

## MEMORANDUM

TO: Jonathan Goodwill

FROM: Development Engineer

SUBJECT: **6a-8 Buckingham Road, Killara**

The application is for the demolition of the existing structures and the construction of a residential flat development with 43 units (3x1br, 33x2br and 7x3br). Strata subdivision is not indicated on the application form.

The site has been the subject of several previous applications, the most recent of which was refused by the Land and Environment Court in May 2010.

The adjoining site, 2-6 Buckingham Road, is the subject of a Court approval and it is understood that commencement of works is imminent.

The following documents were used for the assessment:

- BASIX Certificate 360906M, dated 22 February 2011;
- Jeffery and Katauskas Preliminary Geotechnical Assessment dated 17 January 2007;
- Traffix Traffic Impact Assessment dated February 2011;
- Don Fox Planning Statement of Environmental Effects dated March 2011;
- PSE Access Consulting Assessment Report dated 9<sup>th</sup> February 2011;
- Aleksandar Design Group Drawings 0856 DA02 to DA17, all Issue A;
- Dickson Rothschild Drawings 05-067A111/F, A112/F, A201/G and A302/C (2-6 Buckingham Road);
- ABC Consultants Drawings 11004 C00.01/A, C01.01/A, C02.01/A and C03.01A.

**Additional information is required for engineering assessment to proceed (listed below):**

### **Water management**

The site is affected by an interallotment drainage easement created to benefit the site at 2-6 Buckingham Road, as well as an easement over the trunk drainage pipe which drains the Pacific Highway and upstream properties.

The SEE states that an easement is currently being obtained over Killara Golf Course, but no documentation was submitted to this effect.

The Council pipe is not within the easement – a survey plan submitted in connection with a previous application shows the pipe running closer to the rear boundary. The Stormwater management plans show the pipe within the easement, but no design. Clarification is required – what is actually proposed?

The BASIX water commitments are for a 43,000 litre rainwater tank, with re-use for toilet flushing. On site detention is also required. The Site storage requirement is 57 cubic metres (using 50% of the site area to calculate, ie allowing for deep soil), and with the concession allowed under DCP 47 for the retention and re-use, a volume of 43 cubic metres is required. This is provided in a detention tank adjacent to the rainwater tank, located below the lowest basement level.

Water quality measures are required, and a Humeceptor is shown, collecting runoff from external surfaces and the basement pump-out (although on Sheet C02.01 the rising main is not connected to the Humeceptor, it is intended to be as shown on Drawing C03.01 – this could be amended by condition).

It is noted that the basement drainage pump would only need to cater for subsoil inflows and runoff from some stairs. The sizing of the wet well has been carried out in accordance with DCP 47 *Water management*. This is satisfactory, however groundwater seepage is expected at depths of 5-6 metres (see below) and if significant flows occur, then the wet well may need to be increased in size. This could be conditioned for consideration in the preparation of the Construction Certificate plans.

Generally, the proposed water management system for the development is satisfactory.

### **Traffic and parking**

The traffic report has been prepared using the Town Centres DCP 2010. This DCP does not actually apply to this site and instead the requirements of LEP 194 and DCP 55 apply.

The site is further than 400 metres from Killara Station, so 50 resident and 11 visitor parking spaces are required. Of the 43 units, 5 are to be manageable units, therefore 5 disabled resident and 1 disabled visitor parking spaces must be provided.

The SEE contains inconsistent carparking figures – it states on one page that only 9 visitor spaces are provided, then the table on page 37 proposes 11, then page 46 states that only 8 visitor and 58 resident spaces are proposed.

The plans actually show 50 resident spaces and 11 visitor spaces, but there are deficiencies.

The traffic report states that one disabled parking space is provided for visitors but makes no mention of disabled resident parking. The plans do not indicate any disabled resident parking, despite the access report which states "dedicated accessible (disabled) car spaces (one for each of the required accessible apartments) are provided in close proximity to the lift...".

