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Flood Impact Assessment Report

Glendenning Road Data Centre

Prepared for: LCI Consultants

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Revisions

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1 Introduction

This flood impact assessment report has been prepared on behalf of LCI Consultants in support of an SSDA submission for a proposed data centre facility at 2 Glendenning Road, Glendenning NSW 2761.

The purpose of this report is to review existing flood information from various sources to assess the potential flood affectation of the site.

2 Available Information

This report was prepared with reference to the following documents and information:

- Blacktown Development Control Plan 2015. Part A Introduction and General Guidelines.
- Blacktown City Council online maps.
- Blacktown City Council Planning Certificate Section 10.7 dated 16 April 2024 (Certificate Number PL2024/04403).
- Local Overland Flow Path Study within Existing Urban Areas of Blacktown City Final Report. Volume 1 of 2: Report & Appendices. Revision 1. May 2020. Catchment Simulation Solutions.
- Local Overland Flow Path Study within Existing Urban Areas of Blacktown City. Flood Risk Categorisation of Properties. Revision 6. April 2024. Catchment Simulation Solutions.
- Eastern Creek Catchment Development Scenario Hydraulic Assessment. Volume 2 – Figures and Maps. Final Report. Revision 3. June 2016. Catchment Simulation Solutions for Blacktown City Council.

3 Description of Site and Development

3.1 Existing Site

The subject site is located at 2 Glendenning Road, Glendenning and is legally described as Lot 2 DP 1137162. It is zoned E4 General Industrial under the *Blacktown Local Environmental Plan 2015*.

The subject site comprises a total area of 10.44ha and exhibits a primary frontage to Glendenning Road at the western boundary for approximately 295m. A secondary frontage to Woodstock Avenue is located along the southern boundary, for a length of approximately 335m.

The subject site comprises three (3) existing warehouse buildings that undertake various operations, including storage and logistics and a transport vehicle centre. The buildings are positioned toward the Glendenning Road frontage and cover approximately one half of the subject site. The remainder of the subject site to the rear is vacant and contains a mix of grass, native vegetation and sporadic trees. A patch of mature native vegetation exists along the southern boundary, which is identified as outstanding biodiversity value. An established landscaping strip is located along the Glendenning Road frontage, providing some screening of the existing buildings.

Vehicle access is obtained via four (4) vehicle crossings off Glendenning Road, which provide separate access for the two (2) large tenants. Vehicle access is also provided off Woodstock Avenue for the southern tenant.

The subject site is traversed by overhead 132kV transmission lines and towers, managed by Endeavour Energy. A drainage reserve also exists directly north of the subject site, which is managed by Blacktown City Council.

The subject site is surrounded by industrial land to the north, west and south (refer to the site context in **Figure 2**). Directly adjoining the subject site to the east is the Nurragingy Reserve, which falls under the jurisdiction of the Western Parklands. The Eastern Creek is located within the reserve and runs along the eastern boundary of the subject site. The closest residential area is located approximately 400m to the west of the subject site on the opposite side of the Westlink M7 Motorway.

The subject site is depicted in **Figure 1** below.



Figure 1. Aerial Map of Subject Site (Source: NearMap, 2024)



Figure 2. Site Context and Zoning (Source: Blacktown Local Environmental Plan, 2024)

3.2 Proposed Development

The proposal involves the staged construction and operation of a data centre development, comprising:

- Site preparation and establishment works including:
 - Bulk earthworks to create proposed site levels;
 - In-ground building services and utility work;
 - Clearance of trees and vegetation within the proposed development extent;
- Construction and operation of three data centre buildings, known as DC01, DC02 and DC03, comprising:
 - A total Gross Floor Area (GFA) of 50,233m² (DC01 – 19,985m², DC02 – 10,263m² and DC03 – 19,985m²);
 - A maximum building height of 45.3m, including five storeys for each building;
 - Three internal substations;
 - A total IT capacity of approximately 193.6MW (DC01 – 79.2MW, DC02 – 35.2MW and DC03 – 79.2MW);
- Total diesel fuel storage of 2,736,030L within underground bulk fuel storage tanks and generator day tanks;
- 97 back-up generators across the full development;
- External plant and equipment (including water tanks and pump rooms);
- Installation of evaporative cooling units;
- Three vehicle crossovers to Glendenning Road and internal access roads;
- Security fencing surrounding the development, including a controlled entry and exit point;
- 165 on-site car parking spaces (including 6 accessible parking spaces and 12 Electric Vehicle (EV) parking spaces);
- Landscaping across the subject site;
- Hours of operation being on a 24 hours per day, seven days per week basis.

The proposed works would be constructed in three stages, as follows:

- **Stage 1:** The first stage would include the construction of DC01, located at the rear of the subject site. The three existing site buildings would be demolished.
- **Stage 2:** The second stage would involve the construction of DC02.
- **Stage 3:** The construction of DC03.

4 Flood Affection of Site

Several information sources were reviewed to determine the flood affection of the site.

4.1 Blacktown City Council (BCC)

4.1.1 Online Mapping

Inspection of the 'Flooding Precincts' layer in BCC online mapping ('Blacktown City Council, 2024) was undertaken for Mainstream Flooding (Riverine) and Local Flooding (Overland Flow). An extract of the Flooding Precincts layer for the site is presented in the figure below.



Figure 4-1 Flooding Precincts at the site – extracted from BCC online maps ('Blacktown City Council, 2024)

Statements regarding Mainstream Flooding (Riverine) flood affection of the site based on mapping are provided below, with commentary to describe the flooding.

The mapping in Figure 4-1 shows:

- The riverine high flood risk precinct does not affect the site.
 - This precinct is defined as land within the floodway in a 1% AEP riverine flood and/or subject to potential evacuation difficulties during a flood.
 - The site is therefore not impacted by the 1% AEP riverine flood nor subject to potential evacuation difficulties during this flood event.
- The riverine medium flood risk precinct has nominal encroachment into the site at the north-east corner.

