

Memo

11 April 2025

To: [REDACTED]
[REDACTED]

c/o 1967 Melton Highway, Grangefields
Town Planning People

From: [REDACTED]

Project: Melton East Precinct Structure Plan

Subject: 1967 Melton Highway, Grangefields Drainage Assessment

Background

The Site of the assessment is at 1967 Melton Highway Grangefields and is known as Parcel 13 in the future Melton East Precinct Structure Plan (PSP). The site is divided by a steep north/south escarpment that flattens into the Kororoit Creek floodplain in the east. This can be seen in Figure 1 below. The site is outlined in red with Melton highway to the north, connection to Judd court in the south and Kororoit Creek forming the eastern boundary.

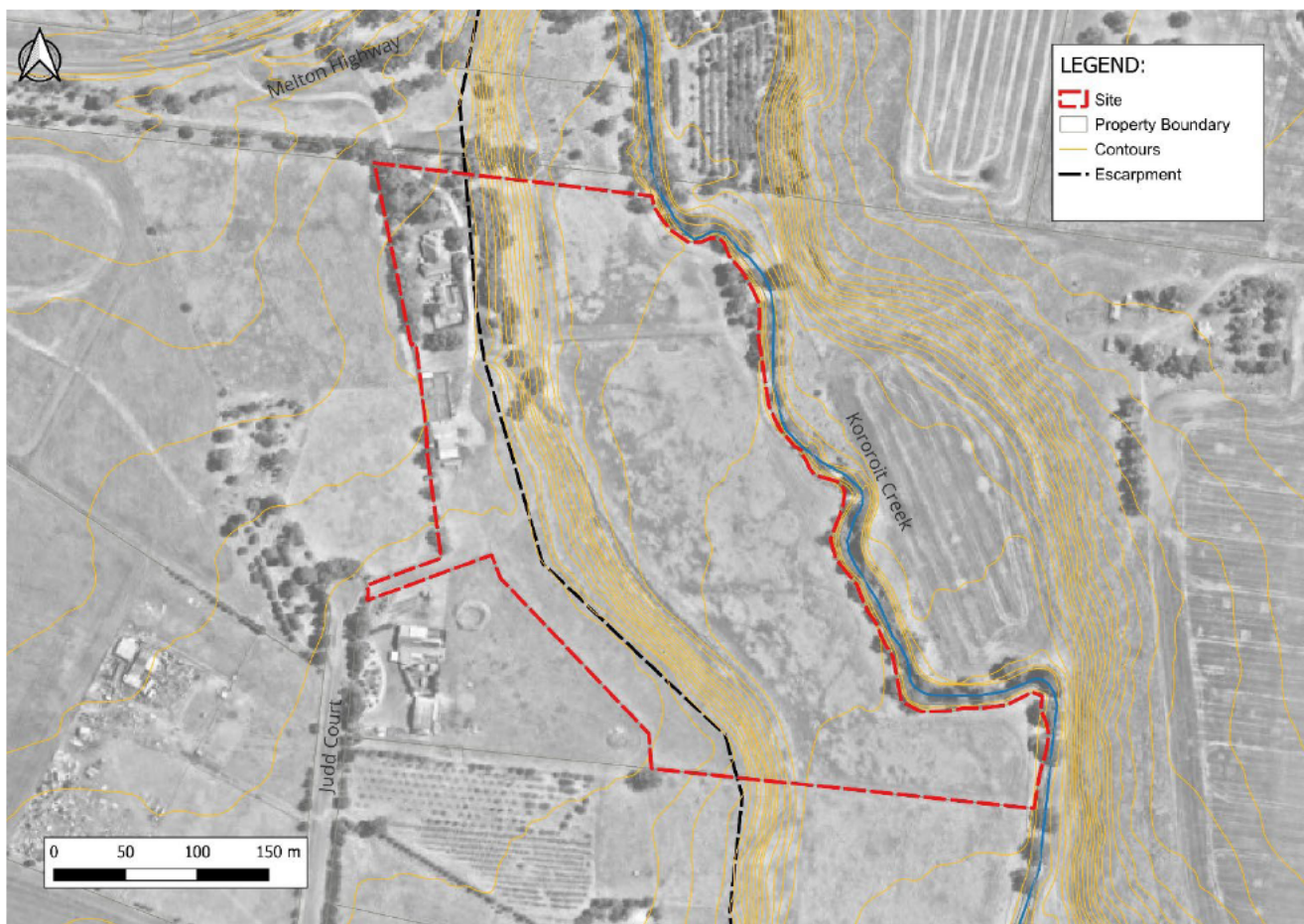


Figure 1: Site and current condition (with Contours)

Source: Water Studio GIS (25014_MeltonEastPSP.gqz)

The area is currently under review as part of the Melton East Precinct Structure Plan area that looks to manage the development of the broader area using shared cost assets that result in a considered and valuable community. This parcel is within the High Street Melton DSS managed by Melbourne Water.

In 2023 the PSP and associated DSS was workshopped with the many landholders in the area and the results were combined and shared within a Co-design Workshop Summary document finalised in April 2023. In this document the probable developable area within Parcel 13 was approximately 5.3Ha. The proposed residential area outlined in that process is shown in Figure 2 below.

