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Submitted by: Anonymous Submitted values are:

Submission Type:I am making a personal submission

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Suburb/Town & Postcode: Rossmore 2557

Submission file:

p1806832jc01v03-181102 0.pdf

Submission: Why can't the department implement and cut and fill strategy as per the attached? It would save the Department money in not having to acquire the land and allow the owners to move on with their lives. It's a simple method of water management taught in any basic hydrology class. We went to great expense to commission this report for the first round of submissions and it was largely ignored. I live at much better outcome than acquistion or Environmental zoning

URL: <a href="https://pp.planningportal.nsw.gov.au/draftplans/exhibition/western-sydney-aerotropolis-planning-package">https://pp.planningportal.nsw.gov.au/draftplans/exhibition/western-sydney-aerotropolis-planning-package</a>



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Contact:
Our Ref:
P1806832JC01V03
Pages:
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Cc.
Ray Gayed / Andrew Gayed

2 November 2018

URBIS Attn: Murray Donaldson By email

Dear Murray,

RE: CONCEPTUAL REGIONAL FLOOD MITIGATION STRATEGY, LAND AT MAY AVENUE ROSSMORE AND KEVIN PARK DRIVE BRINGELLY – SOUTH CREEK PRECINCT, ROSSMORE NSW

## **Background**

It is understood that Urbis is preparing a submission to the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan – Stage 1: Initial Precincts (LUIIP) on behalf of the owners of a property at \_\_\_\_\_\_\_, Rossmore. You have requested advice on flood management and mitigation strategies required for an alternative land use structure plan for the South Creek Precinct in the vicinity of the site. We have therefore prepared this conceptual regional flood mitigation strategy (the conceptual FMS) for land located generally in the vicinity of Kevin Park Drive, Bringelly, and May Avenue, Rossmore. The conceptual FMS has considered flood affected land to the probable maximum flood (PMF) level adjoining South Creek, for an approximately 700 m long reach north of the Bringelly Road bridge over South Creek (the study area).

In preparing this preliminary advice, we have considered the following:

- 1. Liverpool Council's published flood mapping.
- 2. 100 year ARI and PMF flood levels in the study area.
- 3. Local topographic conditions.

## **South Creek Precinct**

The 'Western Sydney Aerotropolis – Land Use and Infrastructure Implementation Plan' (the **WSA Plan**) identifies the study area as being located within the 'South Creek Precinct' (the **precinct**). Refer to Figure 1 for the study area location as provided in the WSA Plan. We understand that the core precinct objectives are as follows:

- To interface to surrounding development, providing open space, amenity, biodiversity and wellbeing values;
- 2. To embrace natural systems as valuable assets, rather than constraints;
- 3. Provide canopy cover as well as the creation of permanent water bodies with the potential to provide a network within the South Creek corridor;





- 4. To contribute to urban cooling and encourage the residents to use and enjoy riparian lands;
- 5. Regular pedestrian and cycle connections across waterways will support active transport use.

The current proposed general zoning category of 'urban' and 'non-urban' land are provided at Figure 1. We observe the following in respect of these boundaries:

- 1. The non-urban land encompasses flood liable land to the PMF and in many areas, even land that is above the PMF.
- 2. The non-urban land is centred on South Creek and presents as a corridor which varies between say 700-800 m in width. The width is far more that is necessary to carry upstream stormwater flows. It is likely that if such a width were ultimately adopted, that it may be difficult to achieve a number of the precinct objectives such as a useable interface between urban and non-urban land and provision of efficient connections across water ways.
- 3. It is our view that a narrow 'environmental corridor' which would range say between 250-450 m in width, would be more than adequate to carry upstream stormwater flows, as well as being capable of satisfying the precinct objectives. A narrower corridor would also mean that fewer properties would ultimately be integrated into the non-urban category, this translates into better efficiencies in achieving environmental outcomes within the corridor.

