

Blu Structural Design

Structural, Civil & Hydraulic Engineering Consultants

Hydraulic Engineer Flood Certificate

For Complying Development on a Flood Control Lot

Date: 17 March 2025
Project Address: 7 Gundaroo Terrace, Gundaroo NSW 2620
Flood Control Lot: Lot 15 DP758488
BSD Project #: FC22316

Introduction:

Blu Structural Design Pty Ltd has undertaken an assessment of the above listed flood control lot. Our civil and hydraulic engineers have assessed the site and the proposed development for compliance with the NSW Government's State Environmental Planning Policy (SEPP) for complying development on a flood control lot where the following policy applies:

- *State Environmental Planning Policy (SEPP) (Exempt and Complying Development Codes) 2008*
Part 3D Inland Code – Section 3D.7

Assessment Methodology:

The assessment of the flood control lot is carried out in accordance with the requirements of subsections 1 and 2 of the SEPP.

- In accordance with subsection (1), development under this code (the SEPP) must not be carried out on any part of a flood control lot, other than a part of the lot that the council or a professional engineer who specialises in hydraulic engineering has certified, for the purposes of the issue of the relevant complying development certificate, as not being any of the following: flood storage area, a floodway area, a flow path, a high hazard area or a high risk area.
- In accordance with subsection (2), If complying development under this code (the SEPP) is carried out on any part of a flood control lot, the following development standards also apply in addition to any other development standards specified in (2) (a) to (g). These development standards consider minimum habitable floor level, flood compatibility of building materials, structural resistance to flood, flood impact of the development, access to flood refuge, vehicular access to the development and open car parking levels.

Result of Assessment:

We confirm the proposed development is compliant with the conditions of part 3D.7, 1(a -e) & 2(a-g) (Part 3D Inland Code - *Complying development on flood control lots*) of the NSW Government's *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*. Please refer to the proceeding pages of this report for the detailed assessment.

Competent Person Details:

Name:	<u>Michael Stammers</u>
Qualifications:	<u>BE(Civil), DipEngPrac</u>
Position:	<u>Director and Principal Structural, Civil & Hydraulic Engineer</u>
Company:	<u>Blu Structural Design Pty Ltd</u>
Address:	<u>Central Coast, WEST GOSFORD NSW 2250</u>
Phone:	<u>0412 088 729</u>

Signed:



Referenced Documentation:

This certificate is applicable for the proposed development as described in the following drawings provided to Blu Structural Design:

Drawing #	Drawing Title	Revision	Date
A.01	Simple Site Plans – Proposed Pool - Site Plan	A	31.01.2025
A.02	Simple Site Plans – Proposed Pool – Pool Details	A	31.01.2025
A.03	Simple Site Plans – Proposed Pool – General Notes	A	31.01.2025
A.05	Simple Site Plans – Proposed Pool – Pool Safety Requirements	A	31.01.2025
A.06	Simple Site Plans – Proposed Pool - Pool Safety Requirements	A	31.01.2025

Detailed Assessment Under Subsection (1):

Development under this code must not be carried out on any part of a flood control lot, other than a part of the lot that the council or a professional engineer who specialises in hydraulic engineering has certified, for the purposes of the issue of the relevant complying development certificate, as not being any of the following:

SEPP Criteria – Subsection (1)	Result	Assessment Notes
<i>(a) Is any part of the lot a flood storage area?</i>	Yes	Parts of the lot are designated as flood storage area, however the part of the lot to be developed under this certificate is not designated as flood storage. Development Site complies ✓
<i>(b) Is any part of the lot a floodway area?</i>	Yes	Parts of the lot are designated as floodway area, however the part of the lot to be developed under this certificate are not designated as floodway. Development Site complies ✓
<i>(c) Is any part of the lot a flow path?</i>	Yes	Parts of the lot would be considered as a flow path, however the part of the lot to be developed under this certificate are not assessed to be a flow path. Development Site complies ✓
<i>(d) Is any part of the lot a high hazard area?</i>	Yes	Parts of the lot are designated as high hazard, however the part of the lot to be developed under this certificate is not designated as high hazard. Development Site complies ✓
<i>(e) Is any part of the lot a high risk area?</i>	Yes	Parts of the lot are designated as high risk, however the part of the lot to be developed under this certificate is not designated as high risk. Development Site complies ✓

The part of the lot to be developed was found to be compliant with the conditions of the SEPP. Reference is made to the council and applicable flood study map extracts provided in this report.

Detailed Assessment Under Subsection (2):

If complying development under this code is carried out on any part of a flood control lot, the following development standards also apply in addition to any other development standards—

SEPP Criteria – Subsection (2)		
For Complying Development, the following conditions must be satisfied by any proposed Development:		
Development Standard:	SEPP Criteria	Assessment Result / Notes
(a) Minimum Habitable Floor Level	If there is a minimum floor level adopted in a development control plan by the relevant council for the lot, the development must not cause any habitable room in the dwelling house to have a floor level lower than that floor level	Development Complies ✓ No new habitable floor area is proposed by this development
(b) Building Materials	<i>Any part of the dwelling house or any attached development or detached development that is erected at or below the flood planning level must be constructed of flood compatible material.</i>	Development Complies ✓ The development utilises flood compatible materials
(c) Structural Capacity	<i>Any part of the dwelling house and any attached development or detached development that is erected, must be able to withstand the forces exerted during a flood by water, debris and buoyancy up to the flood planning level (or if an on-site refuge is provided on the lot, the probable maximum flood level).</i>	Development Complies ✓
(d) Development Impact	<i>The development must not result in increased flooding elsewhere in the floodplain.</i>	Development Complies ✓ The development has no impact on the floodplain.
(e) Access to Refuge	<i>The lot must have pedestrian and vehicular access to a readily accessible refuge at a level equal to or higher than the lowest habitable floor level of the dwelling house.</i>	Development Complies ✓ Vehicular and pedestrian access is available to the lot in the 1% AEP flood event.
(f) Vehicular Access	<i>Vehicular access to the dwelling house will not be inundated by water to a level of more than 0.3m during a 1:100 ARI (average recurrent interval) flood event (equivalent 1% AEP).</i>	Development Complies ✓ Vehicular access is available for the 1%AEP flood event which does not exceed 300mm.
(g) Car Parking	<i>The lot must not have any open car parking spaces or carports lower than the level of a 1:20 ARI (average recurrent interval) flood event (equivalent 5% AEP).</i>	Development Complies ✓