

SSDA Civil Engineering Report Incorporating Water Management Plan

3 Brookhollow Avenue Data Centre

Prepared for Project Garden 1 Pty Ltd / 12 December 2025

232040 CAAD

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Rev	Date	Prepared By	Approved By	Remarks
1	24/10/2025	GL	AM	For SSDA (DRAFT)
2	12/12/2025	JLO	AM	For SSDA
3	13/05/2026	AM	AM	For SSDA

1.0 Executive Summary

This civil engineering report has been prepared by Taylor Thomson Whitting (TTW) to accompany a detailed State Significant Development Application (SSDA) for a proposed data centre development. The proposed development site is located at 3 Brookhollow Avenue, Norwest NSW 2153, referred to as Lot 2021 in Deposited Plan (DP) 831173. The proposal forms Stage 2 of the Green Square SYDGPU1 Data Centre and encompasses a total area of disturbed land measured at 20,823 m².

This report addresses the Secretary's Environmental Assessment Requirements (SEARs) issued for the project and forms a central component of the Integrated Water Management Plan.

Based on the assessments undertaken, this report finds that the proposed development is suitable for the site, will not give rise to any unacceptable impacts, and warrants approval subject to the implementation of the following proposed mitigation measures:

- A site-wide in-ground stormwater pit and pipe network;
- Two on-site stormwater detention (OSD) tanks with combined volume of 881m³ as per the OSD Calculation Sheet for Upper Parramatta River Catchment Trust (UPRCT);
- Stormwater treatment measures including 12 x OceanProtect Oceanguards (or similar approved equivalent) and 41 x 690mm Ocean Protect PSorb StormFilters (or similar approved equivalent) to meet the pollutant reduction targets set out by Council;
- A wastewater design in alignment with the Sydney Water mandated requirements (refer to Aurecon documentation);
- A firewater design in alignment with Fire and Rescue NSW requirements (refer to Aurecon documentation); and
- An erosion and sediment control plan to manage stormwater quality and quantity on site during the construction phase of the development.

Following the implementation of the above design measures, any resultant impacts will be considered acceptable and consistent with relevant standards and guidelines

2.0 Introduction

This report has been prepared on behalf of Project Garden 1 Pty Ltd as trustee for the Norwest Property Trust (the applicant) in support of a SSDA submitted to the Department of Planning, Housing and Infrastructure (DPHI) under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This SSDA seeks development consent for the construction and operation of a data centre, with a total power consumption of approximately 96MW (IT load). The proposal will form part of a broader state-of-the-art data centre campus, equipped to cater for growing data storage needs within Australia and the emergence of artificial intelligence (AI).

In summary, approval for the following is sought:

- Minor site preparation works including tree clearing and bulk earthworks;
- Civil earthworks and the installation of relevant servicing infrastructure and utilities;
- Construction of a four (4) storey data centre with roof top plant, equating to an RL 130 (39.39m) and Gross Floor Area (GFA) of 16,191m²;
- Installation of 77 x diesel fuel generators and associated storage
- Provision of on-site car parking for approximately 25 spaces; and
- Landscaping, tree removal and offset tree planting

In response to the SEARS issued by DPHI, an assessment of the integrated water management for the proposed development has been undertaken. The SEARs set out the following requirements in relation to the assessment of Water Management.

Table 1: SEARS Requirement

SEARs Item	Description of Requirement	Section Reference (this Report)
13	Water Conditions	
13.2	Provide a Surface Water Impact Assessment that assesses potential impacts on surface water resources (quality and quantity) including related infrastructure, hydrology, dependent ecosystems, drainage lines, downstream assets and watercourses.	Section 5.0
14	Water Management	
14.1	Provide an Integrated Water Management Plan for the development that:	
14.1.1	• Is prepared in consultation with the local council and any other relevant drainage or water authority.	Section 3.0, 5.0
14.1.2	• Outlines the water-related servicing infrastructure required by the development (informed by the anticipated annual and ultimate increase in servicing demand) and evaluates opportunities to reduce water demand (such as recycled water provision).	Refer to the Infrastructure Delivery, Management & Staging plan prepared by Aurecon.
14.1.3	• Details the proposed drainage (stormwater and wastewater) design for the site including any on-site treatment, reuse and detention facilities, water quality management measures, and the nominated discharge points, on-site sewerage management, and measures to treat, reuse or dispose of water.	Refer to Section 5.0 for details of proposed stormwater design. Refer to the wastewater and reuse design details prepared by Aurecon as Hydraulic Engineer

14.1.4	Demonstrates compliance with the local council or other drainage or water authority requirements and avoids adverse downstream impacts.	Section 3.0, 5.0, 6.0
14.2	Where drainage infrastructure works are required that would be handed over to the local council, or other drainage or water authority, provide full hydraulic details and detailed plans and specification of proposed works that have been prepared in consultation with, and comply with the relevant standards of, the local council or other drainage or water authority.	The proposed drainage will include works that would be handed over to the local Council or other water authority. Consultation with Council regarding this proposal is on-going.
15	Flooding	
	Identify the flood planning level as set out in the relevant council LEP or SEPP and identify any: - flood risks on site having regard to adopted flood studies - the potential effects of climate change, and - any relevant provisions of the NSW Flood Risk Management Manual.	Flooding items covered in the Flood Impact Risk Assessment issued by TTW.
	Where the development is occurring on flood prone land a flood impact and risk assessment (FIRA) must be prepared having regard to the Flood Impact and Risk Assessment Guideline - LU01 (FIRA guide). When determining the scope and category of the FIRA the requirements outlined in the FIRA guide must be considered.	
	Detail any flood risk management measures that are to be incorporated as part of the development having regard to relevant guidelines (including any design solutions, flood modification measures, property modification measures, operational procedures or Flood Emergency Response Plan).	

