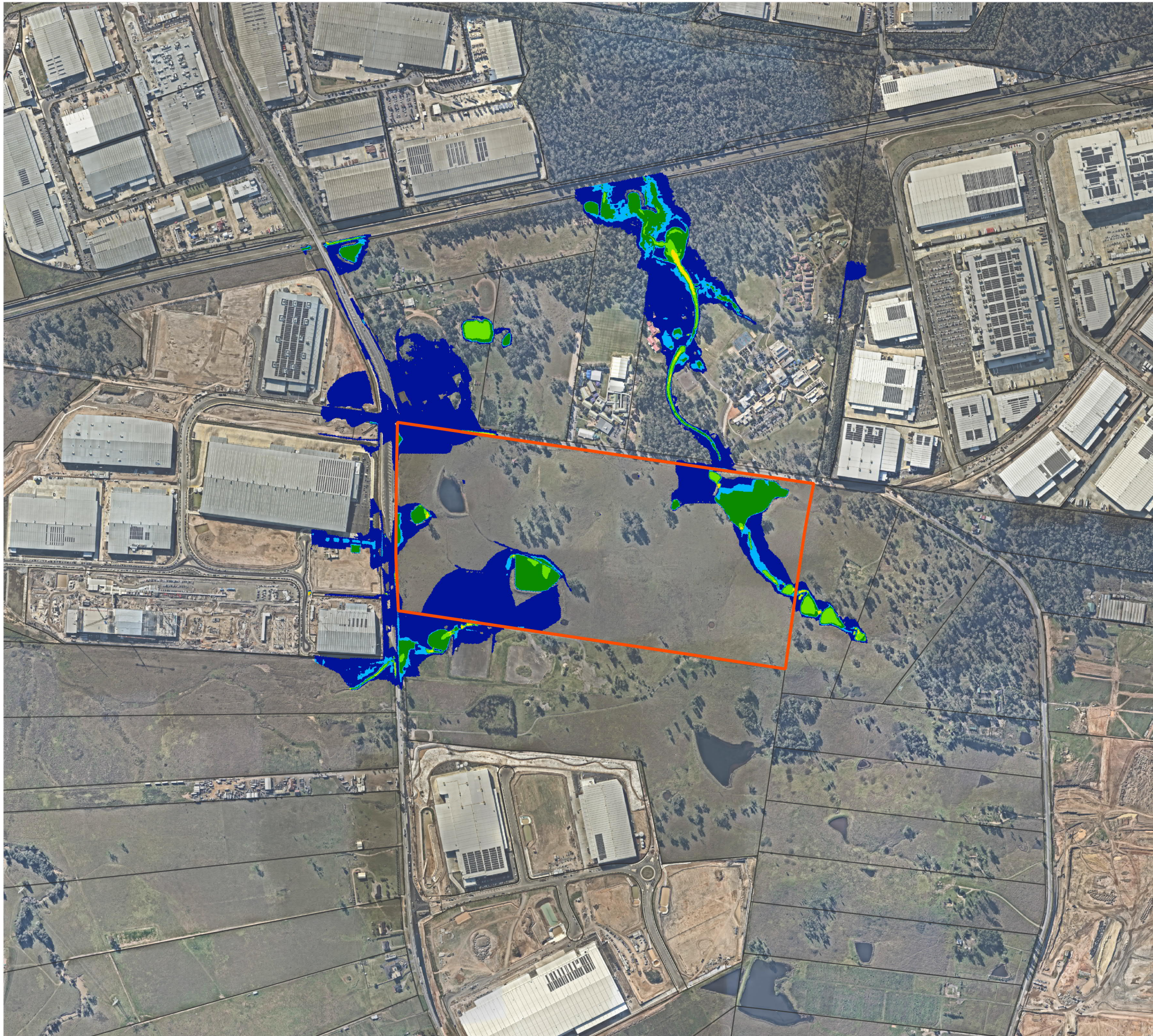
Legend

— FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

Band 1 (Gray)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00

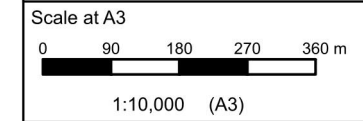


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Existing Scenario
 0.2% AEP Event
 Flood Hazard**



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk
 Management Guide FB03 thresholds

Drawing Name:
25-1282-E-500-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

FLOOD HAZARD

Band 1 (Gray)

