Griffith/Narrabundah Community Association Inc.

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Mr Simon Corbell MLA
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Dear Minister

Residential densities and flood studies in Griffith

We would like to follow-up on your letter of 20 November 2013 regarding call-in powers, residential densities and the flood study in Griffith, with particular reference to the flood study and residential densities.

Flood studies

We were surprised that all the information relating to the flood study has been made available in the public domain.

It is too late now to undertake another flood study, but we are at a loss to understand how ESDD was satisfied with the advice provided by the applicant's consultant. How could an assessment of the flood hazard be made when the basic data and the methodology used in the analysis are not available?

For example:

- 1. The Cardno Young "Flood Study Report" tabled as part of the DA application papers, was claimed to be based on a 1999 review by Bill Guy and Partners. To estimate a flood hazard it is necessary to specify a rainfall Intensity Frequency Duration function, (this specifies how much rain per hour per unit of area was precipitated) together with the area over which it fell, as an input to the modelling. All that is known from the information provided is that a one hour storm was used. This is not sufficient. The spatial extent of the rainfall and the amount that was precipitated over the one hour period should be given.
- 2. The 100 year Average Recurrence Interval (ARI) is only an estimate. The report should have contained an indication of the uncertainty of this estimate. This would have allowed an assessment of how likely it is that rainfall of this intensity might occur more frequently than every hundred years.
- 3. The report also ran some models with half the culverts blocked. This is unsatisfactory. Any realistic modelling should have also modelled the effect of both culverts being blocked. As we demonstrated in our letter of 27 September 2013, this happened in January 2013 in the lower retention basin. After only ~38 mm of rain the water rose to within one metre below the top of the lower embankment. To only model for one blocked culvert is to base the model on the assumption that everything else will be working satisfactorily.

- 4. No amendments appear to have been made from the 1999 study to account for any climate change. As stated in the *Water for the Future striking the balance* report, we can expect in the ACT, 'Increasing rainfall intensities leading to more intense stream flow and increasing summer rainfall and associated run-off and erosion.'
- 5. No consideration appears to have been given to the consequences, of adding a ~1.5 ha impervious layer to the catchment area as a result of the development. This must affect both the hydrological and drainage patterns of the area. One obvious expected consequence would be a markedly quicker run-off in the event of a storm than would be the case with most of the site still grassed.

In summary, the 100 year ARI estimates presented in the Development Application are flawed and were grossly inadequate as a basis for decision making in relation to the proposed development. We can only hope that this does not leave the ACT taxpayer exposed in the unhappy event that the site does at some stage flood.

Medium density residential specifications

We would like to ask you to reconsider your policy with regard to including the definition for medium density housing in the Territory Plan. At present, as we stated in our letter of September 2013, Medium Density Housing is defined in the Canberra Spatial Plan as "Generally between 25 to 60 dwellings per hectare and not usually more than three or four storeys in height. Examples are townhouses and terrace housing." However, this definition is not included in the Territory Plan and lacks any legal force.

This situation is unsatisfactory and should be remedied. There needs to be consistency throughout all the planning documentation. What is the point of defining medium density in one part of the planning documentation but not using this definition in another?

The argument that the maximum density can be achieved from "other planning requirements such as plot ratio, setback and building envelope requirements" does not appear to be correct. These parameters relate to the dimensions of the structure with respect to the block and are not related to the density in terms of dwellings per hectare. It seems to be like the old apple and orange comparison. Even if this argument was valid, it would seem that only the planning professional would have the skills and the time to determine what was the maximum density permissible on a site if this can only be determined from "other planning requirements". The advantages to either the Government or the community of having a planning regime that is so opaque to the lay person are not immediately apparent.

The terms low density, medium density and high density are key words in the Objectives of all the Residential Zones (RZ1-RZ5), but nowhere in the Territory Plan are these terms defined. In other words they have no legislative status. You will be aware that the ACAT has at times expressed exasperation with the vagueness of some of the criteria that have to be evaluated when deciding planning disputes. The continued refusal to provide some objective measure of housing density into the Territory Plan will only exacerbate this problem.

All that is required is to incorporate the words from the Glossary of the Canberra Spatial Plan in the Planning Act that "Medium Density Housing is defined as between 25 to 60 dwellings per hectare and not more than three or four storeys in height."

The fact that there is a range of 25-60 dwellings per hectare should provide enough flexibility for the definition to work. There would be no need to define 'low' and 'high density'.

We are not sure what the "adverse unintended consequences for development" would be in these circumstances. The risk of "unintended consequences" resulting from the insertion of an objective density measure seems low, although it might constrain the approval of proposals with densities greater than the lay person might have thought were permitted. But it is not clear that this would be a bad outcome. After all, Canberra is supposed to be a planned city and anything that clarifies the situation should be welcome.

We would be very happy to talk with any of your officers on this issue.

Yours sincerely

(John Edquist)
President
Griffith Narrabundah Community Association Inc

21 February 2014