

09 June 2020

Hugh Stanford
Victorian Planning Authority

Proposal: Planning scheme amendments

Site location: Amendment C243hume - Sunbury South and Lancefield Road ICP

Melbourne Water reference: MWA-1173814

Other/Your reference: D/20/1127

Date referred: 04/05/2020

Thank you for providing Melbourne Water with the opportunity to provide comment on the exhibited Sunbury South and Lancefield Road Infrastructure Contributions Plan (ICP), Amendment C243hume to the Hume Planning Scheme.

Melbourne Water has reviewed the preliminary information provided in support of this ICP, and has a number of comments to provide in response:

Interactions with DSS funded Drainage Infrastructure

The Development Services Schemes (DSS) relevant to these precincts will be reimbursing the cost of works associated with delivering the core drainage infrastructure required to service the proposed urbanisation. The designs for the proposed ICP assets should not prejudice the delivery and maintenance of DSS assets, and should be referred to Melbourne Water for comment as they progress to concept, functional and detailed design stages.

There are a number of proposed ICP assets adjacent to proposed DSS drainage assets.

- LR-BR-01 - 2 Lane Bridge Crossing of Jacksons Creek - Wetland
- SS-BR-01 - 2 Lane Bridge Crossing of Jacksons Creek- Wetland (WL3) and Pipeline (B1-B2)
- SS-BR-02 - 2 Lane Bridge Crossing of Harpers Creek - Sediment Pond (SB1) and Pipeline (S1-S2)
- SS-BR-03 - Culvert Crossing of Harpers Creek - Wetland (WL10)
- SS- BR-04 - Construction of 2 lane road underpass of rail line - Wetland (WL13)

Assumptions for Crossing Designs

The greater Sunbury area is characterised by un-stable erosive waterways due to the areas geomorphological characteristics and increasing stormwater volumes. As a result; a number of existing crossing structures in the region are at risk of failure due to active erosion, and Melbourne Water has needed to undertake significant capital works to protect assets.

Future waterway crossings must be designed as single span, or multi span structures with piers and abutments setback sufficiently (minimum 5 metres) outside the waterway top of bank to allow for incision, widening and migration of the channel. This is particularly important in relation to crossings over tributaries of Jacksons Creek and Emu Creek, which have the greatest likelihood of erosion, Harpers Creek is a prime example.

As Jacksons Creek, Emu Creek and their tributaries are of high ecological significance, bridge and crossing design must allow for and include measures to reduce the long term impact to habitat values along waterways during their use. Design needs to consider and minimise the impact of light, noise disturbance.

General Comments

Crossings must be designed and constructed in-line with Melbourne Water's *Waterway Crossing Guidelines*:

<https://www.melbournewater.com.au/sites/default/files/Constructing-waterway-crossings-guidelines.pdf>

Crossings within the Growling Grass Frog Conservation Corridor must be designed and constructed in-line with the *Growling Grass Frog Crossing Design Standards*:

https://www.msa.vic.gov.au/__data/assets/pdf_file/0020/73415/Growling-Grass-Frog-Crossing-Design-Standards_March2017.pdf

Melbourne Water has previously provided initial advice (letter dated 04/09/2019) in response to the preliminary designs for LR-BR-01 and SS-BR-01, this advice should be considered in response to the proposed ICP bridge and culvert crossings.

Should you require any further information please don't hesitate to contact myself on 03 9679 7183 or laurence.newcome@melbournewater.com.au

Kind Regards



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