2.1 Reference Documents

The following documents have been reviewed and referenced in the preparation of this report:

Standards and guidelines:

- The Hills Development Control Plan (DCP) 2012- Part B Section 7: Industrial
- The Hills Development Control Plan (DCP) 2012- Appendix B: Water Sensitive Urban Design
- The Hills Shire Council Stormwater & Waterways Management 2024- The Flood Modelling and Stormwater Design Guideline Revision 1
- Baulkham Hills Shire Council – Subdivision Control 1997 Appendix A: Design Guidelines
- The Hills Shire Council Works Specification Subdivisions / Developments 2023.
- Upper Parramatta River Catchment Trust (UPRCT)- On-site Stormwater Detention Handbook 2005
- Landcom NSW Managing Urban Stormwater Soils and Construction (The “Blue Book” Vol. 1 and Vol. 2);
- NSW Water Sensitive Urban Design (WSUD) Guidelines;
- Australian Standard AS3500.3:2025 Plumbing and Drainage: Stormwater Drainage;

- Australian Standard AS3500.2:2021 Sanitary plumbing and drainage
- Australian Rainfall and Runoff (ARR) 2019;

Design inputs by others;

- Architectural documentation by Greenbox Dated December 2025;
- Geotechnical Investigation Report (Ref No. 233937.00) by Douglas Partners Dated 17 September 2025;
- Topographical and Utilities Survey by Stantec Dated 3 October 2024.

3.0 The Site

The site, located at 3 Brookhollow Avenue, Norwest (Lot 2021 DP 831173), is situated within the Norwest locality, forming part of the Hills Local Government Area (LGA). Development surrounding the site comprises a mix of commercial, retail and residential developments, as outlined below:

- **North:** Norwest Boulevard, commercial office buildings, an early learning centre, 'Castle Pines' retirement community and Castle Hill Country Club Golf Course;
- **East:** Windsor Road, commercial office buildings, small pockets of residential developments and industrial developments;
- **South:** Brookhollow Avenue, commercial developments, a hotel and medium density residential development; and
- **West:** Commercial developments (including a shopping centre (Norwest Marketown)), various retail premises and the Norwest Metro Station.

The site is well serviced by public transport including bus and Metro. Norwest Metro Station provides connections to Tallawong in the northwest and Sydney CBD to the southeast. Bus stops along Norwest Boulevard provide connections through to Parramatta, Seven Hills and Rouse Hill.

As shown in the below mapping, the site is in proximity to Strangers Creek and Brookhollow Reserve, located at the site's southwestern border. Norwest Lake is located approximately 90m northwest of the site.

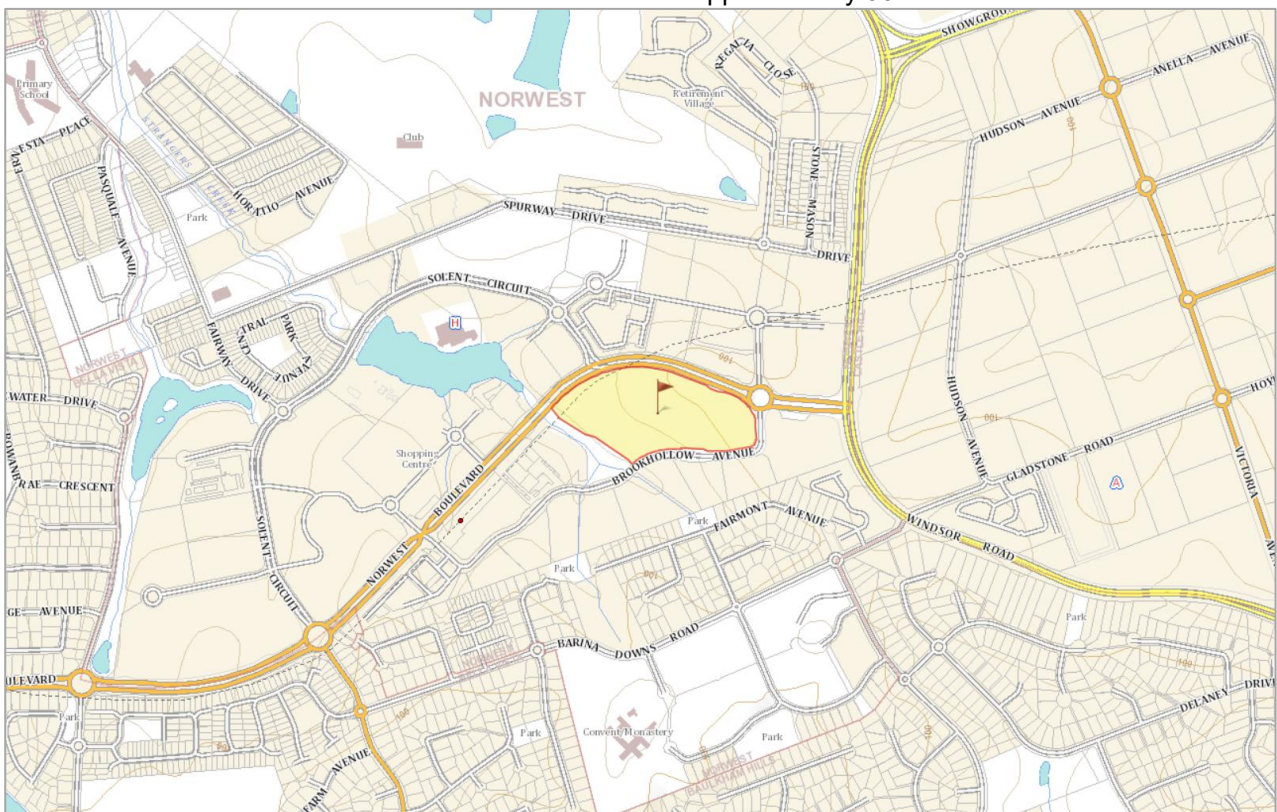


Figure 3-1: Site Context Map (Six maps)

3.1 Site Description

The subject site is legally described as Lot 2021 of DP 831173. The site can be described as irregularly shaped and has a total land area of approximately 51,867sqm. A portion of the site currently comprises an existing 4MW data centre that was approved under D93/318, dated 21 June 1993.