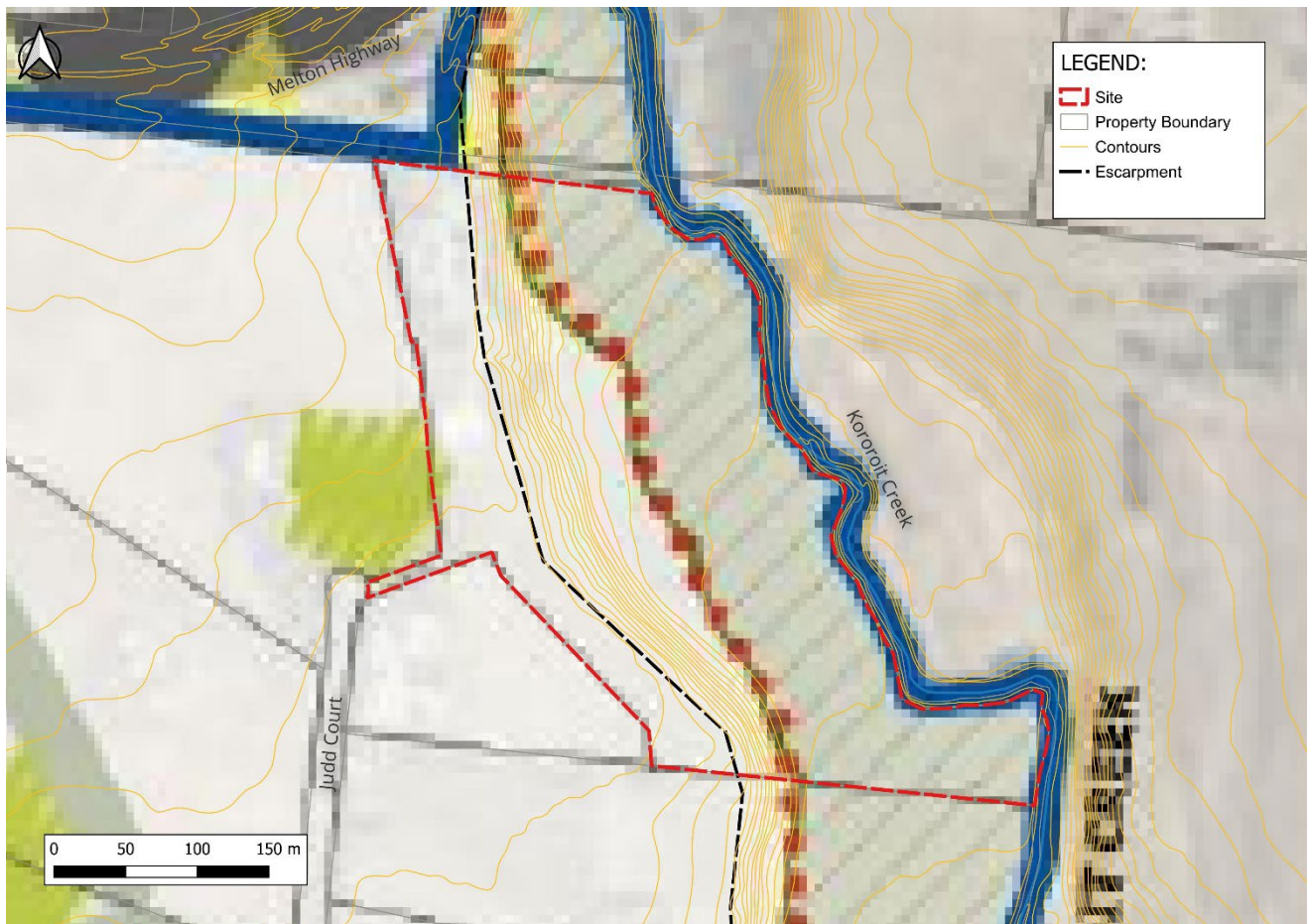


Figure 2: 2023 Co-Design Workshop PSP outcome

Source: Water Studio GIS (25014_MeltonEastPSP.gqz)

In the more recent iteration of the PSP documents, the Site has seen a dramatic reduction in the proposed residential development area being reduced to 0.680Ha (Split over three portions that are divided by a local park). A copy of the 2025 PSP within Parcel 13 can be seen in Figure 3. In this iteration of the PSP, the area is undevelopable in isolation and has resulted in a significant reduction in land value for the landholder.

The landholder is understandably disappointed with this outcome and has asked that Water Studio review the PSP with respect to drainage within the parcel.

Further to the publicly available documentation on engage.vic.gov.au and letstalk.melbournewater.com.au, the landholder has provided correspondence from the VPA, Melton Council and Melbourne Water that further explains the decisions made with regard to the increase in land take for shared assets across the PSP Area (and specifically Parcel 13).

