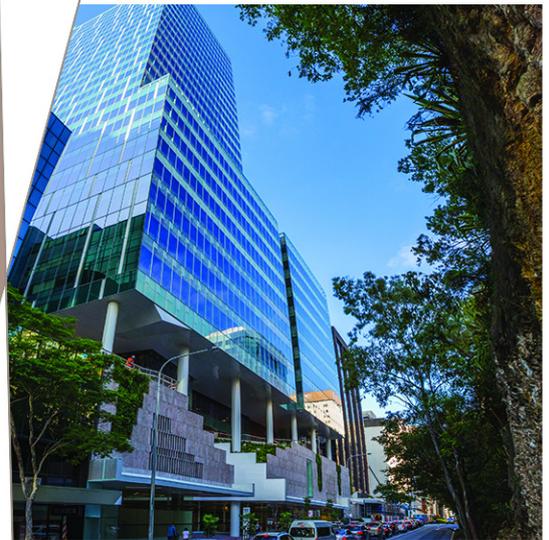


Flood Related Planning Controls

Moorabool

V171604



Prepared for
Moorabool Shire Council & Melbourne Water

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1 Introduction

This has been prepared to accompany the proposed Special Building Overlay (SBO) for Moorabool, December 2017. It provides a background, describes what information has been used in the development and provides details of the overlay.

2 Background

Melbourne Water (MW) and Moorabool Shire Council (Council) prepared flood related planning overlays for potential inclusion into the Moorabool Planning Scheme. The overlays consisted of proposed Land Subject to Inundation Overlays (LSIO) and Special Building Overlays (SBO). MW and Council engaged Cardno to undertake an independent review of the technical methodology used to determine the location and shape of the proposed planning overlays. The report 'Peer Review Moorabool Shire Flood Modelling' (V170467, November 2017) documents the review.

It was concluded that the flood model from the Lower Lerdererg Catchments Flood Mapping project was suitable for use. However, the methodology adopted to convert the outputs to a planning overlay should be modified and the overlays be amended accordingly.

3 Information used and Methodology

Hydraulic modelling results from the Lower Lerdererg Catchments Flood Mapping project were used as inputs into the flood overlay and the process below followed.

- > Step 1: Filter flood results to remove areas with shallow (less than 0.05 m) flooding;
- > Step 2: Combine the above results into a single shape and remove both wet "puddles" or dry "islands" if the area is less than 100 m².
- > Step 3: Smooth the shape to remove the 'staircase' effect associated with modelling grid cells.
- > Step 4: Split the shape into MW and Council controlled areas based on the splits adopted in the previous overlays and on the source of flooding (i.e. if inundation emanates from a MW asset then is classified as MW flooding). Remove the Council areas as the amendment is for MW controlled areas only.
- > Step 5: Based on MW's document 'Finalising Flood Extents for Inclusion in Planning Schemes' review the overlay at the property scale. In summary, properties which had less than 2% of their total area inundated were considered for removal. If more than 25% of their frontage was affected or the area is considered at risk based on the various flood depths experienced, the overlay was retained on the property.

The draft overlay produced using the above process was supplied to MW for review. During this review an area (at Cairns Drive DS) was updated by MW to be more reflective of the topography which had recently been significantly modified as part of development works.

4 Overlays

The revised Special Building Overlay is shown on Figure 4-1 overleaf.

Figure 4-2 shows this proposed overlay alongside the previously exhibited overlay. Whilst there are a number of changes, the key area of change is in the rural land south of Masons Lane. The proposed overlay is significantly reduced from that which was previously exhibited.

It is recommended that the proposed SBO is adopted and the planning scheme amendment process be recommenced.



Figure 4-1 Proposed Overlay

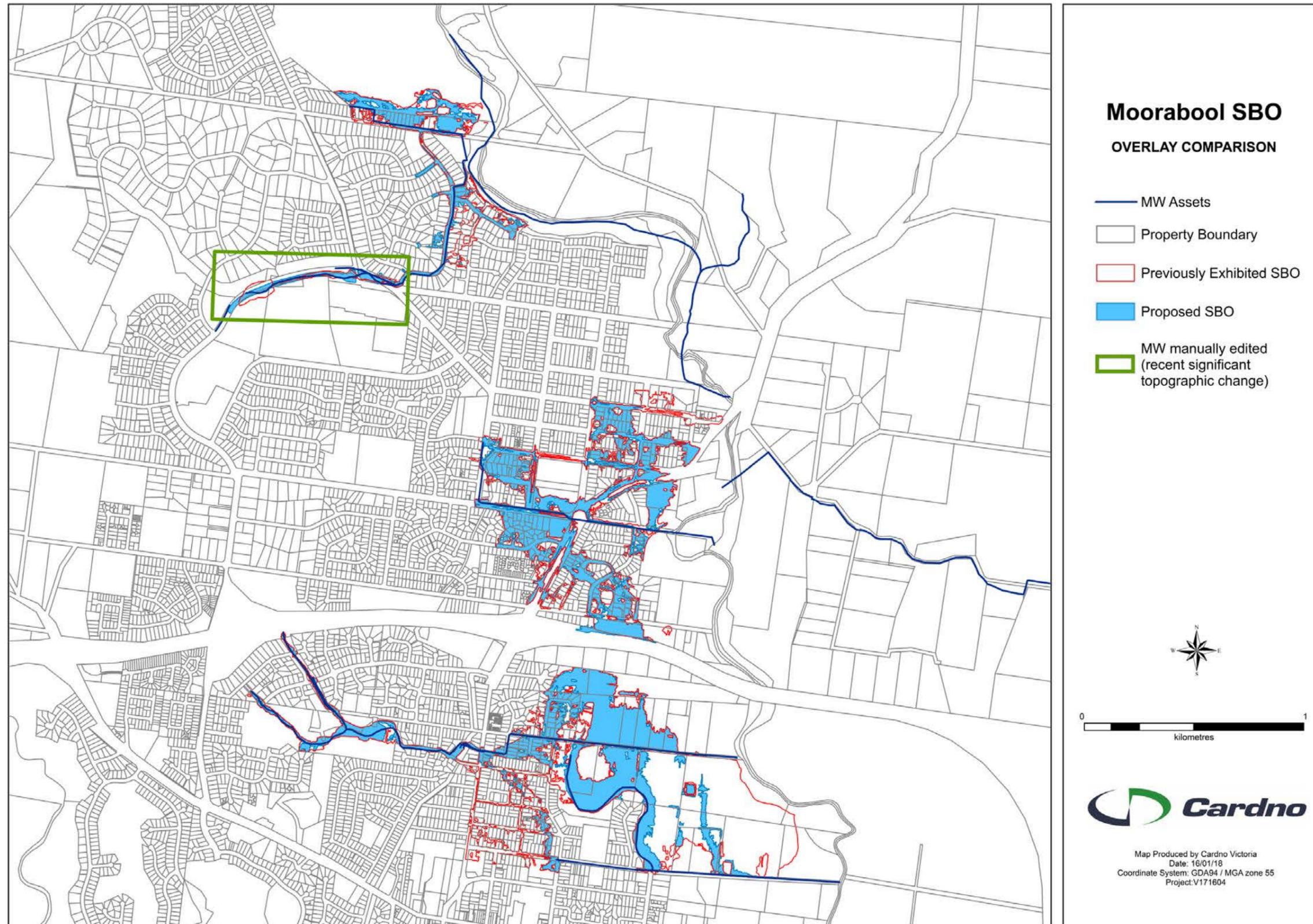


Figure 4-2 Overlay Comparison