The site is bound by Brookhollow Avenue to the south and east, Brookhollow Reserve and the Hills Corporate Centre to the west and Norwest Boulevard to the North. The primary frontage of the site is to Brookhollow Avenue, where vehicular access is provided. Based on a review of topographical mapping, the site appears to fall from east to west from a maximum height of RL104 in the northeastern corner of the site to RL82m along the western portion of the site.

The site is located approximately 500m to the east of the Norwest Metro station, with the metro line running under the north / northwest boundary of the site.

The site is heavily vegetated, however, none of the vegetation is mapped on the biodiversity values mapping prepared under the Biodiversity Conservation Act 2016 (BC Act).



Figure 3-2: Aerial of the Site (Source: Metro Map, 2024)

4.0 Proposed Development

This SSDA seeks development consent for the construction and operation of a data centre, with a total power consumption of approximately 96MW. The proposal will form part of a broader state-of-the-art data centre campus, equipped to cater for growing data storage needs within Australia and the emergence of artificial intelligence (AI).

Specifically, the proposal includes:

- Minor excavation works beyond earthworks intended to be undertake under the separate Substation Development Application under assessment by The Hills Shire Council;
- Civil earthworks and the installation of relevant servicing infrastructure and utilities;
- Construction of a four (4) storey data centre with roof top plant, equating to an RL 130 (39.39m) and Gross Floor Area (GFA) of 16,191m²;
- Installation of 77 x diesel fuel generators and associated storage
- Provision of on-site car parking for approximately 25 spaces; and
- Landscaping, tree removal and offset tree planting.

The existing and proposed site layout is shown in the figures 4-1 and 4-2 below.



Figure 4-1: Aerial Photograph of the Existing Site Location

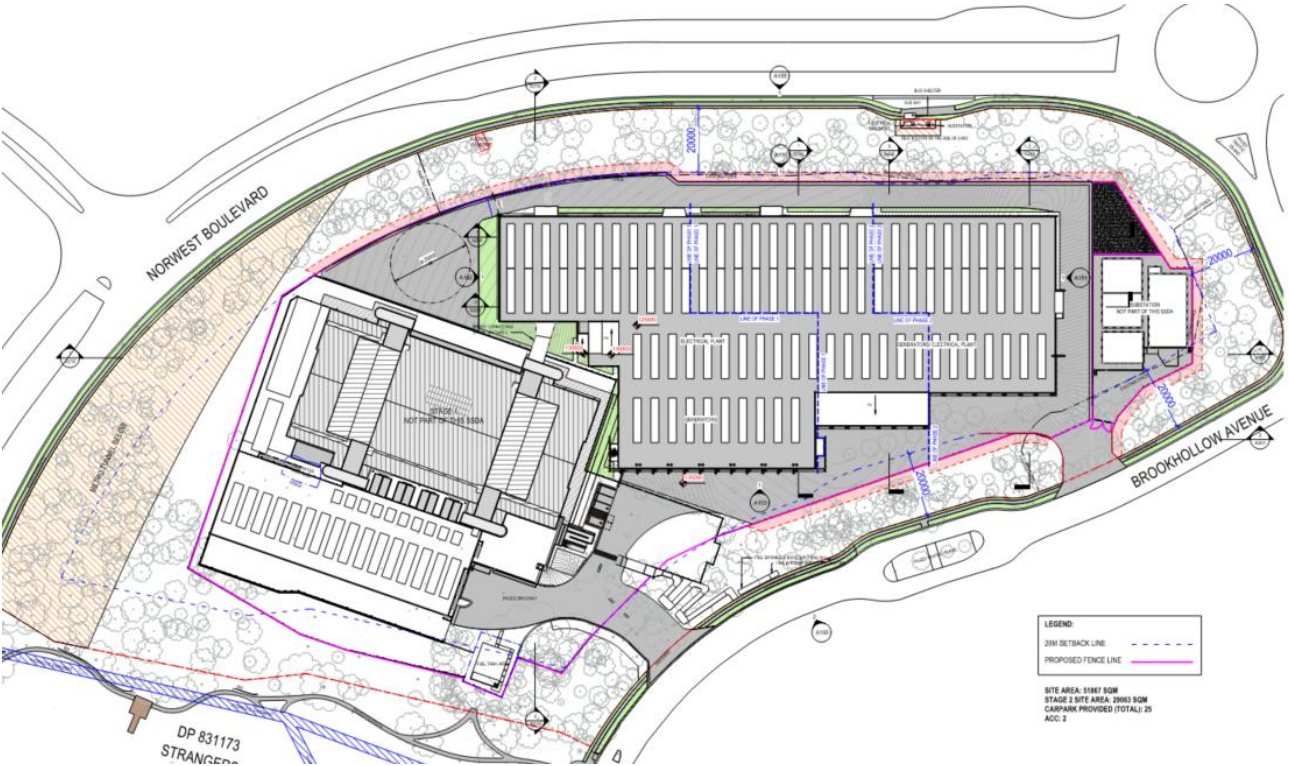


Figure 4-2: Site Plan (Source; Greenbox)