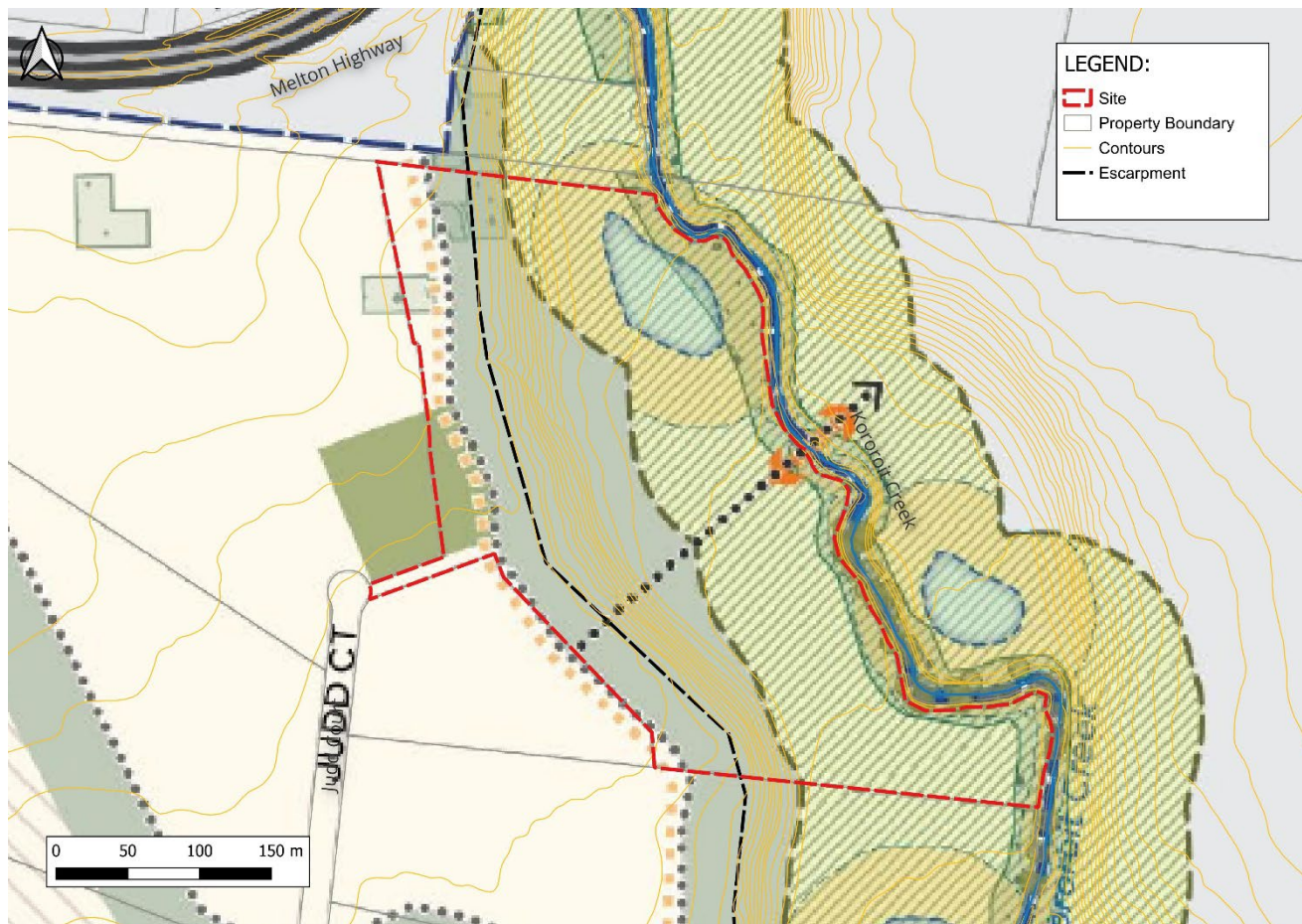


Figure 3: 2025 Draft PSP outcome

Source: Water Studio GIS (25014_MeltonEastPSP.gqz)

Assessment

Melbourne Water have recommended a 30m setback from the top of the escarpment which is excessive and appears inconsistent across the PSP in its application (refer parcels 46/48). This 30m buffer has absorbed almost all of the previously deemed developable area for parcel 13.

Based on Melbourne Water's document "Waterway Corridors, Guidelines for Greenfield development areas within the Port Phillip and Westernport Region (2025)", Melbourne Water have suggested the waterway is a 4th order waterway that requires up to a 50m setback from top of bank. In an email from Henry Kassay (VPA) on the 25th of March, 2025 he summarises advice from Melbourne Water that states:

"In this case the top-of-bank may be defined as the break of slope of the escarpment forming the overall waterway corridor or may be argued as the extent of the floodplain of the channel form."

They further go on to reference Victorian Planning Provision clauses that:

"Locating development a minimum of 30 metres from the banks of waterway systems."

It's important to remember that the definition of "top of bank" or "extent of floodplain" refers to a hydraulic condition or flood / flow level. The intention is to set an appropriate waterway corridor that ensures flood flows within the catchment area are captured within the defined area and don't cause nuisance flooding or damage to private property in the future. The top of escarpment is not the hydraulic top water level in the 1% AEP event and is the product of extensive long-term erosion in the area. The escarpment is not a relevant hydraulic reference point and should not form the basis of offsets, setbacks and buffers.

