



26 July 2013

Platino Properties
11/20 Young Street
Neutral Bay NSW 2089

Attention: John Codling

John,

Platino Properties propose a Planning Proposal to change the zoning of the industrial site at 67-71 Lords Road, Leichhardt to residential for an apartment development. Platino Properties have requested a desk top review of the flood behaviour at the site and preliminary flood advice based on the Council requirements as specified in their DCP. They have provided a site survey plan and a flood certificate from Council which provides the 100 year and PMF flood levels at the western end of the site and in the adjacent Hawthorne Canal.

The site consists of two lots being Lot 1 DP 940543 and Lot 1 DP 550608 with a total area of approximately 10,617m². The western boundary of the site is adjacent to the former freight line embankment which separates the area from the Hawthorne Canal which is located on the western side of this embankment. Lords Road and the local catchment drains to a point adjacent to the south western corner of the site. There is a stormwater pipe drainage system in Lords Road which is piped under the embankment to the Canal. Overland flows in excess of the pipe capacity would overtop the kerb and drain to the canal via a pedestrian tunnel provided through the embankment. This 3m wide by 3m high tunnel is located adjacent to the south western corner of the site.

The flood levels provided by Council from the Cardno 2010 Flood Study are presented in Table 1.

Table 1 – Council Flood Levels

Location	Ground level	100 yr flood depth	100 yr flood level	PMF level
Entry to site	3.21	0.85	4.05	6.75
Canal –opp site entry			3.55	5.60
Northern end of site	3.90	0.15	4.05	6.80
Canal – opp northern end			3.55	5.45

Based on the flood levels quoted by Council, the 100 yr flood extent on the site generally accords with the site survey levels. The extent of the PMF flood would be up to the eastern extent of the existing buildings on the site. The flood hazard in the 100 yr flood at the western end of the site is recorded by Council as high due to the ponding depth of 0.85m. There is evidence of resheeting of the parking area along the western boundary of the site which may have reduced these flood ponding depths. This can be checked in the detailed design stage of the development. Elsewhere the flood hazard on the site is low which means the site can be redeveloped.

The implications posed by the flooding for the proposed redevelopment of the site have been derived from Part C – Hazard Management of the Council's DCP. This requires the following:

1. Adoption of a flood planning level (FPL) which is 500mm above the 100yr flood level – FPL=RL 4.55m AHD;
2. All residential floors need to be at or above the FPL;
3. In a mixed use development, non residential floors can be below the FPL provided they are flood proofed;
4. Any entrances or flood evacuation routes have to be at or above the FPL;
5. Basement car parks are required to have an entry at the higher of the FPL or PMF – this will require an entry level of RL 6.75m AHD;
6. Access to the basement from residential apartments has to be controlled such that flood waters can only enter the basement when flood waters reach the PMF level;
7. All residential dwellings/apartments will require an evacuation route internally to levels above the PMF.

Other stormwater related issues noted from the Council's DCP are:

1. Onsite detention is generally required by Council but as this site already consists entirely of impermeable surfaces, then no detention is necessary;
2. Requires incorporation of stormwater water quality treatment facilities to achieve the stated extent of pollutant removal;
3. Any development should not compromise the existing Council stormwater pipe drainage under the railway embankment from the western boundary of the site.

Please do not hesitate to contact the undersigned on 0409 912 631 should you require further advice.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Mark Tooker', is written over a horizontal line.

Mark Tooker