5.0 Stormwater Methodology

5.1 Review of Existing Stormwater

The existing site has an overall area of approximately 51,867sqm and is currently around 25% impervious, as shown in Figure 5-1. The existing structures are surrounded by an extensive ring of trees and soft landscaping. Roof runoff from the existing buildings is collected via a series of gutters and downpipes, which direct flows into the existing in-ground drainage network. Additionally, runoff from the existing car park, footway and circulation access road catchments are captured by kerb and surface inlet pits and are also transferred into the in-ground system. These combined impervious area flows are then discharged via a pipe and pit network to the south-western site boundary, ultimately discharging into a pipe run that outlets into Strangers Creek, as shown in Figure 5-2.



Figure 5-1: Total Impervious Area of Existing Site

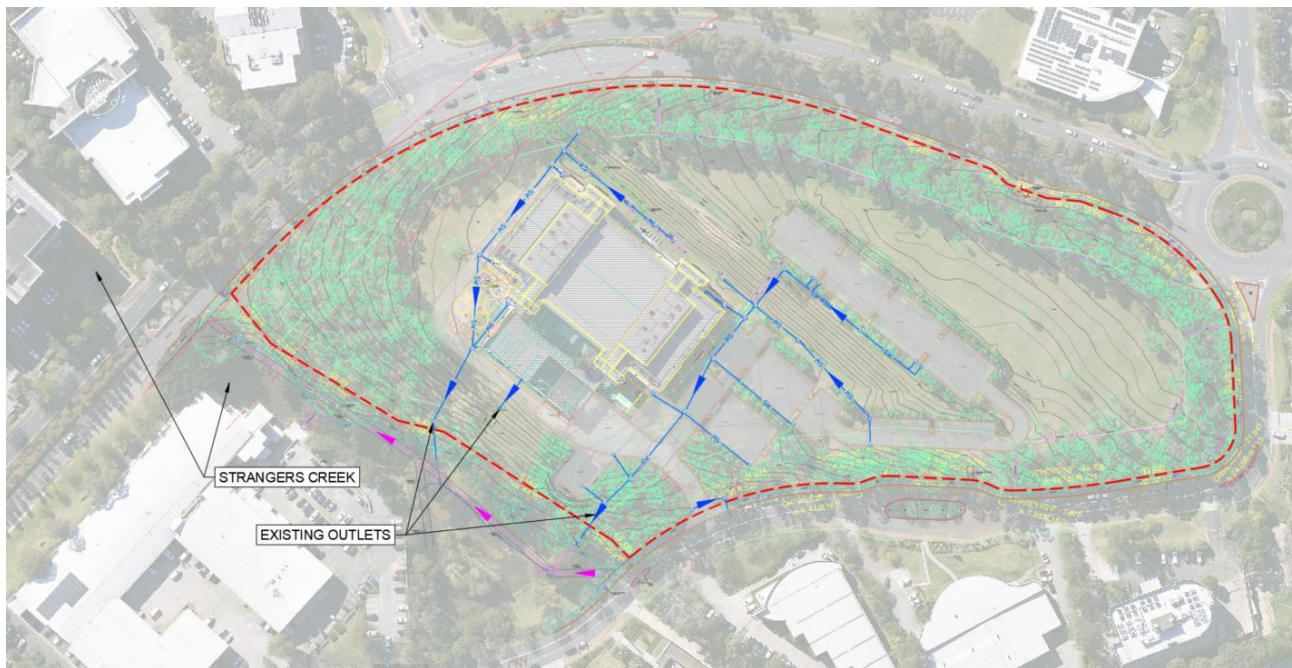


Figure 5-2: Existing Site Drainage Outlet Direction

5.2 Proposed Stormwater Design

Stormwater has been designed in accordance with the Hills Shire Council DCP 2012. Part B Section 7: Industrial, outlines the requirements for stormwater management, summarised as follows:

- Installation of rainwater tanks require approval from Sydney Water.
- On Site Detention (OSD) is required to mitigate any increase in stormwater runoff.
- Blockage factors are to be incorporated into DRAINS modelling with a value of 0.5 for sag pits and a value of 0.2 for on-grade pits.

The flood events to be considered for each drainage infrastructure element are provided in Figure 5-3.

3. Design AEP	
Drainage infrastructure shall be designed with the following design AEP flood event:	
Item	AEP Flood
Stormwater systems (general)	10%
Stormwater systems (sag)	5%
Overland flow including road surface drainage systems	1%
Design of major cross drainage structures, including culverts and bridges	1%
Channel forming flows for bridges and culverts	39.35% to 20%
Open channels designed as major drainage system	1%
Flood evacuation route road and bridges	PMF

Figure 5-3: Flood Event Design Parameters

Furthermore, the Hills Shire Council Works Specification Subdivisions / Developments 2023 several OSD requirements, as illustrated in Figure 5-4 below. The site is located within the UPRCT river catchment map.

4.22 On-Site Stormwater Detention

The Local Government Area of The Hills Shire drains two main catchments, these being the Upper Parramatta River Catchment and the Hawkesbury River Catchment. The on-site stormwater detention (OSD) requirements are different for each catchment.

- Upper Parramatta River Catchment – For those areas draining to the Upper Parramatta River Catchment on-site stormwater detention (OSD) shall be provided in accordance with the requirements of the Upper Parramatta River Catchment Trust (UPRCT). Details of these requirements can be found in the publication “*On-site Stormwater Detention Handbook*” by the UPRCT. This publication can be purchased directly from UPRCT or is available on the internet at www.uprct.nsw.gov.au.