Whilst Melbourne Water does have the right to consider additional features for inclusion in their waterway corridor, their inclusions need to be practical and reasonable. There is no **hydraulic** reason to have a drainage and waterway area at the top of the escarpment. Besides minor local overland flows, there are no significant flows that will utilise this space. Flows within Kororoit Creek do not extend to the top of the escarpment (Note: we have requested the flood levels from Melbourne Water but have not received them in time to incorporate them into this Memo). The "Melton_East_PSP_-_Pre-development_Flood_Conditions_A3.pdf" shows that there is no overland flood flow or otherwise that extends up the escarpment and beyond the Kororoit creek lower flood plain in that area (refer to Figure 4).

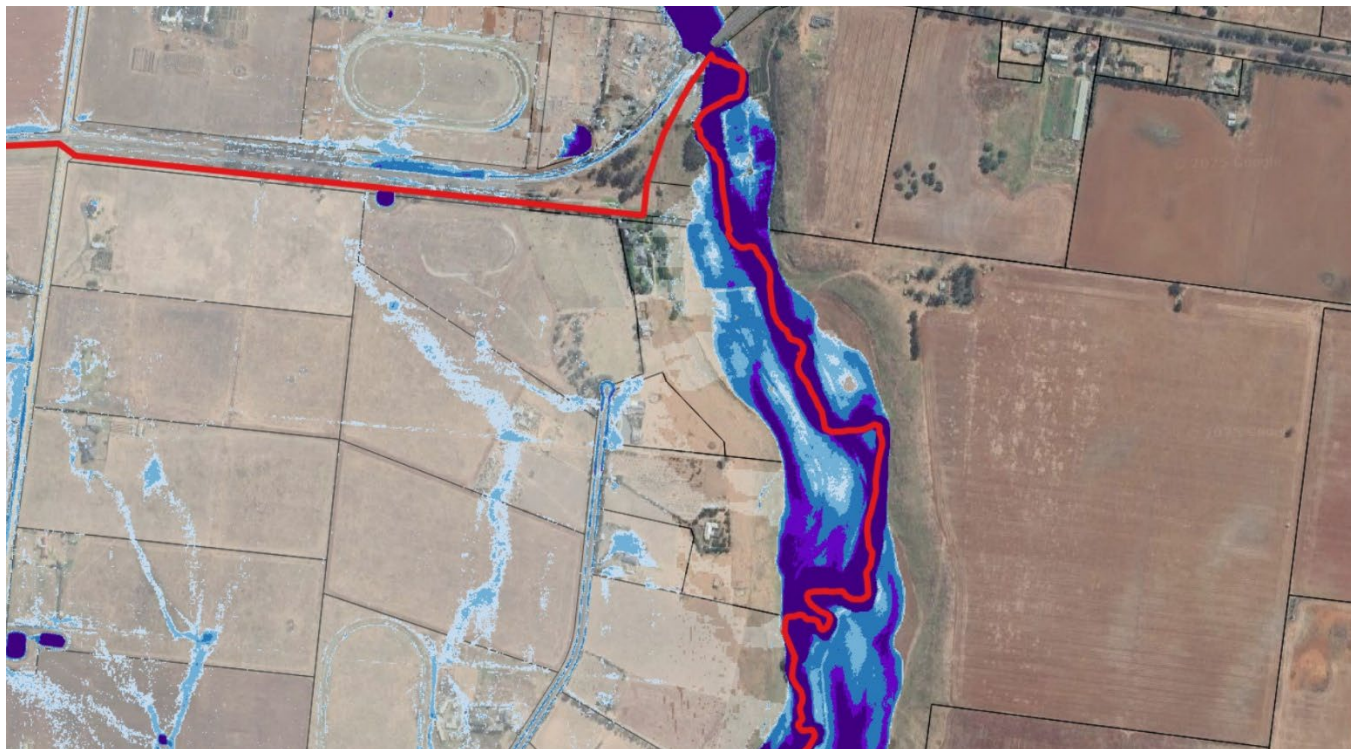


Figure 4: Flood Extent

Source: *Melton_East_PSP_-_Pre-development_Flood_Conditions_A3.pdf*

Furthermore, the width of provided green space between the western and eastern escarpment in this area provides between 250-350m width of green space. This is more than adequate to provide green linkages and public access for the area. Adding a further 30m on either side of the escarpment is excessive.

