# Stormwater and Flooding Impacts of concept development proposal at

42-46 Parramatta Road, Homebush

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Prepared for AJ Bush and Sons Pty Ltd

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#### **Executive Summary**

This report presents the Stormwater and Flooding Impacts from a development proposal at 42-46 Parramatta Road, Homebush for submission to NSW Planning as part of the proposed increase in allowable FSR and Height.

A development application for a nine storey building consisting of 62 Apartments has been approved and the concept proposal is for a twenty four storey building with 111 Apartments.

Based on our review it is our opinion that the proposal will require the same stormwater and flooding requirements as provided for the original nine storey building proposal.



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## 1 42-46 Parramatta Road, Homebush

The site at 42-46 Parramatta Road, Homebush is located on the southern side of Parramatta Road and at the intersection with Station Street. The site is west of Powells Creek and is currently a vacant block that is being used for car parking.

The existing site is bound to the:

- North by Parramatta Road and Apartment building at 58 Parramatta Road
- East by Station Street
- South by Apartment building at 5 Station Street
- West by property at 62-68 Parramatta Road.

The site is traversed by a main sewer line that is proposed to be rediverted as part of the development works.



Figure 1 – Existing site



### 1.1 Current DA Approval

The current approved DA that was lodged in October 2014 is for a new 9 storey apartment building with 62 Units, Ground floor commercial level and 2 levels of Basement car parking.



Figure 2 – Approved DA

The proposed building occupies the full footprint of the site that is L-shaped in plan and approximately 2250m² in area.

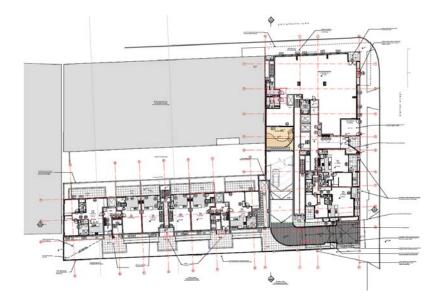


Figure 3 – Site Plan (Ground floor level)



The approved DA Ground floor level is at RL7.25 and the existing ground levels vary between RL7.28 and RL 11.27. The existing site is currently benched at two levels, upper western grassed section (approx. average RL 10.0) and the lower hardstand section (approx. average RL 8.0).

The current approved proposal contains 62m³ of on-site detention with the tank located below the building driveway and water quality controls to address Water sensitive urban design objectives.

Both of the above have been addressed with appropriate DRAINS and MUSIC models that were submitted with the current approved DA.

The stormwater from the development will be discharged to Powells Creek via a new 375 diameter stormwater line that will be constructed below the kerb and gutter of Parramatta Road as requested by Strathfield Council.

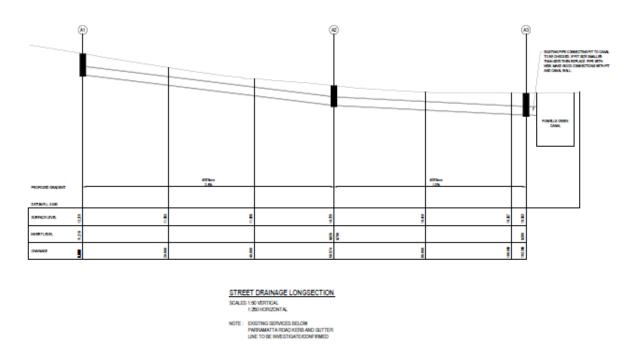


Figure 4 – Proposed 375 diameter stormwater line.

We have reviewed the flood study prepared by wmawater for Strathfield Council dated November 2016, "Powells Creek and Saleyards Creek Revised Flood Study".

The Study tabulates the following peak flood levels at Parramatta Road that are all below the existing and proposed ground levels for the various rainfall events:

5% AEP 0.5% AEP 10% AEP 2% AEP 0.2% AEP 27.45 27.45 27.45 27.45 27.46 27.46 27.46 27.46 27.48 Torrington Road 16.18 16.28 16.33 16.40 16.44 16.48 16.54 17.10 16.59 Brunswick Avenue Parramatta Beresford Road 15.23 15.25 15.28 15.31 15.34 15.36 15.39 15.43 15.79 Road location 12.51 12.55 12.67 12.79 12.94 14.36 9.45 12.10 9.22 9.30 9.41 9.49 9.51 9.56 Pilgrim Avenue 9.35 Parramatta Road 5.41 5.42 5.43 5.44 5.45 5.46 5.47 5.76 6.83 1.83 2.11 2.46 2.55 2.67 4.03 2.24 2.63 2.78 Pomeroy Street Underwood Road 3.43 3.43 3.43 3.43 3.43 3.43 3.43 3.43 3.72 6.95 7.31 7.68 7.85 8.00 8.13 11.25 The Crescent 7.45 8.32 3.46 3.49 3.51 3.55 3.56 3.58 3.63 3.65 5.02 Park Road Allan Davidson 9.36 9.37 9.38 9.40 9.43 9.56 9.63 9.69 11.26 13.09 13.13

Table 23: Peak Flood Levels (mAHD) and Depths (m) at Key Locations

Figure 5: Peak Flood levels



#### 1.2 New Concept Proposal

The revised concept proposal involves increasing the number of units to 111 and the number of residential floors to 24. One commercial level and two Basement levels will remain as currently approved.

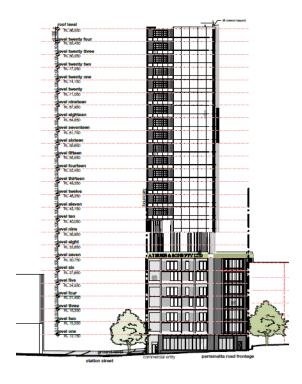


Figure 6 - Proposed Building uplift

The footprint of the proposal is the same as currently approved and occupies the full site area.

The proposed ground floor level of RL7.25 is also the same as the currently approved proposal.

The following previously provided requirements also pertain to the current proposal:

- OSD requirement of 62m3.
- Water Sensitive Urban Design controls.
- New 375 diameter stormwater line to Powells Creek.
- · Rediversion of the main sewer line.

The proposed ground floor level is also higher than the tabulated peak flood levels stated in the report prepared by wmawater and therefore there is no impact from flooding.