On-site stormwater detention shall not be provided in catchment areas that drain to an approved detention system. This generally includes new release areas. Council’s Subdivision & Development Certification section can advise which catchment applies to the proposed development and the requirement for on-site detention.

The design of detention basins shall be in accordance with the principles of the Upper Parramatta River Catchment Trust policy and the following:

- Maximum depth of 600 mm in above ground systems, 200 mm depth in driveways, car parking areas and walkways.
- Desirable maximum side slopes of 1:6 for above ground basins, the absolute maximum should be 1:4 and minimum slope of floor should be 1:50.
- Provision of a grated access lid for each chamber of an underground system.
- Discharge control pits and grated access pits shall be 600 mm x 600 mm for depths up to 800 mm; 600 mm x 900 mm for depths up to 1500 mm; and 900 mm x 900 mm for depths greater than 1500 mm.

Figure 5-4: OSD Requirements

5.2.1 On-site Stormwater Detention (OSD)

The City of Parramatta (CoP) Council and the UPRCT provide guidelines for OSD requirements for developments within the LGA. These guidelines provide essential criteria for determining the necessary site storage requirement (SSR) and for appropriately sizing OSD systems to ensure effective stormwater management.

To ensure compliance with these requirements, the SSR and OSD volume for the proposed development were calculated using the OSD calculation spreadsheet provided by CoP. This tool accurately determines the necessary detention capacity based on the characteristics of the site and the anticipated impact of the development on stormwater runoff.

For the proposed development, with an approximate area of 19,363m² (excluding the substation), it is calculated that a detention tank with a total storage capacity of 881m³ is required. Refer to Figure 5-5 below for further details. This is also attached in Appendix B for clarity.

Two OSD tanks are proposed for the development and have been sized using the council’s OSD Calculation Sheet. A tank with 496m³ volume capacity will be located within the south of the generator platform, connecting

to an existing pit (SW02) within the site. The other tank with 385m³ volume capacity will be located within the northwestern ring road area and will discharge into the existing pit adjacent.

**On-Site Detention Calculation Sheet for Upper Parramatta River Catchment
HED Secondary Outlet**

Project:	Green Square Stage 2 - OSD Tank 1				
Site Address	3 Brookhollow Ave, Baulkham Hills				
Job No:	232040				
Designer:					
Telephone:					
Site Data					
OSD Area:	Upper Parramatta River Catchment				
L.G.A	Parramatta City Council				
Site Area	1.0898	ha	10,898	m ²	
Total Roof Area	0.6538	ha	6,538	m ²	
Area of Site draining to OSD Storage	0.9947	ha	9,947	m ²	Satisfactory
Residual Site Area (Lot Area - Roof Area)	0.436	ha			
Area Bypassing Storage	0.0951	ha			
Area Bypassing / Residual Site Area	21.8%				Satisfactory 30% Max
No. of Dwellings on Site	1				Satisfactory
Site Area per Dwelling	1.090	ha			
Roof Area per Dwelling	0.654	ha			
Basic OSD Parameters					
	Intended Detention			Detention	
Basic SSR Vols	Ext Detention Storage	300	m ³ /ha	Total Storage	455 m ³ /ha
Basic SRDs	Primary Outlet	40	L/s/ha	Secondary Outlet	150 L/s/ha
OSD Tank Bypass					
Residual Lot Capture in OSD Tank	78%				
Adjusted SRDs	33		L/s/ha	106	L/s/ha
OSD Calculations					
	Intended Detention			Detention	
Basic SSR Volume	Ext Detention Storage	326.94	m ³	Total Storage	495.86 m ³
Total Rainwater Tank Credits	2.50		m ³	5.00 m ³	
Storage Volume				Total	490.86 m ³
Storage Volume	Ext Detention Storage	324.44	m ³	Flood Detention Storage	166.42 m ³
OSD Discharges	Primary Outlet	36.46	L/s	Secondary Outlet	115.93 L/s

**On-Site Detention Calculation Sheet for Upper Parramatta River Catchment
HED Secondary Outlet**

Project:	Green Square Stage 2 - OSD Tank 2				
Site Address	3 Brookhollow Ave, Baulkham Hills				
Job No:	232040				
Designer:					
Telephone:					
Site Data					
OSD Area:	Upper Parramatta River Catchment				
L.G.A	Parramatta City Council				
Site Area	0.84655	ha	8,466	m ²	
Total Roof Area	0.4205	ha	4,205	m ²	
Area of Site draining to OSD Storage	0.79535	ha	7,954	m ²	Satisfactory
Residual Site Area (Lot Area - Roof Area)	0.426	ha			
Area Bypassing Storage	0.0512	ha			
Area Bypassing / Residual Site Area	12.0%				Satisfactory 30% Max
No. of Dwellings on Site	1				Satisfactory
Site Area per Dwelling	0.847	ha			
Roof Area per Dwelling	0.421	ha			
Basic OSD Parameters					
	Intended Detention			Detention	
Basic SSR Vols	Ext Detention Storage	300	m ³ /ha	Total Storage	455 m ³ /ha
Basic SRDs	Primary Outlet	40	L/s/ha	Secondary Outlet	150 L/s/ha
OSD Tank Bypass					
Residual Lot Capture in OSD Tank	88%				
Adjusted SRDs	36		L/s/ha	126	L/s/ha
OSD Calculations					
	Intended Detention			Detention	
Basic SSR Volume	Ext Detention Storage	253.37	m ³	Total Storage	385.18 m ³
Total Rainwater Tank Credits	2.51		m ³	5.00	m ³
Storage Volume				Total	380.18 m ³
Storage Volume	Ext Detention Storage	251.46	m ³	Flood Detention Storage	128.72 m ³
OSD Discharges	Primary Outlet	30.81	L/s	Secondary Outlet	106.64 L/s

Figure 5-5: OSD Calculation Sheet

5.2.2 DRAINS Modelling

The preliminary DRAINS model has been developed to assess flow dynamics for both the post-development catchment without OSD controls and the post-development catchment incorporating the proposed OSD systems. It will also aid in evaluating the capacity and adequacy of the overland flow regime during a major storm event.