Space A3 is short – as a parallel space, it should be 6.3 metres long, but is only 5.4 metres. The other parallel spaces are acceptable since the circulation space around the lift can be used for manoeuvring.

The single lane ramps are provided to maximise the setback from the boundary. The traffic report recommends traffic lights – the locations of these should be shown on the drawings.

The report states “The proposed development has acquired access from the ROW through the adjoining property of 2-6 Buckingham Road which is subject to separate DA.”

No evidence has been submitted to show that the owners of 2-6 Buckingham Road are prepared to grant this right of way or modify their consent to provide the access ramp.

The drawings show a single bridge, with the driveway entering the subject development at RL109.00. The approved plans for 2-6 Buckingham Road show that the proposed ramp bridge is in the middle of a ramp down from one level (RL110.43) to another (RL109.73) at 1:20 (5%). The levels either side of the proposed ramp bridge are RL110.23 and RL109.73 approximately. This gives a gradient for the ramp bridge between 20% and 12%. This is not satisfactory, as there is insufficient space for transitions to be provided.

### **Waste management**

The development requires 44 containers (22 for garbage, 11 for paper and 11 for mixed recycling). A storage area is shown at the entry level, which appears to be adequate in size.

However, the documentation does not demonstrate that the small waste collection vehicle can enter the carpark from Buckingham Road (through 2-6 Buckingham Road) and manoeuvre the entire ramp system of that carpark, then enter the subject site via the ramp. To demonstrate this, a continuous longitudinal section along the whole path of travel would be required, showing a minimum headroom of 2.6 metres and maximum gradient of 20%.

This is additional to the matters already raised regarding the practicality of entering one site via a completely separate development.

### **Construction traffic management**

No construction traffic management plan has been submitted. The Sediment & Erosion control plan by ABC Consultants shows the temporary entry, but no construction vehicle routes throughout the site, stockpiles etc nor does it demonstrate that turning is available within the site. Since no permanent entry is proposed from Buckingham Road, how would access to the site be maintained for the latter stages of the development – where would equipment such as the concrete pump stand?

Other information required is construction vehicle routes from all directions – no construction vehicle access should proceed south past No. 8 Buckingham Road, so alternative routes must be indicated eg for vehicles approaching from the north or departing to the south.

Turning paths for an 11 metre long rigid vehicle at the proposed site entry should also be provided so that the need for construction stage No Parking restrictions in Buckingham Road can

be assessed. A Works Zone would be required along the site frontage and this would be conditioned.

### **Geotechnical investigation**

The geotechnical report is based on investigation of the neighbouring property 2-6 Buckingham Road. That site is underlain by deeply weathered shale, with groundwater inflow noted at about 5-6 metres depth. It is considered that the report submitted is sufficient for DA assessment. The architectural basement plans are also labelled "Excavation plan" and indicate that no batters are proposed, but full shoring from the surface.

The geotechnical report contains recommendations for dilapidation survey and for additional subsurface investigation prior to detailed design and Construction Certificate issue.

Groundwater seepage is expected at 5 to 6 metres depth, which confirms my previous comment regarding design of the basement pump-out well.

### **The following matters must be addressed:**

- Lack of disabled resident parking.
- Non-compliant dimensions of parallel parking space A3.
- Proposed traffic lights to be shown on the architectural plans.
- Uncertainty about the access across the adjoining property and apparently incompatible levels between the approved ramps within that property and the proposed ramp bridge to the subject site.
- A continuous longitudinal section along the whole path of travel for the small waste collection vehicle, showing a minimum headroom of 2.6 metres and maximum gradient of 20%.
- Clarification of whether the Council pipe is to be relocated (and if so, a design for the relocated pipe) or the easement?
- Approval of Killara Golf Club to grant easement.
- A Construction Traffic Management Plan addressing the matters listed above.

K Hawken  
**Team Leader**  
**Engineering Assessment Team**