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PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2021/1193/3

Date: 1 July 2025

Queensland Government

23 August 2024

Economic Development Queensland
GPO Box 2202
Brisbane Queensland 4001 Australia

Dear Sir/Madam,

Re: 19 – 25 CAMPBELL STREET, BOWEN HILLS QLD 4006
TECHNICAL MEMO – REVIEW OF ENGINEERING SERVICES AND STORMWATER MANAGEMENT PLAN
24708.004 C L001, BRISBANE

In 2021, ADG Engineers (Aust.) Pty Ltd (ADG) was engaged by Dowse Projects Pty Ltd (Dowse) to prepare a Civil Engineering Report (ADG reference: 24708 C R001 Rev02 15.10.21). The Civil Engineering Report included a Stormwater Management Plan (SMP) and Engineering Services Report (ESR) for a proposed 30-storey tower project located at 19-25 Campbell Street (Lot 41-25 on RP9895, Lot 10, 12 & 21 on RP144655, Lot 1 on RP144514 and Lot 1 on RP 151932) located in Bowen Hills, under a Build to Rent scheme. This report was submitted to Economic Development Queensland (EDQ) to support the project's Development Application, which was approved on 20th December 2022 (EDQ reference: DEV2021/1193).

In 2024, New Urban Villages (NUV) assumed responsibility of the development from Dowse. ADG was subsequently engaged by NUV to prepare a Technical Memo to support a 'Change Application'. ADG have considered the revised architectural plans for the development, completed by Nettletontribe Architects (NT), in relation to the proposed civil stormwater and civil servicing design intent. This Technical Memo has been prepared to support the 'Change Application' and is intended to demonstrate that the previously submitted Civil Engineering Report prepared by ADG in 2021 is generally suitable for the latest architectural plans in August 2024. This memo should be read in conjunction with the previously approved and above-mentioned Civil Engineering Report.

Flooding

Brisbane City Council's Flood Wise report generated in 2021, documented that no Defined Flood Levels (DFL) or Overland Flow were identified for building and development purposes. A subsequent, updated Flood Wise report generated for the site in 2024 corroborated that these findings remain unchanged.

Stormwater Quality

The total development area for the proposed works is 3,292m^2. As the development is greater than 2,500m^2, the development remains classified as 'high risk' for water quality, triggering the requirement to meet the stormwater treatment targets conditioned in the State Planning Policy (SPP) 2017. As such, Stormwater Quality Improvement Devices (SQIDs) are proposed to meet these targets.

An updated stormwater run-off model was created using MUSIC 6.3.0 (**Figure 1**). The results of the MUSIC model are recorded in **Figure 2**. The proposed stormwater quality treatment measures for the development can be summarised below:

Northern System (Catchment C1)

- 2 x 690mm tall PSorb Cartridges
- 1 x OceanGuards

Southern System (Catchment C2)

- 1 x 690mm tall PSorb Cartridge
- 1 x OceanGuards

It is noted that Catchment C3 is not included as part of the modelled treatment train as it represents a portion of land that will be resumed by Council as part of this development.