The OSD tanks have been designed to capture runoff from all roof catchments as well as the hardstand and landscaped areas. The southern end of the ring road has been treated as bypassing the proposed OSD tanks and will be captured by the existing stormwater network within the site. The stormwater catchment plan for the developed area of the site is shown indicatively in Figure 5-6 and will be further refined as the design progresses.

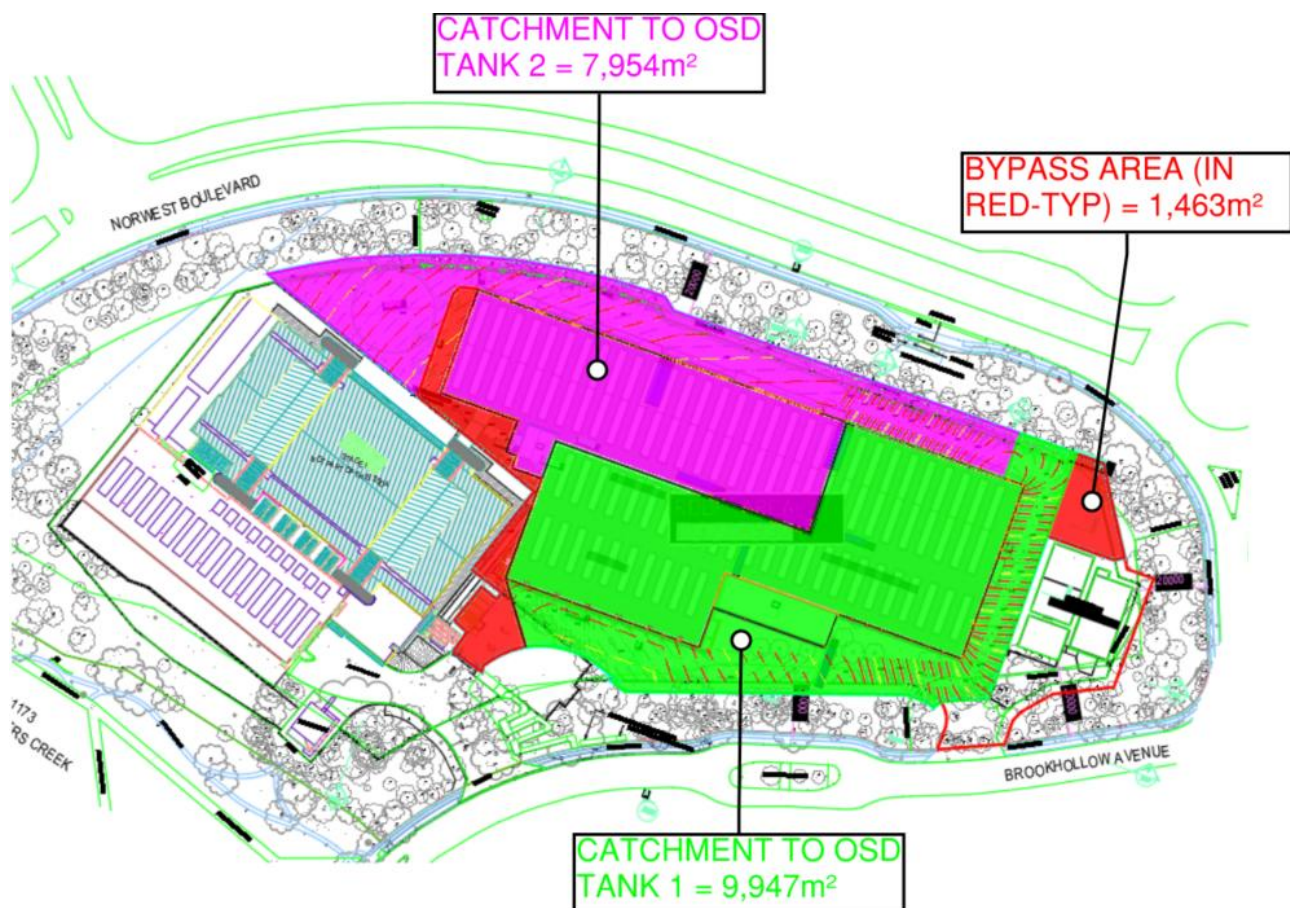


Figure 5-6: Stormwater Catchment Plan

DRAINS modelling indicates that the 20% AEP outflow from the uncontrolled pre-development catchment is 349 L/s. As shown in Figure 5-7, the outflows from the OSD systems during the 1% AEP storm are 109 L/s and 125 L/s, with an additional 96 L/s bypass. This results in a total site discharge of 330 L/s. As this total discharge remains below the PSD, the proposed design is considered acceptable.