- This precinct is defined as the Flood Planning Area, which is defined as land that lies below the Flood Planning Level. The Flood Planning Level is the 1% AEP flood level plus a freeboard (for residential properties).
- Mapping shows the site is outside the riverine medium flood risk precinct (Flood Planning Area) and therefore above the Flood Planning Level.
- The riverine low flood risk precinct affects the site.
 - This precinct is defined as land that is flood prone i.e. affected by riverine flooding to the Probable Maximum Flood.
 - The site is affected by riverine flooding somewhere between the 1% AEP flood and the Probable Maximum Flood, however the likelihood of the flood that first affects the site is not known.

Statements regarding Local Flooding (Overland Flow) flood affectation of the site based on mapping are provided below, with commentary to describe the flooding.

Mapping shows:

- The overland flow high flood risk precinct does not affect the site.
 - This precinct is defined as land subject to a high hydraulic hazard in a 1% AEP flood and/or subject to potential evacuation difficulties during a flood.
 - The site is therefore not subject to high hydraulic hazard in a 1% AEP flood or subject to potential evacuation difficulties during a flood.
- The overland flow medium flood risk precinct affects the site.
 - This precinct is defined as the Flood Planning Area. According to ²Blacktown City Council (2024), the Flood Planning Area for overland flow is the extent of the 1% AEP flood with 0.15 m depth filter applied.
 - The map shows that overland flow of medium flood risk (1% AEP event) only occurs in low points of the terrain, being the low point (road sag) in Glendenning Road near the northwest corner of the site, in the northern channel, and in low points of the terrain on the site. This overland flow of medium flood risk (1% AEP event) that occurs in low points of the terrain on the site is expected to occur due to direct rainfall on the site, as data in Blacktown City Council (2020) indicates overland flow does not enter the site from Glendenning Road in the 1% AEP overland flow event. Review of data in Blacktown City Council (2020) indicates that overland flow in Glendenning Road adjacent to the site does not exceed 0.2 m deep (and deemed not to overtop the road and enter the site) in the 5% AEP, 2% AEP or 1% AEP overland flow events.
- The overland flow low flood risk precinct affects the site.
 - This precinct is defined as land that is flood prone i.e. affected by overland flow flooding up to and including the Probable Maximum Flood.
 - The site is affected by overland flow flooding somewhere between the 1% AEP overland flow event and the Probable Maximum Flood. Review of data in Blacktown City Council (2020) indicates that the most frequent simulated overland flow event that first exceeds 0.2 m deep in Glendenning Road adjacent to the site (and deemed to overtop the road and enter the site) is the 0.5% AEP (1 in 200 AEP) event.

Definitions of low, medium and high flood risk precincts for Mainstream Flooding (Riverine) and Local Flooding (Overland Flow) are provided in Appendix A Glossary.

4.1.2 Eastern Creek Flood Study Development Scenario Hydraulic Assessment (2016)

The Eastern Creek Catchment Development Scenario Hydraulic Assessment (Blacktown City Council, 2016) report was reviewed for the site location to determine the flood affectation and characteristics near the site.

4.1.2.1 Flood Levels and Depths

Flood mapping undertaken for existing conditions as part of the Eastern Creek Catchment Development Scenario Hydraulic Assessment (Blacktown City Council, 2016) show that the 1% AEP and 0.2% AEP flood events do not directly impact the site. In these events, flood water is contained within the drainage channel to the north of the lot and in Eastern Creek (external to the lot) to the east.

During the Probable Maximum Flood (PMF), flood water from west of Glendenning Road overtops Glendenning Road, then enters and generally traverses the site from west to east.

Flood levels and depths for the 1% AEP, 0.2% AEP and PMF flood events were extracted from Blacktown City Council (2016) and are shown in the figures below.

Inspection of flood levels (from digital data) in the 1% AEP flood event:

- in the northern channel range from 31.45 m AHD at the western end (upstream end of northern channel) down to 30.27 AHD at the eastern end (downstream end of northern channel),
- in Eastern Creek adjacent to and east of the site range from 30.83 m AHD at the southern end (upstream end) down to 30.17 AHD at the northern end (downstream end).

Inspection of site survey shows the vast majority of the existing site has ground surface levels higher than 32.00 m AHD, with no proposal to cut / reduce existing site boundary levels