Figure 1 MUSIC model treatment train

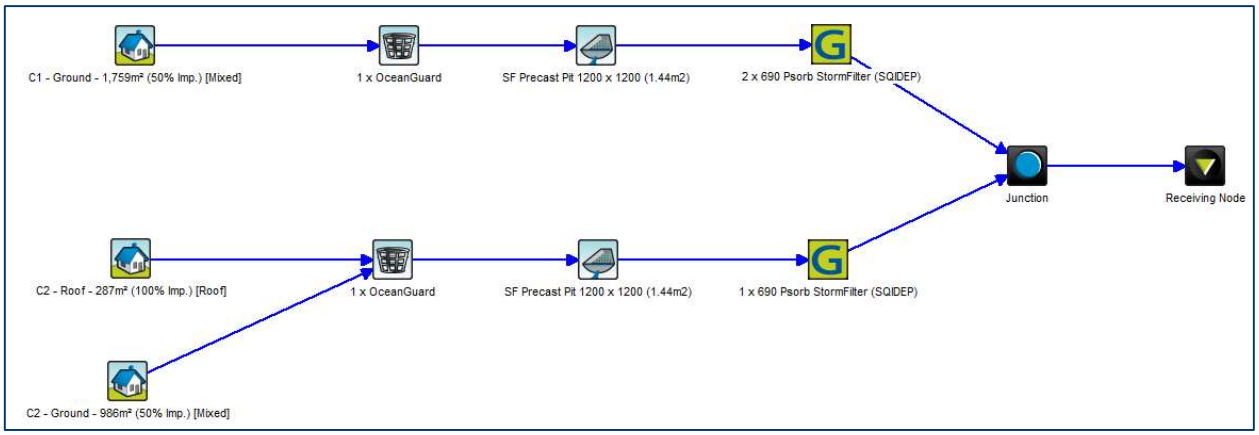

Figure 2 Results for the treatment train

	Sources	Residual Load	% Reduction
Flow (ML/yr)	2.53	2.53	0
Total Suspended Solids (kg/yr)	486	63.3	87
Total Phosphorus (kg/yr)	1.3	0.503	61.2
Total Nitrogen (kg/yr)	8.1	4.12	49.1
Gross Pollutants (kg/yr)	55.2	0	100

Stormwater Quantity

To assess any changes to the proposed stormwater quantity recommendations in the Civil Engineering Report, a comparison between the original pre-development and the new 2024 post-development catchment plans were undertaken. As the proposed development leads to a maintained impervious area of 100%, it implies that there will be no increase to the peak discharge from the site. Therefore, no detention measures are required for the development.

A catchment plan for the 2024 proposed layouts has been appended with this report for reference.

Capacity Assessment

As of the date of this Technical Memo, a Service Advice Notice (SAN) has been lodged to Urban Utilities for the development to understand the capacities of the existing sewer and water infrastructure network. A copy of the approve SAN will be provided to EDQ upon receipt from Urban Utilities.

Earthworks

The bulk earthworks strategy outlined in the 2021 Civil Engineering Report remains unchanged since there are no changes to the lowest basement level.

Conclusion

The changes to the updated architectural layouts in 2024 are considered to have negligible effect on the flooding, stormwater quality, stormwater quantity and bulk earthworks requirements of the development. As such, ADG considers the recommendations within the Civil Engineering Report completed in 2021 (reference no: 24708 C R001 Rev02 15.10.21) to remain valid and that a revision of the Civil Engineering Report is unnecessary to suit the revised architectural layout and the support the 'Change Application'.

We trust that the above satisfies the requirements of the 'Change Application'. Please do not hesitate to contact the undersigned should EDQ require any other information.

Kind regards,

C. Moore

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Cameron Moore

Associate Director – Civil

Attachments

1. *POST DEVELOPMENT CATCHMENT PLAN*
2. *CONCEPT SERVICES LAYOUT PLAN*
3. *FLOODWISE REPORT*

Rev	Date	Description
1	23/08/2024	PRELIMINARY ONLY

T: 1300 657 402 E: info@adgce.com W: www.adgce.com
Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: NEW URBAN VILLAGES