	<= 0
	H1
	H2
	H3
	H4
	H5
	H6

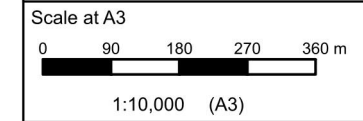


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 5% AEP Event
 Flood Depth**



Status: DRAFT FOR SSSA

Drawing Name:
25-1282-D-020-A

Issue:
A

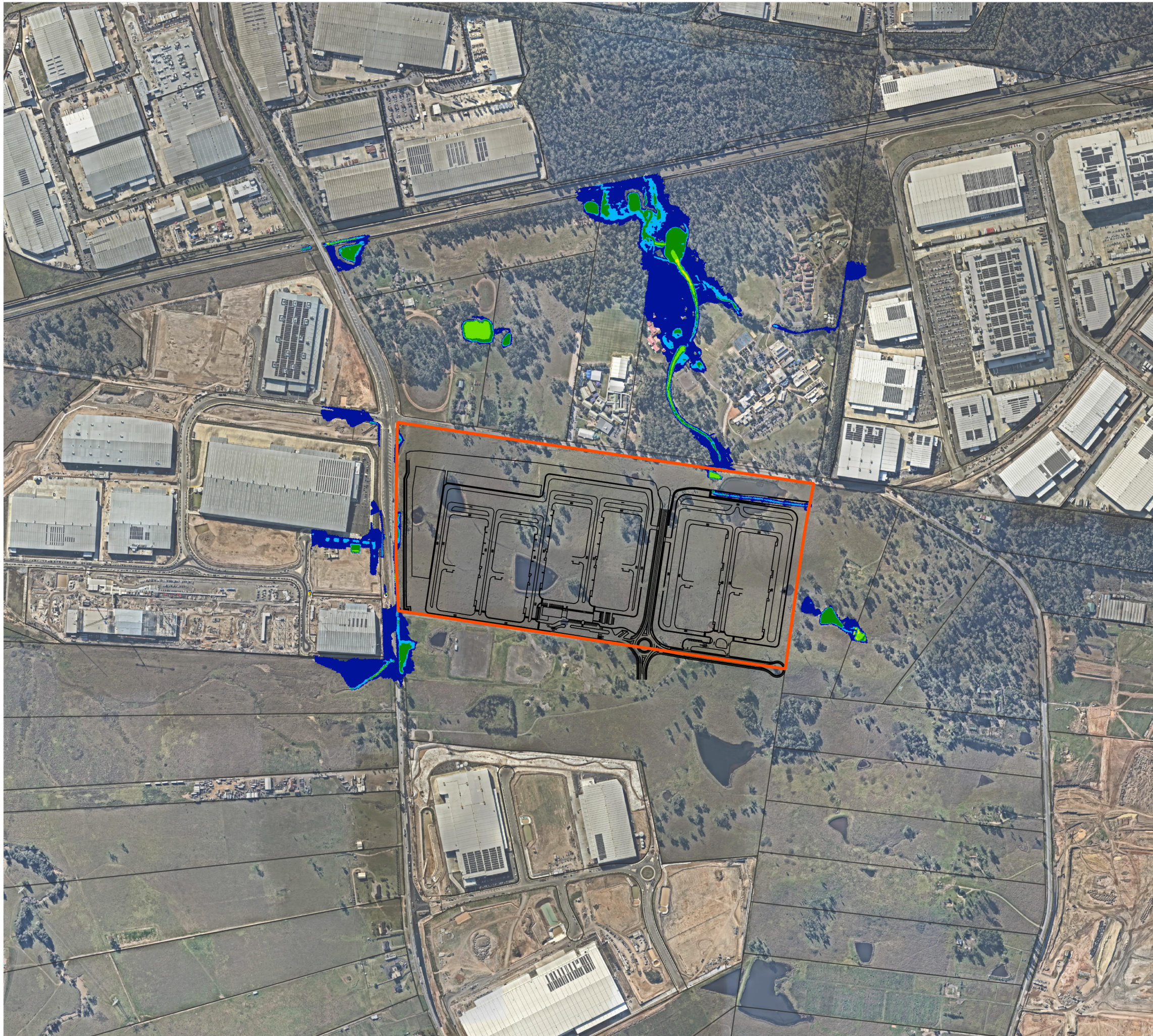
Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- Band 1 (Gray)
- 0.00 to 0.25
 - 0.25 to 0.50
 - 0.50 to 0.75
 - 0.75 to 1.00
 - 1.00 to 1.25
 - 1.25 to 1.50
 - 1.50 to 1.75
 - 1.75 to 2.00
 - > 2.00