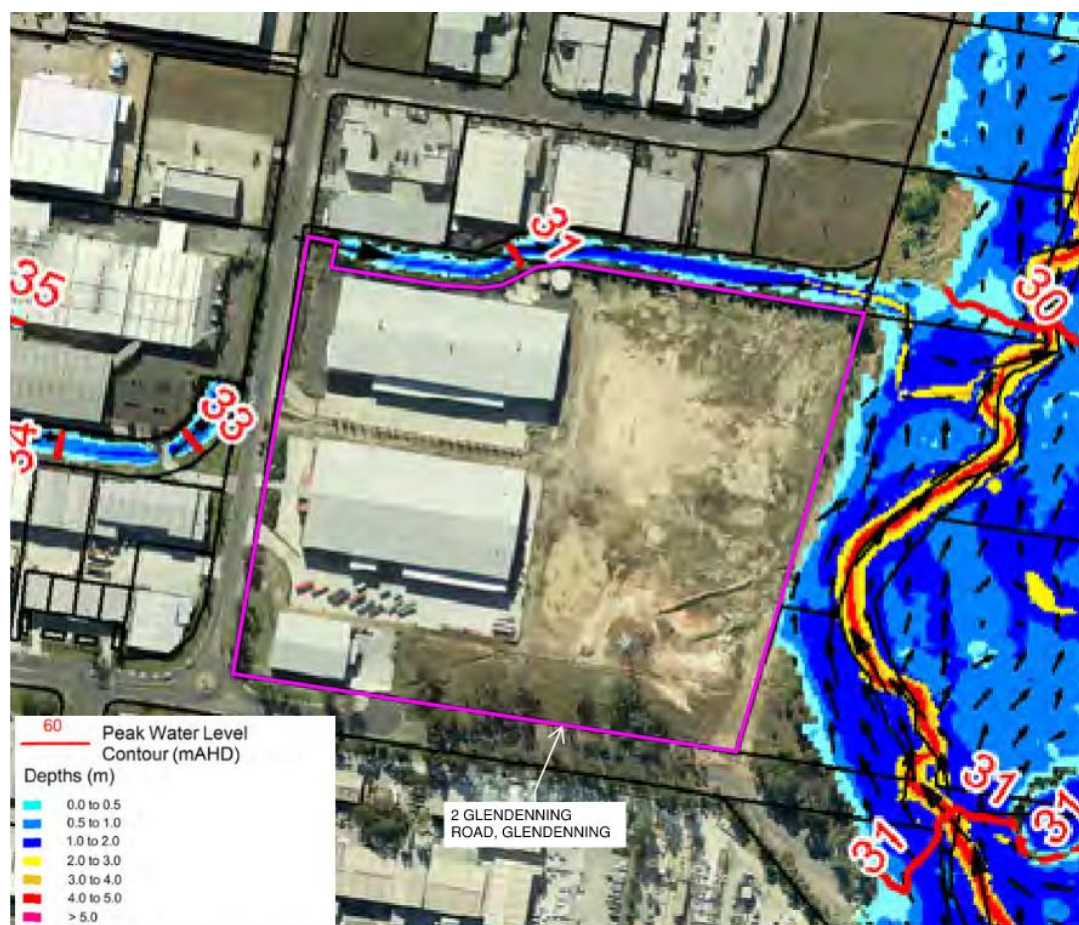


Figure 4-2 Existing conditions 1% AEP flood levels and depths (extracted from Blacktown City Council, 2016)

Review of flood levels (from digital data) in the 0.2% AEP flood event identifies that:

- Flood levels in the northern channel range from 31.55 m AHD at the western end (upstream end of northern channel) down to 30.44 AHD at the eastern end (downstream end of northern channel),
- Flood levels in Eastern Creek to the east of the site range from 31.00 m AHD at the southern (upstream) end, down to 30.33 AHD at the northern (downstream) end.

Inspection of site survey shows the vast majority of the existing site has ground surface levels higher than 32.00 m AHD along the eastern and northern boundary, with no proposal to cut / reduce existing site boundary levels

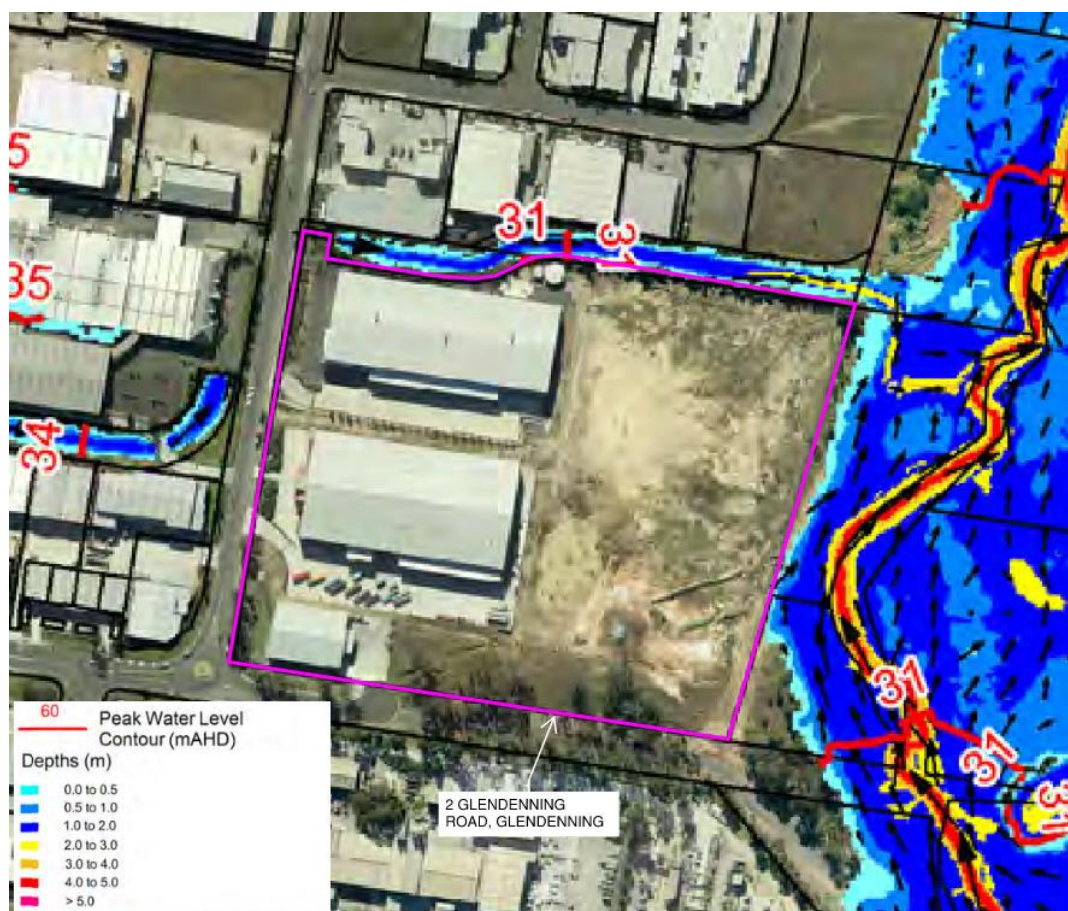


Figure 4-3 Existing conditions 0.2% AEP flood levels and depths (extracted from Blacktown City Council, 2016)