More so, in the Conservation Area Concept Plan – North, on page 89 of the PSP PDF, the area of the proposed waterway corridor above the escarpment is actually defined as “uncredited open space”. Which implies the area has no drainage function and more importantly is not reimbursable. If this area was to be defined as a Waterway and Drainage reserve it should be reimbursable. The area is not currently wet, convey flows or act in any formal drainage function today and thus should be fully reimbursable if it were to remain a waterway and drainage reserve.

Recommendation

In a PSP like Melton East, where residential development is limited, we should be looking for every opportunity to increase developable yield and maximise the density of development within this broader area. Adding in “nice to have” extra waterway reserves that have no hydraulic benefit should not be supported nor encouraged.

A 30m buffer should not be applied from the top of the escarpment within this PSP. In fact, the most appropriate boundary to the escarpment is the Local Access Street Residential – Conservation Area interface found on page 92 of the PSP document. A copy of which has been included Figure 4 below for ease.

Local Access Street residential – Conservation Area Interface

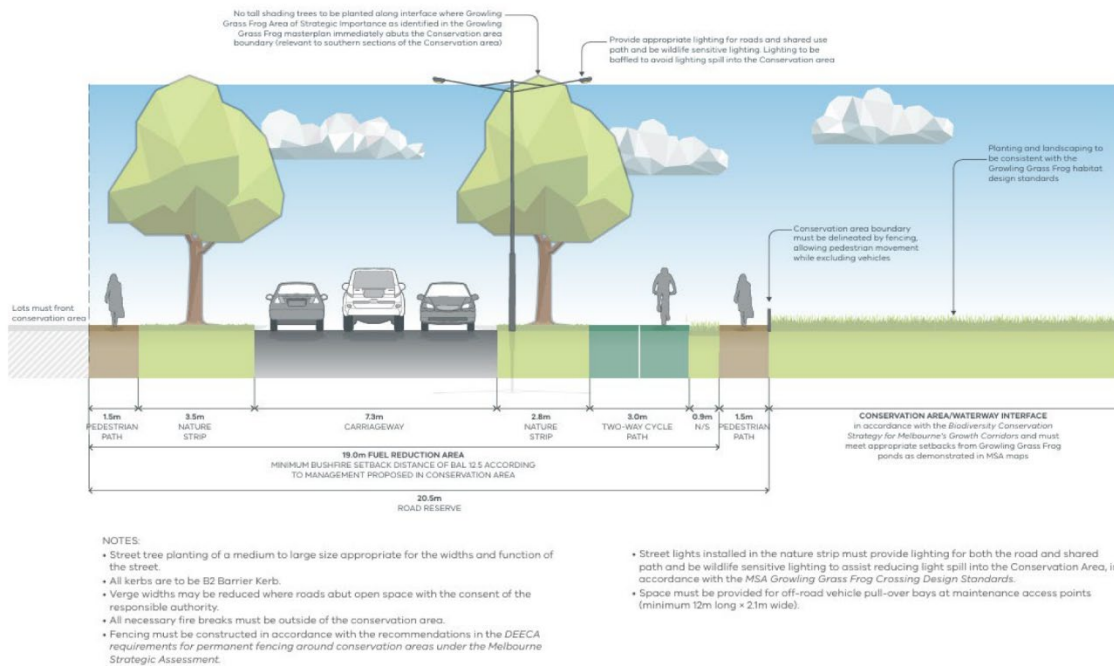


Figure 5: Proposed Boundary to the escarpment

Source: Melton East PSP (March 2025)

This road reserve, already incorporated into the PSP documentation, provides an appropriate buffer between residential housing and the potential bushfire fuel loads that can be generated within waterway corridors. Bushfire consideration now forms a key part of discussion at most PSP Panel hearings with regard to waterways (refer Croskell PSP, 2025).