## The Conceptual FMS

In preparing the flood mitigation strategy, we have assumed the following as key design principles:

- 1. Creek Position
  - The position of the existing South Creek and its banks would be retained in their present location. We do note that the Creek is highly degraded and flows are often irregular, with the creek being dry for extended periods between rainfall. Relocating portions of the creek should in our opinion therefore not be disregarded in any future zoning proposal.
- 2. Earthworks Below 100 year Flood Level
  For the purposes of ensuring that the conceptual FMS does not impact on upstream
  or downstream properties outside of the FMS study area, we have assumed that cut
  and fill earthworks below the 100 year flood level would be balanced so as to
  preserve floodplain storage, and would be interfaced with upstream and
  downstream flows to ensure no adverse impacts.
- 3. Earthworks Between 100 year Flood to PMF Level
  We have conservatively assumed that all residential land would be raised to the
  PMF level. We note that ordinarily the design level for residential land is the 100 year
  ARI flood level + 0.5 m freeboard.





The concept FMS is provided at Figure 2 and Figure 3. Figure 2 provides a plan of the alternate broad 'urban' and 'non-urban' zoning categories, also indicating the areas where earthworks would be required to achieve ground levels at the PMF. Figure 3 provides a typical schematic section through the ultimate environmental corridor. The following comments are made in respect of the alternative scheme:

- 1. The alternate scheme will deliver a better opportunity to meet the precinct objectives.
- 2. The alternate scheme would ensure adequate conservation and rehabilitation of riparian land.
- 3. The alternate scheme would enable efficient connectivity between urban and non-urban land.

If you have any further queries regarding this matter, please do not hesitate to contact Mo Shahrokhian at our offices on (02) 9476 9999.

For and on behalf of

**MARTENS & ASSOCIATES PTY LTD** 

**DR DANIEL MARTENS** 

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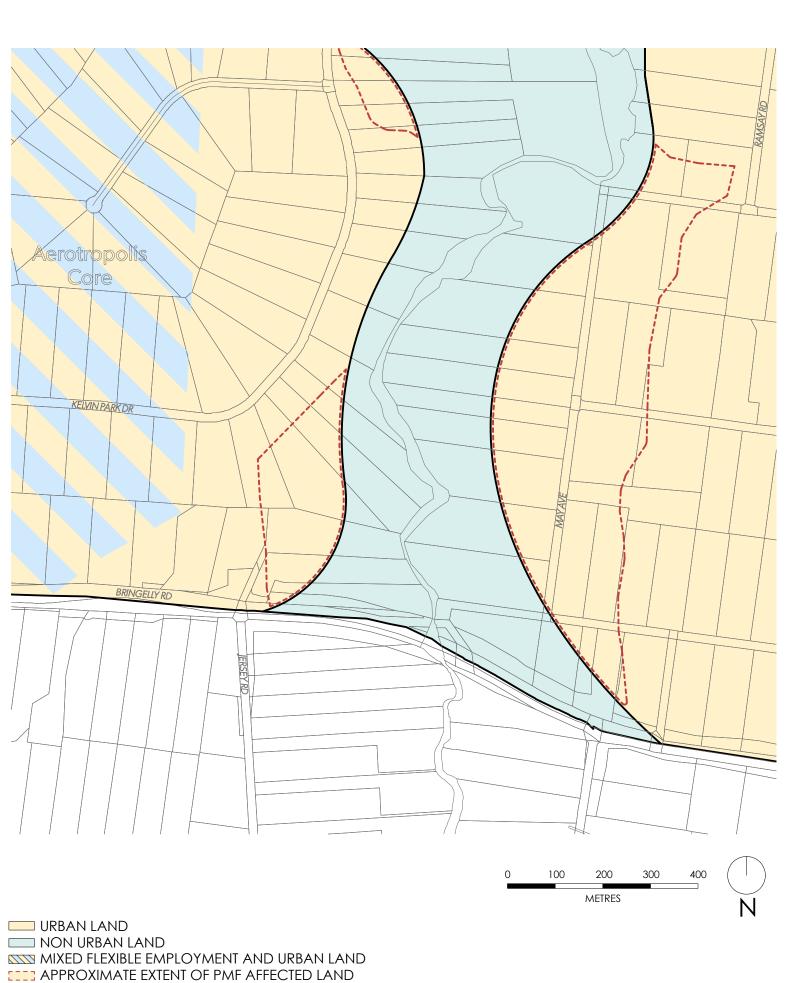
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