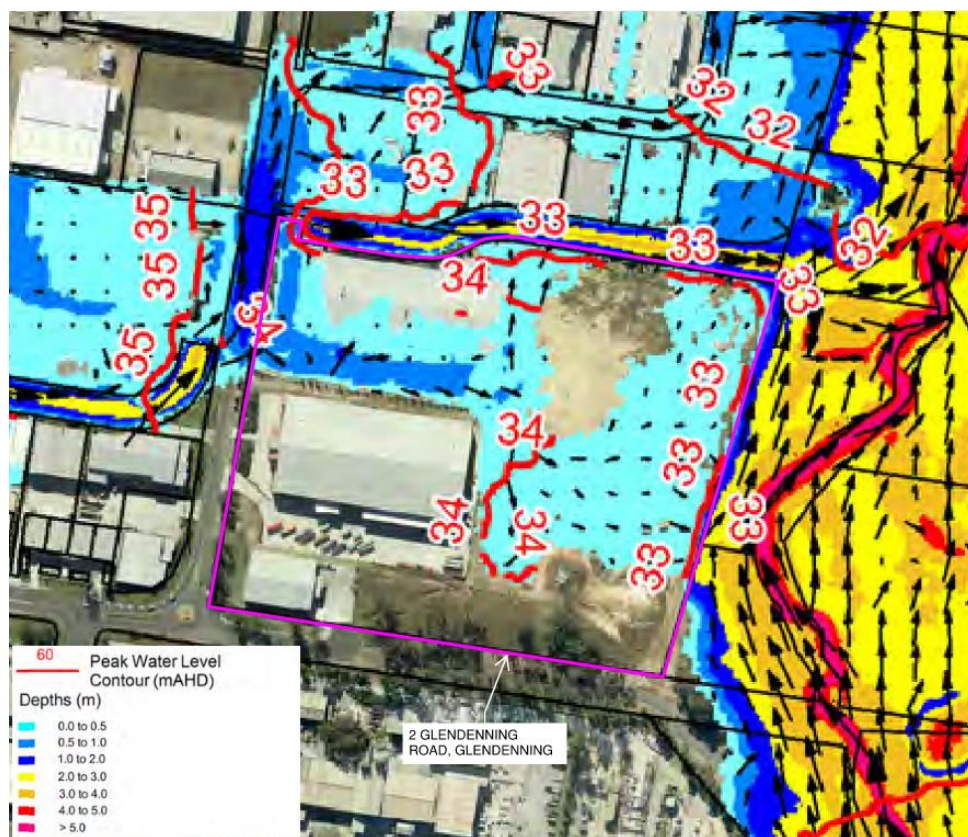


Figure 4-4 Existing conditions PMF flood levels and depths (extracted from Blacktown City Council, 2016)

4.1.2.2 Hydraulic Categories

The hydraulic categories for the 1% AEP and PMF flood events in the vicinity of the site are shown in the figures below. The figures show the lot is not affected by the floodway category in the PMF flood event.

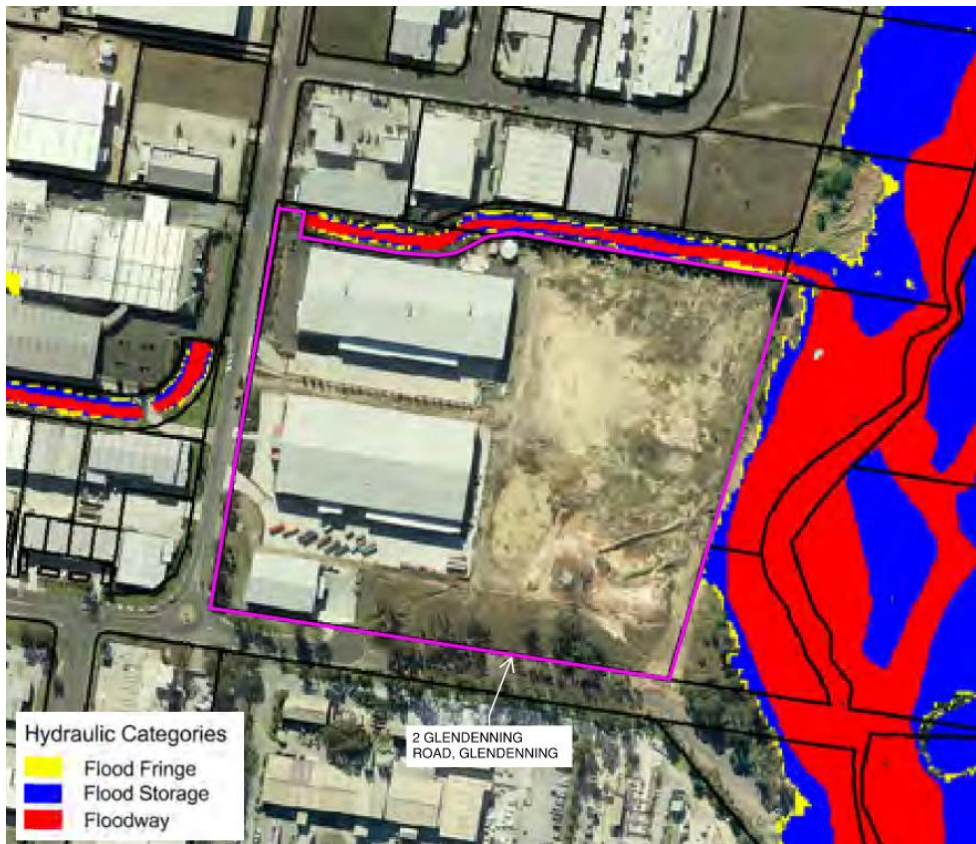


Figure 4-5 Existing conditions 1% AEP hydraulic categories (extracted from Blacktown City Council, 2016)