For this site, the proposed road reserve boundary will ensure the escarpment and corresponding view is enjoyed by path users, road users and residents to the west. For parcel 13, this also provides a suitable ~28m deep series of lots within the bulk of this specific parcel alongside the proposed road. This equates to approximately 2.4Ha of developable area for parcel 13 including the 20.5m wide road fronting the escarpment. A possible layout can be seen in Figure 5 below and shows that this site is developable independently.

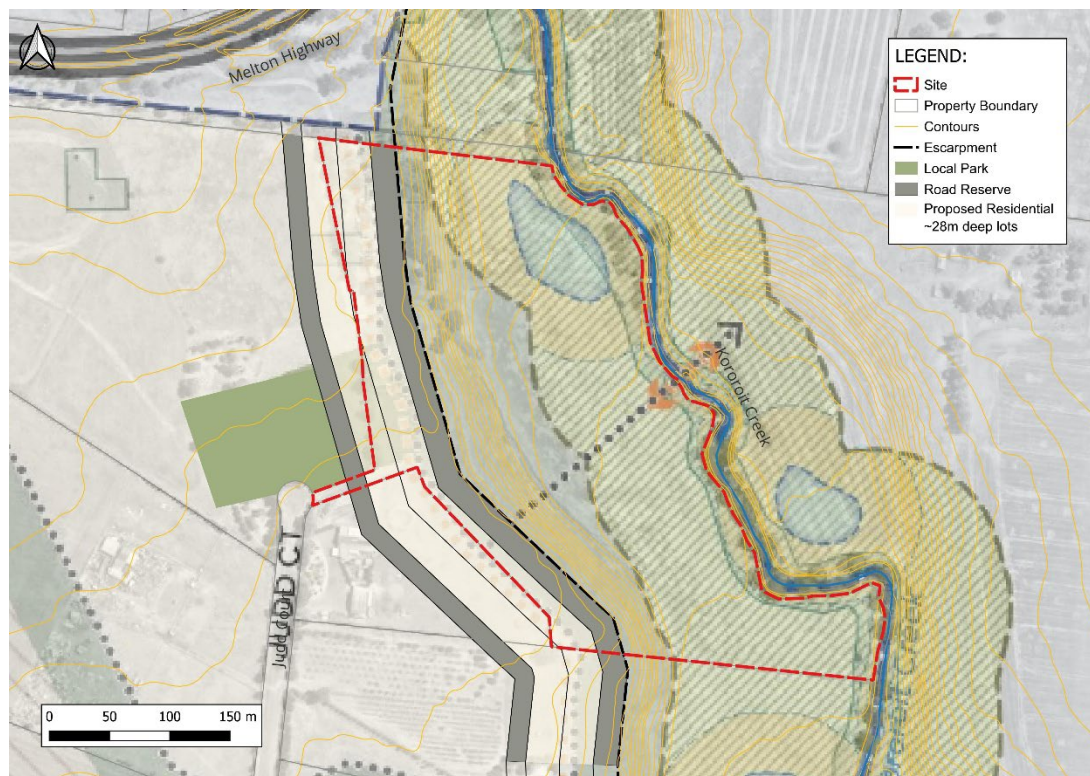


Figure 6: Proposed PSP Development

Source: Water Studio GIS (25014_MeltonEastPSP.gxz)

Summary

It's important to appreciate that the proposed 30m waterway and drainage buffer provides no drainage function with no hydraulic need and is not an appropriate use of the land in an already restrained PSP. Given the 250-350m width of greenspace formed between the escarpments formed by Kororoit Creek, we have adequate greenspace and more need for dwellings.

An additional 30m buffer at the top of the escarpment in the Melton East PSP is excessive and should not be incorporated along the length of the Kororoit Creek escarpment. Particularly when the 2023 co-design workshop did not highlight this as even an option. A more appropriate boundary to the escarpment is a 20.5m road reserve that creates a formal bushfire fuel boundary to residential dwellings.