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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 5% AEP Event
 Flood Hazard**

Scale at A3

 1:10,000 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk Management Guide FB03 thresholds

Drawing Name:
25-1282-D-020-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD HAZARD

Band 1 (Gray)

- <= 0
- H1
- H2
- H3
- H4
- H5
- H6

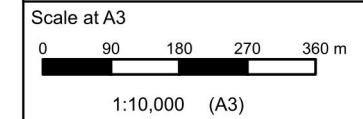


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Depth**



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-100-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- Band 1 (Gray)
- 0.00 to 0.25
 - 0.25 to 0.50
 - 0.50 to 0.75
 - 0.75 to 1.00
 - 1.00 to 1.25
 - 1.25 to 1.50
 - 1.50 to 1.75
 - 1.75 to 2.00
 - > 2.00



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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Hazard**

Scale at A3

 1:10,000 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk
 Management Guide FB03 thresholds

Drawing Name:
25-1282-D-100-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD HAZARD

Band 1 (Gray)

- <= 0
- H1
- H2
- H3
- H4
- H5
- H6



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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Afflux**

Scale at A3

 1:10,000 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-100-H

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

WSL DIFFERENCE (m)

- Band 1 (Gray)
- < -0.01
 - 0.01 to 0.01
 - 0.01 to 0.03
 - 0.03 to 0.05
 - 0.05 to 0.10
 - 0.10 to 0.30
 - 0.30 to 0.70
 - > 0.70

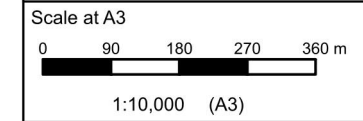


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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 0.2% AEP Event
 Flood Depth**



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-500-A

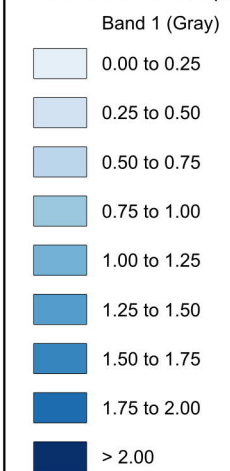
Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)





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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 0.2% AEP Event
 Flood Hazard**

Scale at A3

 1:10,000 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Flood Hazard Flood Risk
 Management Guide FB03 thresholds

Drawing Name:
25-1282-D-500-D

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD HAZARD

Band 1 (Gray)

- <= 0
- H1
- H2
- H3
- H4
- H5
- H6



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Client:
PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 4 EY Event
 Flood Depth**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-4EY-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHd)

FLOOD DEPTH (m)

- Band 1 (Gray)
- 0.00 to 0.25
 - 0.25 to 0.50
 - 0.50 to 0.75
 - 0.75 to 1.00
 - 1.00 to 1.25
 - 1.25 to 1.50
 - 1.50 to 1.75
 - 1.75 to 2.00
 - > 2.00



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Client:
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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 4 EY Event
 Flood Velocity**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-4EY-B

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD VELOCITY (m/s)

Band 1 (Gray)

0.00 to 1.00 # Gravel and sand

1.00 to 1.40 # Clays

1.40 to 2.50 # Grass surfaces

2.50 to 3.00 # Spalls 100-150mm dia

3.00 to 5.00 # Spalls 250mm dia

> 5.00 # Concrete



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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 4 EY Event
 Flood Bed Shear Stress**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Sydney Water Guideline thresholds

Drawing Name:
25-1282-D-4EY-K

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD BED SHEAR (Pa)

- Band 1 (Gray)
- 0.000 to 1.500 - Fine Colloidal Sand
 - 1.500 to 3.000 - Alluvial Silt and Silty Loam (Non-Colloid)
 - 3.000 to 4.000 - Firm Loam and Fine Gravels
 - 4.000 to 12.000 - Stiff Clay and Alluvial Silts (Colloidal)
 - 12.000 to 16.000 - 25mm Gravel/Cobble
 - 16.000 to 32.000 - 50mm Gravel/Cobble
 - 32.000 to 45.000 - Short Native and Bunch Grass
 - 45.000 to 80.000 - Long Native Grasses
 - 80.000 to 96.000 - 152mm Gravel/Cobble
 - 96.000 to 177.000 - Turf
 - 177.000 to 192.000 - 305mm Gravel/Cobble
 - >192.000 - Other Engineered Surface Treatment



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Project Name:

MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:

**Developed Scenario
 5% AEP Event
 Flood Depth**

Scale at A3



1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:

25-1282-D-020-A

Issue:

A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

Band 1 (Gray)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00



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PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 5% AEP Event
 Flood Velocity**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-020-B

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD VELOCITY (m/s)

Band 1 (Gray)

0.00 to 1.00 # Gravel and sand

1.00 to 1.40 # Clays

1.40 to 2.50 # Grass surfaces

2.50 to 3.00 # Spalls 100-150mm dia

3.00 to 5.00 # Spalls 250mm dia

> 5.00 # Concrete



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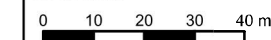
Project Name:

MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:

**Developed Scenario
 5% AEP Event
 Flood Bed Shear Stress**

Scale at A3



1:1,500 (A3)



Status: DRAFT FOR SSDA

Note: Symbology based on Sydney Water Guideline thresholds

Drawing Name:

25-1282-D-020-K

Issue:

A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD BED SHEAR (Pa)

Band 1 (Gray)

- 0.000 to 1.500 - Fine Colloidal Sand
- 1.500 to 3.000 - Alluvial Silt and Silty Loam (Non-Colloid)
- 3.000 to 4.000 - Firm Loam and Fine Gravels
- 4.000 to 12.000 - Stiff Clay and Alluvial Silts (Colloidal)
- 12.000 to 16.000 - 25mm Gravel/Cobble
- 16.000 to 32.000 - 50mm Gravel/Cobble
- 32.000 to 45.000 - Short Native and Bunch Grass
- 45.000 to 80.000 - Long Native Grasses
- 80.000 to 96.000 - 152mm Gravel/Cobble
- 96.000 to 177.000 - Turf
- 177.000 to 192.000 - 305mm Gravel/Cobble
- >192.000 - Other Engineered Surface Treatment



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 Fax: 02 9923 1055
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 info@atl.net.au

Client:
PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Depth**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-100-A

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- Band 1 (Gray)
- 0.00 to 0.25
 - 0.25 to 0.50
 - 0.50 to 0.75
 - 0.75 to 1.00
 - 1.00 to 1.25
 - 1.25 to 1.50
 - 1.50 to 1.75
 - 1.75 to 2.00
 - > 2.00



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PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Velocity**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-100-B

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD VELOCITY (m/s)

Band 1 (Gray)