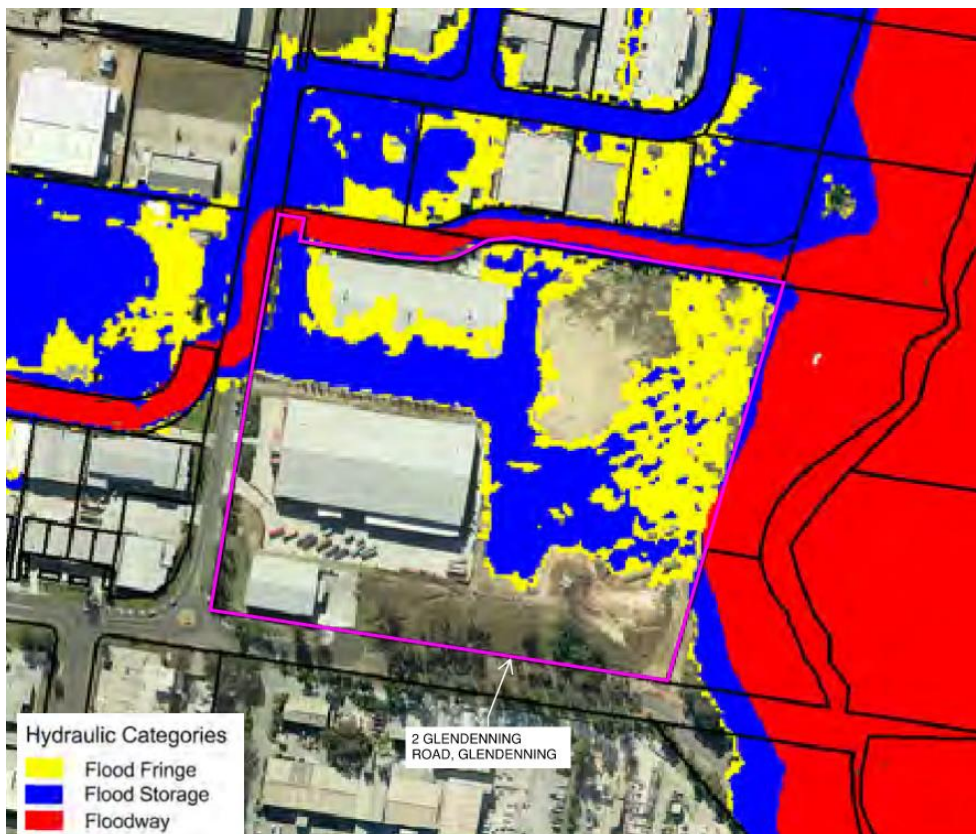


Figure 4-6 Existing conditions PMF hydraulic categories (extracted from Blacktown City Council, 2016)

5 Proposed Development

5.1 Development Location

The site and the proposed development are not located within the floodway in the Probable Maximum Flood (PMF) event (refer to section 4.1.2.2). Development controls for development within the floodway are therefore not applicable.

The site and the proposed development are not located within the flood fringe hydraulic category of the 1% AEP event, however, are within the flood fringe category of the Probable Maximum Flood (PMF) event (refer to section 4.1.2.2). An assessment against the controls listed in section 9.4.3 of the Blacktown Development Control Plan 2015 for development within the flood fringe is as follows:

- a) **Control:** An application for the erection of new buildings or the raising or rebuilding of existing buildings (other than buildings ancillary to the use of the land for agriculture and cultivation purposes, excluding poultry farming and pig keeping) must be accompanied by a survey plan.
 - **Response:** Survey plan is provided as part of the SSDA submission.
- b) **Control:** Prior to determining the application, Council may require the submission of the details referred to under Section 9.4.2 above.
 - **Response:** As stated above, the site and the proposed development are not located within the floodway in the Probable Maximum Flood (PMF) event, therefore development controls listed in section 9.4.2 of the Blacktown Development Control Plan 2015 are not applicable.
- c) **Control:** For residential buildings, habitable floor levels should be at a level at least 500mm above the designated flood level.
 - **Response:** Residential buildings are not proposed, therefore habitable floor levels at least 500 mm above the designated flood level are not applicable.
- d) **Control:** Floor levels, other than habitable floor levels, will be determined by Council on the basis of each individual case. For industrial and commercial buildings, the floor level should be at least 300mm above the designated flood level.
 - **Response:** Floor levels for the proposed buildings are at least 300 mm above the designated flood level (refer to section 5.2 of this report for more information).
- e) **Control:** The maximum height between the natural ground level (i.e. ground level prior to any filling of the land) and the habitable floor level shall be 3m.
 - **Response:** Bulk earthworks cut and fill plan SYD08X-ACR-00-XX-DR-C-0071 shows that the maximum filling of the site will be 2.5 metres, which is located under DC02 and DC03 buildings.
- f) **Control:** Where additions are proposed to an existing building which is located below the designated flood level, Council will generally permit additions to a maximum of 10% of the existing floor area. The finished floor level of such additions should be 500mm above the designated flood level, but Council will consider each application on its merits having regard for the proposed use of the additions, the existing levels and flood behaviour.
 - **Response:** Additions to existing buildings are not proposed, therefore this development control is not applicable.
- g) **Control:** The rebuilding of existing buildings shall comply with (a) to (e) inclusive above.
 - **Response:** Rebuilding of existing buildings are not proposed, therefore this development control is not applicable.
- h) **Control:** Council will consider any application for the rezoning of flood prone land on its merits. Generally, Council will not support a Planning Proposal which, once development has occurred, would result in an increase in the potential for personal and/or property damage.
 - **Response:** Rezoning is not proposed, therefore this development control is not applicable.
- i) **Control:** Where an application is made to Council for the subdivision of land creating additional lots, Council will only grant consent if it is satisfied that future development on that land could be undertaken in accordance with the provisions of this DCP in relation to development on flood prone land. Where subdivision is approved in industrial and commercial zones, the land must be filled to 300mm above the

designated flood level. For subdivision in residential zones, Council will require land to be filled to 500mm above the designated flood level.