Project Name: 19-25 CAMPBELL STREET BOWEN HILLS

Discipline	Status
CIVIL	PRELIM

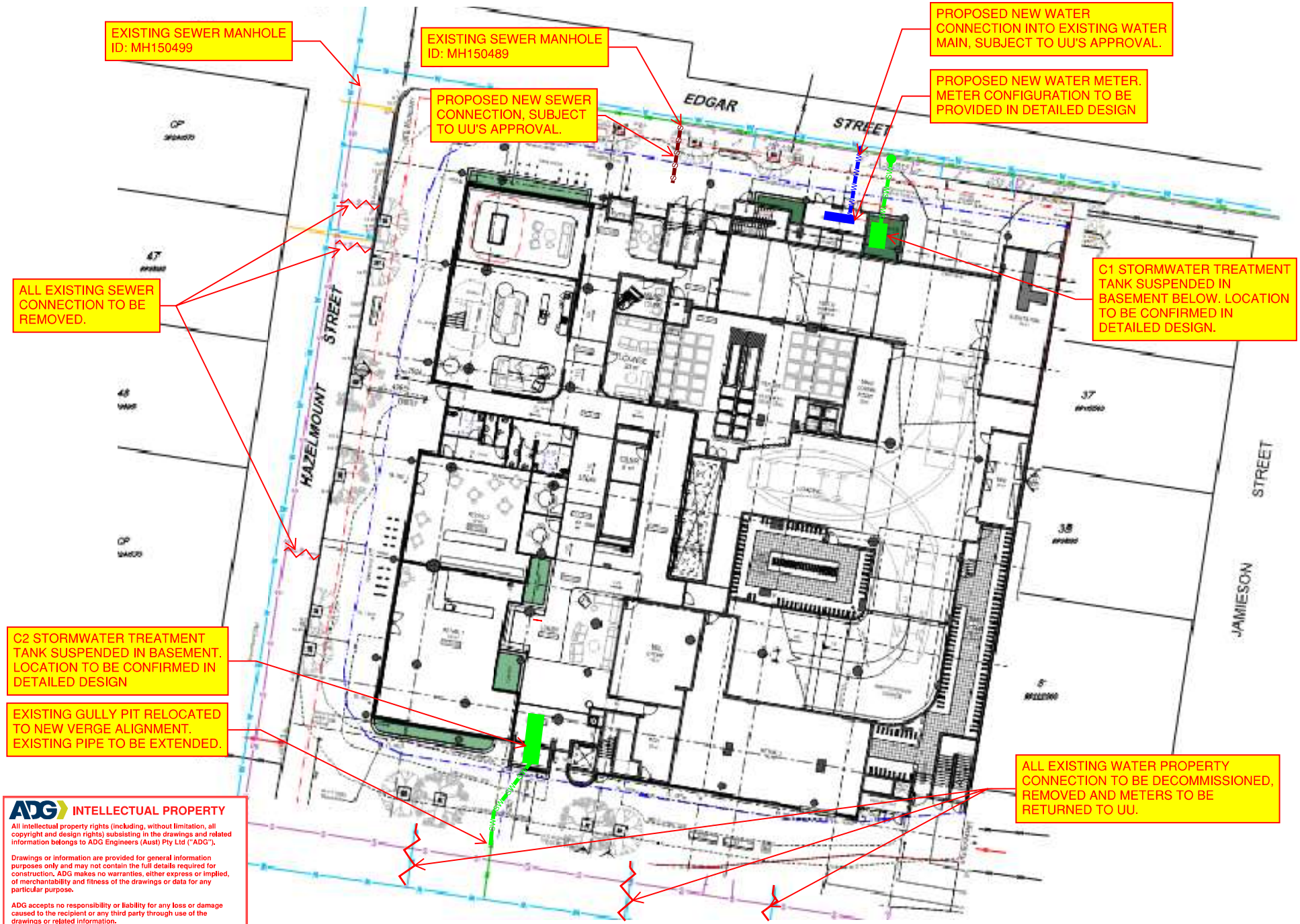
Designed By	Checked By	Approved By
CC	ETY	CDM

Project No.	Drawn By	Scale
24708	CC	NTS (at A3)

Title: POST-DEVELOPED CATCHMENT PLAN

Drawing No.: SK01

Revision: 1



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Client: NEW URBAN VILLAGES

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Discipline	Status
CIVIL	PRELIM

Designed By	Checked By	Approved By
CC	ETY	CDM

Project No.	Drawn By	Scale
24708	CC	NTS (at A3)