0.00 to 1.00 # Gravel and sand

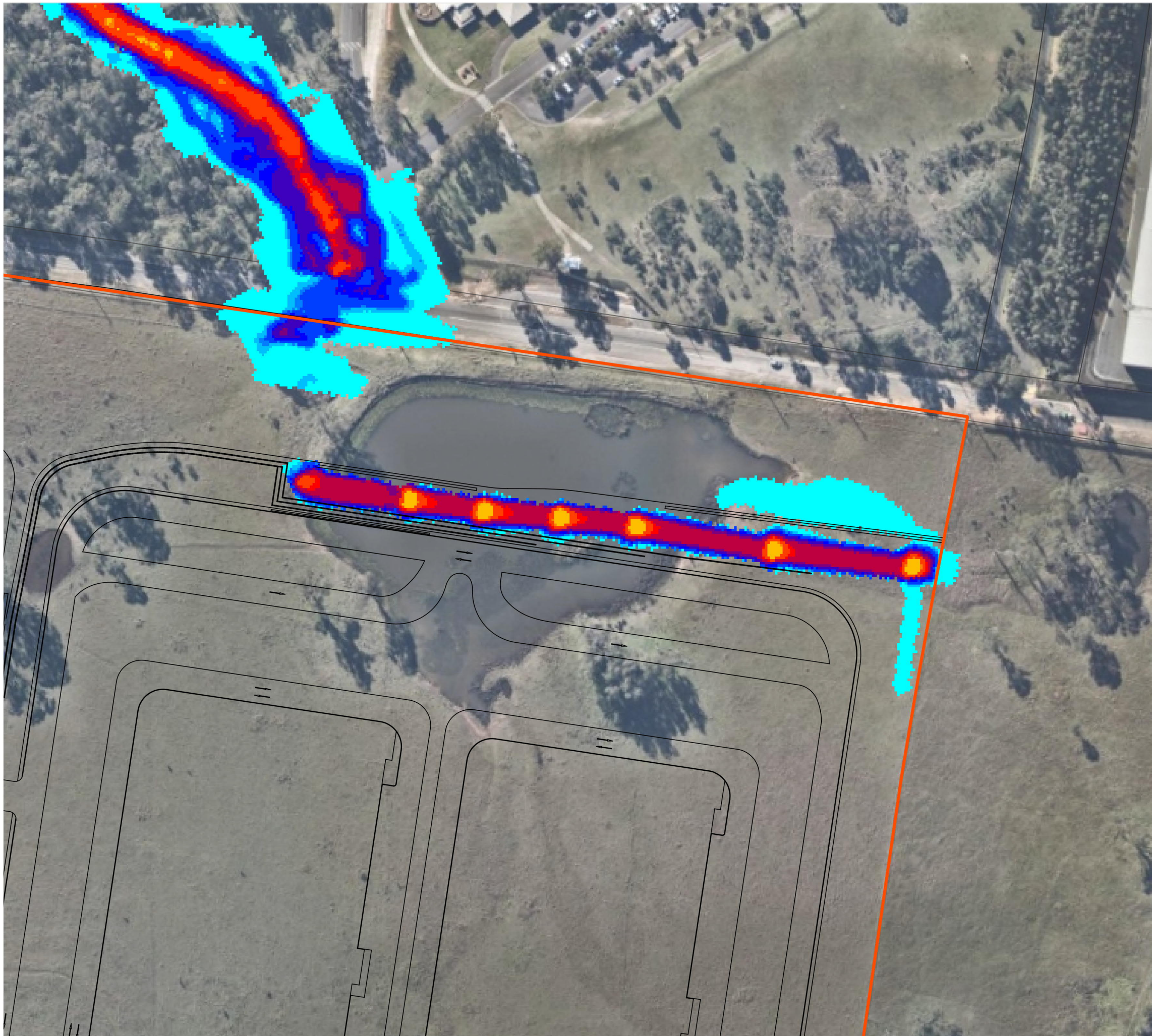
1.00 to 1.40 # Clays

1.40 to 2.50 # Grass surfaces

2.50 to 3.00 # Spalls 100-150mm dia

3.00 to 5.00 # Spalls 250mm dia

> 5.00 # Concrete



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PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Bed Shear Stress**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA
 Note: Symbology based on Sydney Water Guideline thresholds

Drawing Name:
25-1282-D-100-K

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD BED SHEAR (Pa)

- Band 1 (Gray)
- 0.000 to 1.500 - Fine Colloidal Sand
 - 1.500 to 3.000 - Alluvial Silt and Silty Loam (Non-Colloid)
 - 3.000 to 4.000 - Firm Loam and Fine Gravels
 - 4.000 to 12.000 - Stiff Clay and Alluvial Silts (Colloidal)
 - 12.000 to 16.000 - 25mm Gravel/Cobble
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Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 1% AEP Event
 Flood Afflux**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-100-H

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

WSL DIFFERENCE (m)

Band 1 (Gray)

- < -0.01
- 0.01 to 0.01
- 0.01 to 0.03
- 0.03 to 0.05
- 0.05 to 0.10
- 0.10 to 0.30
- 0.30 to 0.70
- > 0.70



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Client:

PLAN PROJECT MANAGEMENT

Project Name:

MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:

**Developed Scenario
 0.2% AEP Event
 Flood Depth**

Scale at A3



1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:

25-1282-D-500-A

Issue:

A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

- PROPOSED DEVELOPMENT LAYOUT
- FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- Band 1 (Gray)
- 0.00 to 0.25
 - 0.25 to 0.50
 - 0.50 to 0.75
 - 0.75 to 1.00
 - 1.00 to 1.25
 - 1.25 to 1.50
 - 1.50 to 1.75
 - 1.75 to 2.00
 - > 2.00



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PLAN PROJECT MANAGEMENT

Project Name:
MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:
**Developed Scenario
 0.2% AEP Event
 Flood Velocity**

Scale at A3

 1:1,500 (A3)



Status: DRAFT FOR SSDA

Drawing Name:
25-1282-D-500-B

Issue:
A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD VELOCITY (m/s)

Band 1 (Gray)