- **Response:** Subdivision of land creating additional lots is not proposed, therefore this development control is not applicable.
- j) **Control:** The filling of land, whether to permit the erection of buildings or otherwise, shall be to the satisfaction of Council's Development Services staff in addition to Council's Investigation and Design staff. Applicants are advised that, in considering the acceptable habitable floor level, Council will have regard for the depth of filling above natural ground level and its stability, together with possible interference with the flow of flood waters.
- **Response:** This control is achieved by maximum fill levels (refer to item e) above) and provision of overland flow paths through the site (noting that overland flow paths does not enter the site in the 1% AEP overland flow event – refer to section 4.1.1 of this report).
- k) **Control:** Buildings are to be constructed with approved materials, resistant to damage by immersion by flood waters for prolonged periods, to the satisfaction of Council.
- **Response:** As the site is not subject to flooding in the 1% AEP riverine or overland flow events, and proposed buildings have floor levels above the designated flood level, flood resilient building materials are not proposed.

5.2 Proposed Floor Levels

As stated in section 4.1.1, the site is outside of the riverine medium flood risk precinct, which is equivalent to the Flood Planning Area, and therefore above the Flood Planning Level.

Notwithstanding, the floor levels of proposed buildings are compared to the 1% AEP flood levels in the vicinity of the site.

All proposed buildings on the site have minimum floor levels that provide at least 500 mm freeboard above the 1% AEP flood levels in the adjacent channel to the north of the site and in Eastern Creek to the east of the site.

A summary of the proposed floor levels and freeboard for each building are provided in the following table. In the 1% AEP flood, the highest flood level in the northern channel adjacent to the site is 31.45 m AHD, and the highest flood level in Eastern Creek adjacent to the site is 30.83 m AHD.

Table 5-1 Proposed building floor levels and freeboard provided for the 1% AEP flood

Proposed building and floor level	Freeboard above highest flood level in northern channel adjacent to site (1% AEP)	Freeboard above highest flood level in Eastern Creek adjacent to site (1% AEP)
DC01 (floor level 35.05 m AHD)	3.60 m	4.22 m
DC02 (floor level 36.05 m AHD)	4.60 m	5.22 m
DC03 (floor level 35.75 m AHD)	4.30 m	4.92 m

The floor levels of proposed buildings also provide at least 500 mm freeboard above the 0.2% AEP riverine flood levels in the adjacent northern channel and Eastern Creek (refer to section 4.1.2.1 for 0.2% AEP flood levels).

5.3 Siting of Buildings

Flood mapping shows the site is not directly impacted up to and including the 0.2% AEP riverine flood event (section 4.1.2.1). Proposed buildings are therefore located outside areas affected by inundation up to and including the 0.2% AEP riverine flood event.

As described in section 4.1.1, overland flow in the 1% AEP event only occurs on the site in low points of the terrain. This is expected to occur due to direct rainfall on the site, as data in Blacktown City Council (2020) indicates overland flow does not enter the site from Glendenning Road in the 1% AEP overland flow event.

The proposed internal road network provides conveyance of overland flows through the site towards the eastern boundary, towards Eastern Creek.