Title: CIVIL SERVICES LAYOUT PLAN

Drawing No.: SK02

Revision: 1

FloodWise Property Report

25 CAMPBELL ST, BOWEN HILLS 4006
Lot 44 on RP9895, Lot 45 on RP9895, Lot 43 on RP9895

Dedicated to a better Brisbane

THE PURPOSE OF THIS REPORT IS FOR BUILDING AND DEVELOPMENT

Brisbane City Council's FloodWise Property Report **provides technical flood planning information** including estimated flood levels, habitable floor level requirements and more. **This report uses the adopted flood planning information in Brisbane City Plan 2014**, that guides how land in Brisbane is used and developed for the future. Find out more about planning and building. To understand how to be **resilient and prepare for floods**, visit Council's Be Prepared webpage. Find more information about how to read a FloodWise Property Report.

This property has no flood levels

Brisbane City Council has not assigned flood level information for this property however it may be affected by one or more flood or property development flags. Please refer to the Flood Planning and Development Information below for details. The property may have 0.2% AEP flood level which will appear on the Flood Planning Information table if applicable. For professional advice or detailed assessment of a property contact a Registered Professional Engineer of Queensland.

Visit the Be Prepared page to find more information on how to prepare your home or business for potential flooding.

Combined 1% AEP for river, creek and storm tide flood extent (if applicable) from the adopted Brisbane City Plan 2014.
Read more about Brisbane City Plan 2014.

Are you resilient and ready for flood?

- Sign up to the Brisbane Severe Weather Alert at **brisbane.qld.gov.au/beprepared**
- Visit bom.gov.au for the latest weather updates.
- Have an evacuation plan, emergency kit and important phone numbers ready.
- Observe where water flows from and to during heavy rain.
- Consider how flood-resilient building techniques will have you home faster and with less damage.

Life threatening emergencies **000** Police/fire/ambulance (mobiles **000** and **112**)	State Emergency Service (SES) **132 500** Energex **13 19 62** Brisbane City Council **3403 8888**

Technical Summary

This section of the FloodWise Property Report contains more detailed flood information for this property so **surveyors, builders, certifiers, architects, and engineers can plan and build** in accordance with Council's planning scheme.

Find more information about planning and building in Brisbane or talk to a Development Services Planning Information Officer via Council's Contact Centre on (07) 3403 8888.

Flood Planning and Development Information

This section of the FloodWise Property Report contains information about Council's planning scheme overlays. Overlays identify areas within the planning scheme that reflect distinct themes that may include constrained land and/or areas sensitive to the effects of development.

Flood overlay code

The Flood overlay code of Council's planning scheme uses the following information to provide guidelines when developing properties. The table below summarises the flood planning areas (FPAs) that apply to this property. Development guidelines for the FPAs are explained in Council's planning scheme.

Flood planning areas (FPA)		
River	Creek / waterway	Overland flow
		Not Applicable

To find more information about Council's flood planning areas (FPAs) for Brisbane River and Creek/waterway flooding to guide future building and development in flood prone areas, please review Council's Flood Planning Provisions.

Coastal hazard overlay code

The Coastal hazard overlay code of Council's planning scheme uses the following information to provide guidelines when conducting new developments. The table below summarises the coastal hazard categories that apply to this property. Development guidelines for the following Coastal hazard overlay sub-categories are explained in Council's planning scheme.

Coastal hazard overlay sub-categories
There are currently no Coastal hazard overlay sub-categories that apply to this property.

Note: Where land is identified within one for more flood planning areas on the Flood overlay or is identified within one of the Storm tide inundation area sub-categories on the Coastal hazard overlay, the assessment criteria that provides the highest level of protection from any source of flooding applies.

Useful Flood Information Definitions

Australian Height Datum (AHD) - The reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level.

Annual Exceedance Probability (AEP) - The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.