0.00 to 1.00 # Gravel and sand

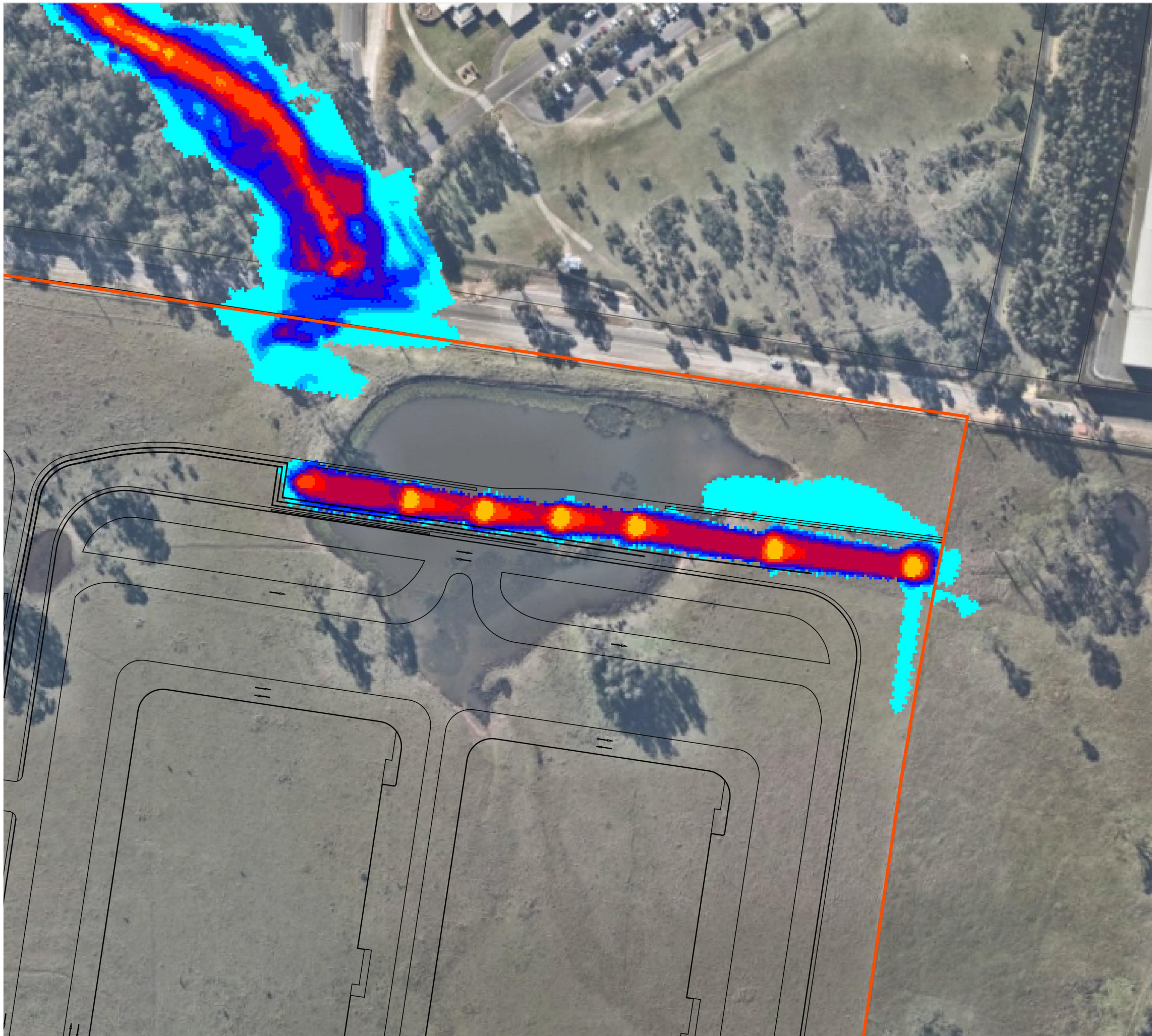
1.00 to 1.40 # Clays

1.40 to 2.50 # Grass surfaces

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PLAN PROJECT MANAGEMENT

Project Name:

MAMRE ROAD DATA CENTRE CAMPUS (SSD-92743706)

Drawing Title:

**Developed Scenario
 0.2% AEP Event
 Flood Bed Shear Stress**

Scale at A3



1:1,500 (A3)



Status: DRAFT FOR SSDA

Note: Symbology based on Sydney Water Guideline thresholds

Drawing Name:

25-1282-D-500-K

Issue:

A

Rev	Date	By	Approved
A	17.10.25	NL	TM

Legend

— PROPOSED DEVELOPMENT LAYOUT

FLOOD BED SHEAR (Pa)

Band 1 (Gray)

- 0.000 to 1.500 - Fine Colloidal Sand
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NORTH SYDNEY

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127 CREEK STREET
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