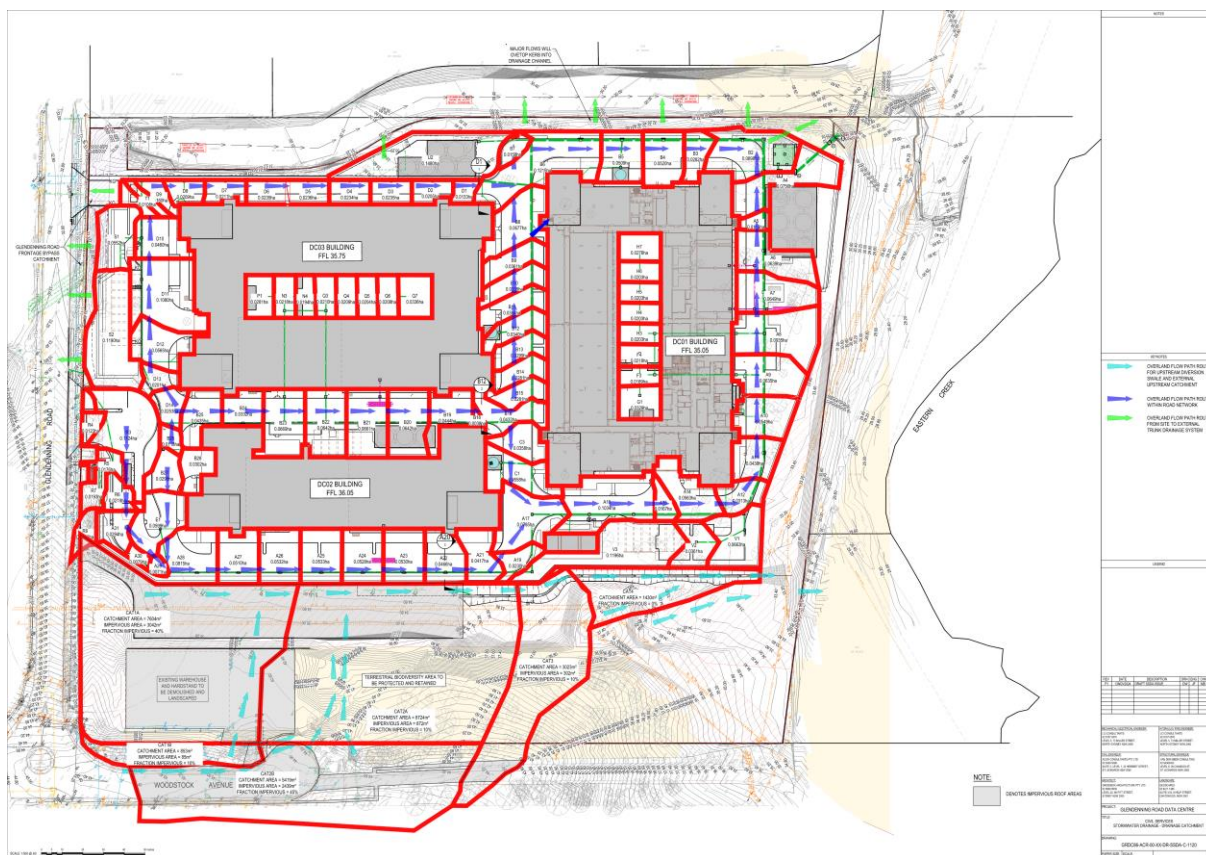


Figure 5-1 Evacuation routes along rising road to local evacuation points

5.4 Proposed Earthworks and Structures

As the site is not impacted by inundation in the 0.2% AEP (1 in 500 AEP) riverine flood event, proposed earthworks and structures will not affect flood flows up to and including this flood event.

5.5 Evacuation

The site has been determined to be an area with 'rising road access' (Blacktown City Council, 2016). An area with rising road access is defined as 'areas where access roads rise steadily uphill and away from the rising floodwaters' where 'evacuation can take place by vehicle or on foot along the road as floodwater advances' (Department of Planning and Environment, 2023).

The figure below shows the vehicular or pedestrian route along rising roads to areas outside the floodplain. This is for the scenario if evacuation has not been undertaken prior to inundation cutting the evacuation route along Woodstock Avenue to the western side of the M7 Motorway, or from the site to the north along Glendenning Road. Kellogg Road and the eastern end of Woodstock Avenue are areas outside the floodplain. The southern end of Kellogg Road and the cul-de-sac at the eastern end of Woodstock Avenue are deemed to be the local evacuation points in the foregoing flood scenario where evacuation to the west along Woodstock Avenue or north along Glendenning Road are cut by floodwater (refer to figure below).

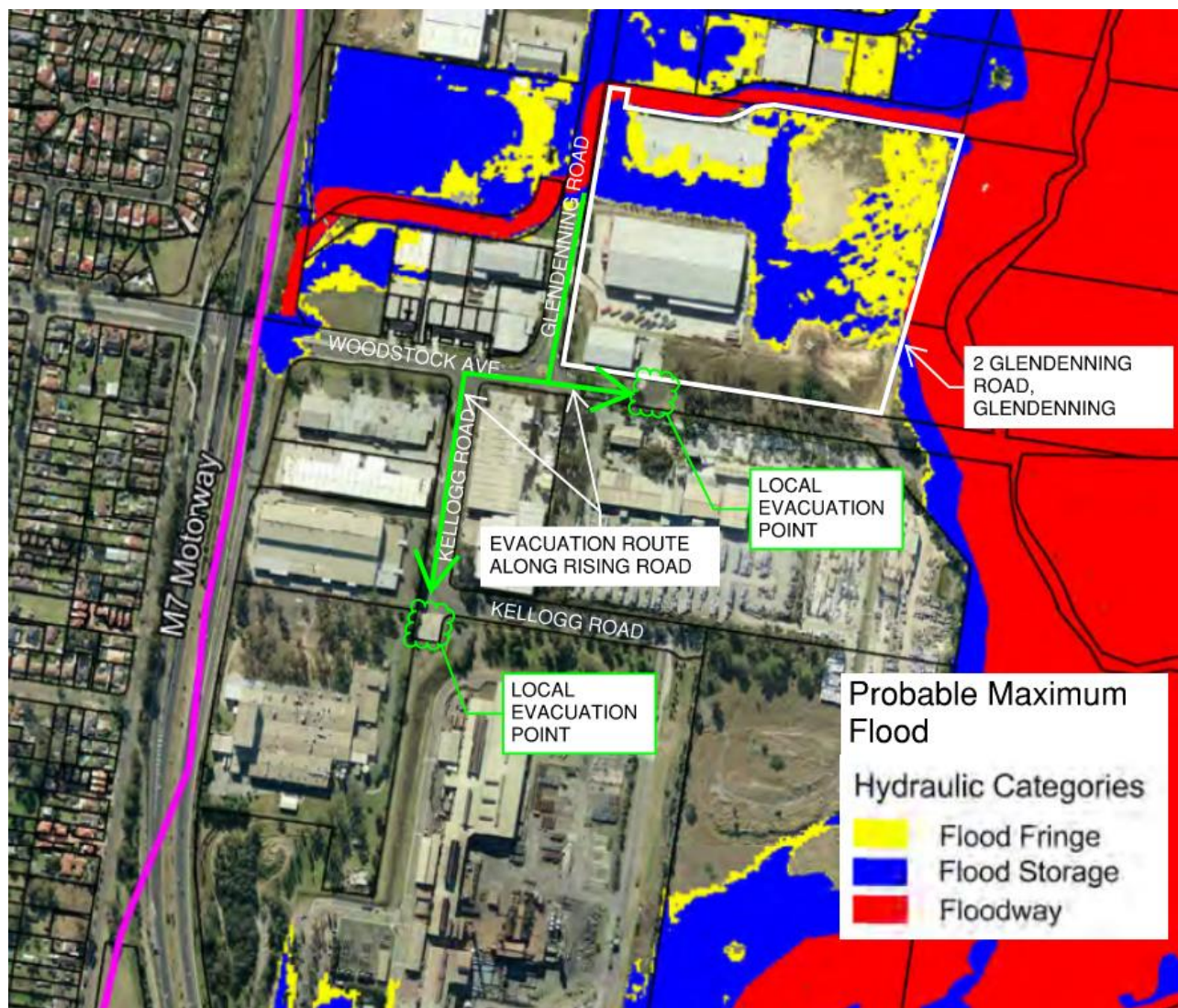


Figure 5-2 Evacuation routes along rising road to local evacuation points

The nominated evacuation route from the site to the nearest hospital, being Mount Druitt Hospital Emergency Department (75 Railway Street, Mount Druitt), is:

- From the site, proceed south on Glendenning Road, at the roundabout take the second exit onto Woodstock Avenue, after 1.8 km keep left to continue on Duke Street, after 600 m at the roundabout take the second exit onto Luxford Road, after 300 m turn left at 'Mt Druitt Hospital' sign, after 350 m turn left at the 'Emergency Main Entrance' signs.