- **0.2% AEP -** A flood event of this size is considered rare but may still occur. A flood of size or larger has a 1 in 500 chance or a 0.2% probability of occurring in any year.
- **1% AEP** - A flood of this size or larger has a 1 in 100 chance or a 1% probability of occurring in any year.
- **2% AEP -** A flood of this size or larger has a 1 in 50 chance or a 2% probability of occurring in any year.
- **5% AEP -** A flood of this size or larger has a 1 in 20 chance or a 5% probability of occurring in any year.
- **20% AEP -** A flood of this size or larger has a 1 in 5 chance or a 20% probability of occurring in any year.

Data quality

- **Data Quality Code A -** Level data based on recent surveyor report or approved as-constructed drawings.
- **Data Quality Code B -** Level data based on ground-based mobile survey or similar.
- **Data Quality Code C -** Level data derived from Airborne Laser Scanning or LiDAR information.

Defined Flood Level (DFL) - The DFL is used for commercial and industrial development. The Defined flood level (DFL) for Brisbane River flooding is a level of 3.7m AHD at the Brisbane City Gauge based on a flow of 6,800 m/s. DFL is only applicable for non-residential uses affected by Brisbane River flooding.

Flood planning area (FPA) - Council has developed five Flood planning areas (FPAs) as part of Brisbane City Plan 2014 Flood overlay mapping for Brisbane River, Creek/waterway flooding and Overland flow to guide future building and development in flood prone areas. Storm tide flooding is mapped separately. The FPAs are designed to recognise the flood hazard for different flooding types. Flood hazard is a combination of frequency of flooding, the flood depth, and the speed at which the water is travelling. **Find more information here**.

Maximum and minimum ground level - Highest and lowest ground levels on the property based on available ground level information. A Registered Surveyor can confirm exact ground levels.

Minimum habitable floor level (dwelling house) - The minimum level in metres AHD at which habitable areas of development (generally induding bedrooms, living rooms, kitchen, study, family, and rumpus rooms) must be constructed as required by the Brisbane City Plan 2014.

Indicative existing floor level - The approximate level in metres AHD of the lowest habitable floor in the existing building (exduding apartments). The data is sourced from a range of sources with varying accuracy levels.

Property - A property will contain 1 or more lots. The multiple lot warning is shown if you have selected a property that contains multiple lots.

Residential flood level (RFL) - This flood level for the Brisbane River equates to the 1% annual exceedance probability (AEP) flood level.

To learn more, visit **Brisbane City Council's Flood Information Hub**

Brisbane City Council's Online Flood Tools

Council provides several online flood tools:

- to guide planning and development
- to help residents and businesses understand their flood risk and prepare for flooding.

Council's online flood tools for planning and development purposes indude:

- **FloodWise Property Report**
- **Flood Overlay Code**

For more information on Council's planning scheme and online flood tools for planning and development:

- phone (07) 3403 8888 and ask to talk to a Development Services Planning Information Officer

- visit brisbane.qld.gov.au/planning-building

Council's Planning Scheme - The Brisbane City Plan 2014 (planning scheme) has been prepared in accordance with the Sustainable Planning Act as a framework for managing development in a way that advances the purpose of the Act. In seeking to achieve this purpose, the planning scheme sets out the Council's intention for future development in the planning scheme area, over the next 20 years.

Disclaimer

1. Defined flood levels and residential flood levels, minimum habitable floor levels and indicative existing floor levels are determined from the best available information to Council at the date of issue. These levels, for a particular property, may change if more detailed information becomes available or changes are made in the method of calculating levels.
2. Council makes no warranty or representation regarding the accuracy or completeness of a FloodWise Property Report. Council disdaims any responsibility or liability in relation to the use or reliance by any person on a FloodWise Property Report.

Planning to build or renovate?

For information, guidelines, tools and resources to help you track, plan or apply for your development visit brisbane.qld.gov.au/planning-building

You can also find the Brisbane City Plan 2014 and Neighbourhood Plans as well as other information and training videos to help, with your building and development plans.