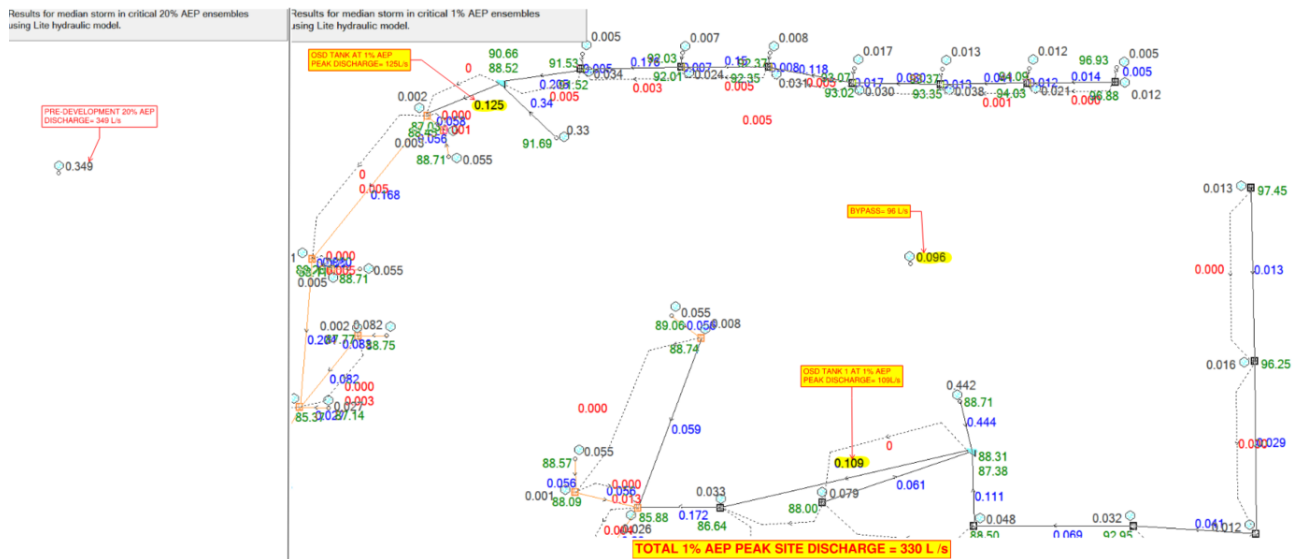


Figure 5-7: DRAINS Schematic Results 1% AEP Storm

5.3 Stormwater Quality

5.3.1 Council Requirements

The Hills Shire DCP requires implementation of Water Sensitive Urban Design (WSUD) principles. In order to meet the pollutant load reduction standards set out in Table 5-1 below, two of the following conditions must be implemented:

- M1 Low Impact Building Design.
- M2 Low Impact Landscape Design.
- M3 Porous Paving.
- M4 Rainwater Utilisation – toilet, hot water.
- M5 Grey Water Utilisation – toilet.
- M6 On-site Infiltration System.
- M7 Stormwater Treatment System.
- M8 Infiltration or Retention Basin.

It is proposed that the following two measures are incorporated into the design:

- M4 Rainwater Utilisation – toilet, hot water.
- M7 Stormwater Treatment System.

Table 5-1: Pollutant Load Reduction Target Requirements

Pollutant	Targetted Performance Requirements
Total Phosphorous	65% reduction in the post development mean annual load
Total Nitrogen	45% reduction in the post development mean annual load
Total Suspended Solids	85% reduction in the post development mean annual load
Gross Pollutants (diameter>5mm)	90% reduction in the post development mean annual load

5.3.1 Stormwater Quality Post Construction

Stormwater runoff from the site is proposed to be treated through a combination of a rainwater reuse tank, pit-insert filter baskets, and filtration cartridges. For modelling purposes, a total of 25kL rainwater tank has been assumed to harvest runoff from all roof surfaces.

Overflow from the rainwater tank will discharge to the filter chamber within the OSD tanks. Stormfilter cartridges are to be provided within the OSD filter chamber and will be used to target pollutant loads. Additionally, surface runoff from external hardstand and landscaped areas will be collected via surface inlet pits and treated through OceanGuard filter baskets before being conveyed to the OSD filter chamber.

A preliminary MUSIC (Model for Urban Stormwater Improvement Conceptualisation) model was used to conceptualise stormwater treatment measures that could achieve the water quality targets required by council. The treatment train proposed for the site used to model MUSIC has been provided in Figure 5-8.