6 Conclusion

Review of Blacktown City Council flood mapping and available flood studies shows the site is not impacted by the 1% AEP riverine flood nor subject to potential evacuation difficulties during this flood event. The site is outside the riverine medium flood risk precinct (Flood Planning Area) and therefore above the Flood Planning Level.

Regardless, all proposed buildings on the site have minimum floor levels that provide at least 500 mm freeboard above the 1% AEP flood levels. Floor levels are also at least 500 mm above 0.2% AEP riverine flood levels.

Investigation of available data shows that overland flow in Glendenning Road adjacent to the site does not exceed 0.2 m deep, and deemed not to overtop the road and enter the site in the 5% AEP, 2% AEP or 1% AEP overland flow events.

The site is not located within the floodway in the Probable Maximum Flood (PMF) event, therefore controls for development within the floodway are not applicable. The site is within the flood fringe category of the PMF event, and an assessment against the controls of the Blacktown Development Control Plan 2015 for development within the flood fringe has been undertaken and demonstrates compliance of the proposed development.

Vehicular and pedestrian evacuation routes along rising roads to areas outside the floodplain (local evacuation point) have been identified.

7 References

Blacktown Development Control Plan 2015. Part A Introduction and General Guidelines. Blacktown City Council. <https://www.blacktown.nsw.gov.au/Plan-build/Stage-2-plans-and-guidelines/Blacktown-planning-controls/Blacktown-Development-Control-Plan-2015>.

Blacktown City Council (2016). Eastern Creek Catchment Development Scenario Hydraulic Assessment. Volume 2 – Figures and Maps. Final Report. Catchment Simulation Solutions. <https://floodata.ses.nsw.gov.au/dataset/eastern-creek-catchment-development-scenario-hydraulic-assessment-report>.

Blacktown City Council (2020). Local Overland Flow Path Study within Existing Urban Areas of Blacktown City Final Report. Volume 1 of 2: Report & Appendices. Revision 1. May 2020. Catchment Simulation Solutions.

¹Blacktown City Council (2024). Online maps. Flooding Precincts. Blacktown City Council. <https://maps.blacktown.nsw.gov.au/>.

²Blacktown City Council (2024). Local Overland Flow Path Study within Existing Urban Areas of Blacktown City. Flood Risk Categorisation of Properties. Revision 6. April 2024.

Department of Planning and Environment (2023). Support for emergency management planning. Flood risk management guideline EM01. New South Wales Government. <https://www.environment.nsw.gov.au/research-and-publications/publications-search/support-for-emergency-management-planning>.

Appendix A Glossary

Glossary of terms below sourced from Blacktown Development Control Plan 2015 (Part A Introduction and General Guidelines).

Approved materials mean materials approved by Council's Building Services Team.

Australian Height Datum (AHD) means a common national plane of level corresponding approximately to mean sea level.

Designated flood level means the designated flood level is the level of a flood having an Average Recurrence Interval of 100 years. That is, the flood level that will have one chance in a hundred on average of being equalled or exceeded in any one year period.

Design floor level means a level which is 500mm above the designated flood level for residential buildings and 300mm above that level for commercial and industrial buildings.

Flood fringe means land outside of the floodway which is subject to inundation by the designated flood.

Flood liable land means land which would be inundated as a result of a standard flood.

Flood maps means maps held by Council which indicate predicted flood levels, flood contours and other relevant information.

Floodway means areas determined as those:

- (a) In which human life could be at risk from the passage of flood waters
- (b) Which are the main flowpaths for flood waters once the river or stream has overflowed
- (c) In which developments may adversely affect the behaviour or passage of flood waters
- (d) In which developments may be adversely affected by the passage of flood waters, other than by immersion.

Habitable floor includes any portion of a building designed, constructed, adapted or used for human habitation whether forming part of a dwelling or any other building and includes rumpus rooms and the like.

Standard flood means the flood selected for planning purposes based on an understanding of flood behaviour and the associated flood risk, taking into account social, economic and ecological considerations.

Definitions of terms from BCC online mapping (¹Blacktown City Council, 2024) are:

Riverine High Risk Flood Precinct

The Riverine High Flood Risk Precinct is the land within the floodway (in accordance with the criteria outlined in the N.S.W. Government Flood Risk Management Manual 2023) in a 100 year riverine flood event and/or subject to potential evacuation difficulties during a flood.

Riverine Medium Risk Flood Precinct

Equivalent to the flood planning area, except for areas that have already been identified as being within the high flood risk precinct. The freeboard used is 500mm.

Riverine Low Risk Flood Precinct

Equivalent to flood prone land. This includes all land that is flood affected by riverine flooding in some capacity, up to and including the PMF, except for areas that have already been identified as being within the high or medium flood risk precinct.

Overland Flow High Risk Flood Precinct

The High Flood Risk Precinct is the land subject to a high hydraulic hazard (in accordance with the criteria outlined in the N.S.W. Government Flood Risk Management Manual 2023) in a 100 year flood event and/or subject to potential evacuation difficulties during a flood.

Overland Flow Medium Risk Flood Precinct

Equivalent to the flood planning area, except for areas that have already been identified as being within the high flood risk precinct. The freeboard used is 300mm for overland flow flood events.

Overland Flow Low Risk Flood Precinct

Equivalent to flood prone land. This includes all land that is flood affected by overland flow flooding in some capacity, up to and including the PMF, except for areas that have already been identified as being within the high or medium flood risk precinct.