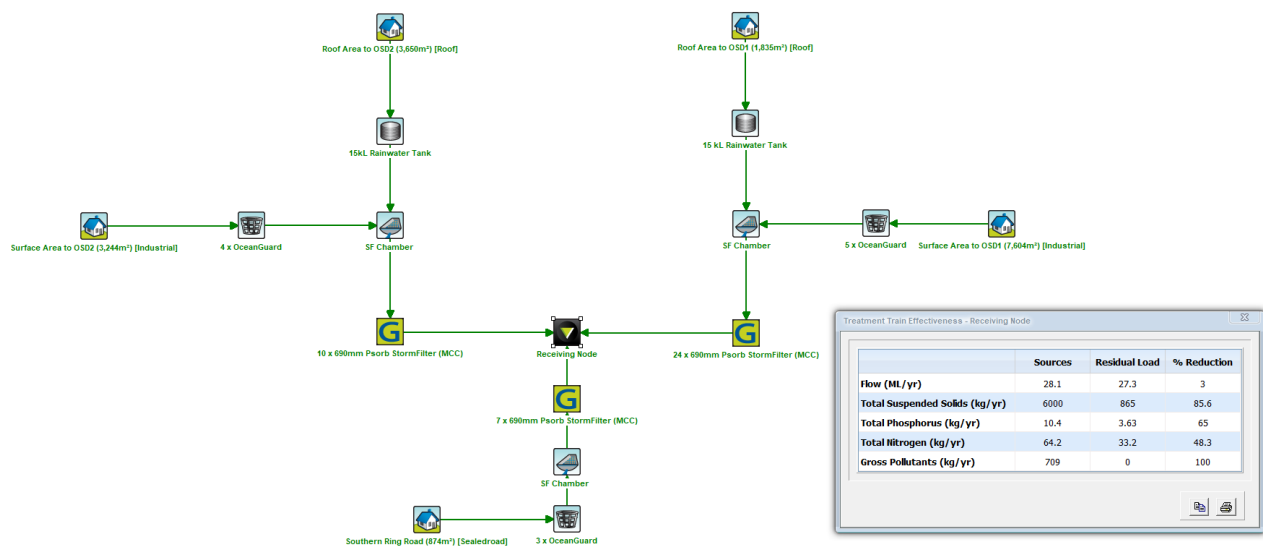


Figure 5-8: MUSIC Treatment Train and Results

The assumed impervious areas and catchment sizes are preliminary and will be refined as the landscape design progresses. As the developed and impervious areas are further detailed, the proposed treatment train will be updated accordingly.

The effectiveness of the proposed treatment train combination has been assessed using the MUSIC model, with the results compared against the council's pollutant reduction targets. This assessment was undertaken to confirm that the proposed stormwater treatment measures adequately meet the required water quality objectives.

The results of the MUSIC model are tabulated below.

Table 2: MUSIC Modelling Results

Pollutant	Min. Required Reduction (%)	Modelled Reduction (%)
Total Suspended Solids (TSS)	85	85.6
Total Phosphorus (TP)	65	65
Total Nitrogen (TN)	45	48.3

Gross Pollutants (GP)	90	100
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Given the above results, all four parameters have met council's water quality targets. Pollutant loads from the proposed development have been significantly reduced for total suspended solids, total phosphorus, total nitrogen and gross pollutants relative to existing.

5.3.2 Stormwater Quality During Construction

During construction stage of the project while the site is disturbed, erosion prevention and sediment control measures will be installed and maintained until construction is completed. Erosion and sediment control measures will be required to comply with:

- The Hills Shire Council DCP 2012;
- Managing Urban Stormwater – Soils and Construction 'Blue Book', Volume 1, 4th Edition, Landcom

A sediment fence will prevent silt and waste being washed into neighbouring sites and streets. It can be integrated with safety fencing. A catch drain with straw bales will be utilised to carry and treat site runoff which will then be captured by a stabilised earth basin with a total volume of 735 m³, that will be installed at the low point of site excavation. At the point of entry to site, stabilised access will be required to ensure that vehicles and machinery leave the site with clean wheels. Pits will have geotextile inlet filter or mesh and gravel inlet filter installed to prevent silt from entering the stormwater system during construction.

The stabilised earth basin is intended for use during the early stages of construction to manage site runoff prior to bulk excavation and building works across the site. As construction progresses and the site becomes developed as well as access to that portion of the site restricted, the basin will be reduced and eventually decommissioned in accordance with the ESCP, and alternative sediment control measures will be implemented as part of the staging strategy. A reduced basin may be implemented with the addition of flocculants to accelerate settling of sediment.

6.0 Site Works Methodology

6.1 Bulk Earthworks

Bulk earthworks on the site will be required to facilitate the development of the site for the proposed multi-storey data centre and surrounding roads and landscapes. Excavation advice provided by Douglas Partners in the geotechnical investigation report to be followed.

The approval for these excavation works is being sought through a separate Development Application which has been submitted to The Hills Shire Council.

6.1.1 Cut and Fill Volumes

A high-level cut and fill estimate has been completed for the site and is shown in drawing no. 232040-TTW-12-SK-CI-00004-0 in Appendix A. The assessment determined the following volumes shown in Table 3. Overall, the balance totals a net cut of 53,315.87m³.

Table 3: Cut and Fill Volume Analysis

TOTAL	Volume (m ³)
Cut	-62740.30
Fill	9424.43
Net (Cut)	-53315.87

Note, the bulk earthworks plan excludes detailed excavation. It is a preliminary estimate which is subject to adjustment to allow for variances in geotechnical conditions, allowable building height, and drainage conditions.

6.2 Pavement Design

The design of external pavements within the site will be undertaken by TTW to ensure they provide adequate strength and safety for both pedestrian and vehicular movements. It is recommended that site-specific California Bearing Ratio (CBR) testing be carried out by the geotechnical engineer to establish the appropriate CBR value for use in the pavement design. Whilst noted that a large majority of the site area is exposed sandstone, some sections of the unexcavated land will potentially require CBR analysis.

Pavements subject to vehicular traffic will need to be designed to accommodate the proposed design vehicle loads and anticipated vehicular movements. A conservative pavement depth of 400mm has been assumed for the purposes of bulk earthworks modelling.

7.0 Flooding

Refer to the TTW flood report documentation.

8.0 Conclusion

This report provides a partial summary of the Integrated Water Management requirements to support the SSDA submission for the proposed SYD1 Brookhollow Avenue Data Centre.

Stormwater is required to comply with the relevant standards and requirements of the Hills Shire Council as outlined in the DCP. WSUD is to be targeted by rainwater reuse tank, 12 x Ocean Protect's Oceanguard surface inlet pit inserts (or similar approved equivalent) and 41 x 690mm Ocean Protect's PSorb Stormfilter cartridges (or similar approved equivalent) to meet council's minimum pollutant reduction rates.

Based on the above, the proposed stormwater drainage works comply with the council's DCP requirements. We recommend that the civil and stormwater works for the proposed development be generally in accordance with the civil engineering drawings shown in Appendix A.

The findings in this statement are based on current available information, regulations and correspondence undertaken at the time of writing.

Prepared by
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Appendix A

SSDA Civil Engineering Drawings