

OCTOBER 2018

**MORDIALLOC BYPASS (FREEWAY)
ENVIRONMENT EFFECTS STATEMENT**

ATTACHMENT III

MAPS AND FIGURES



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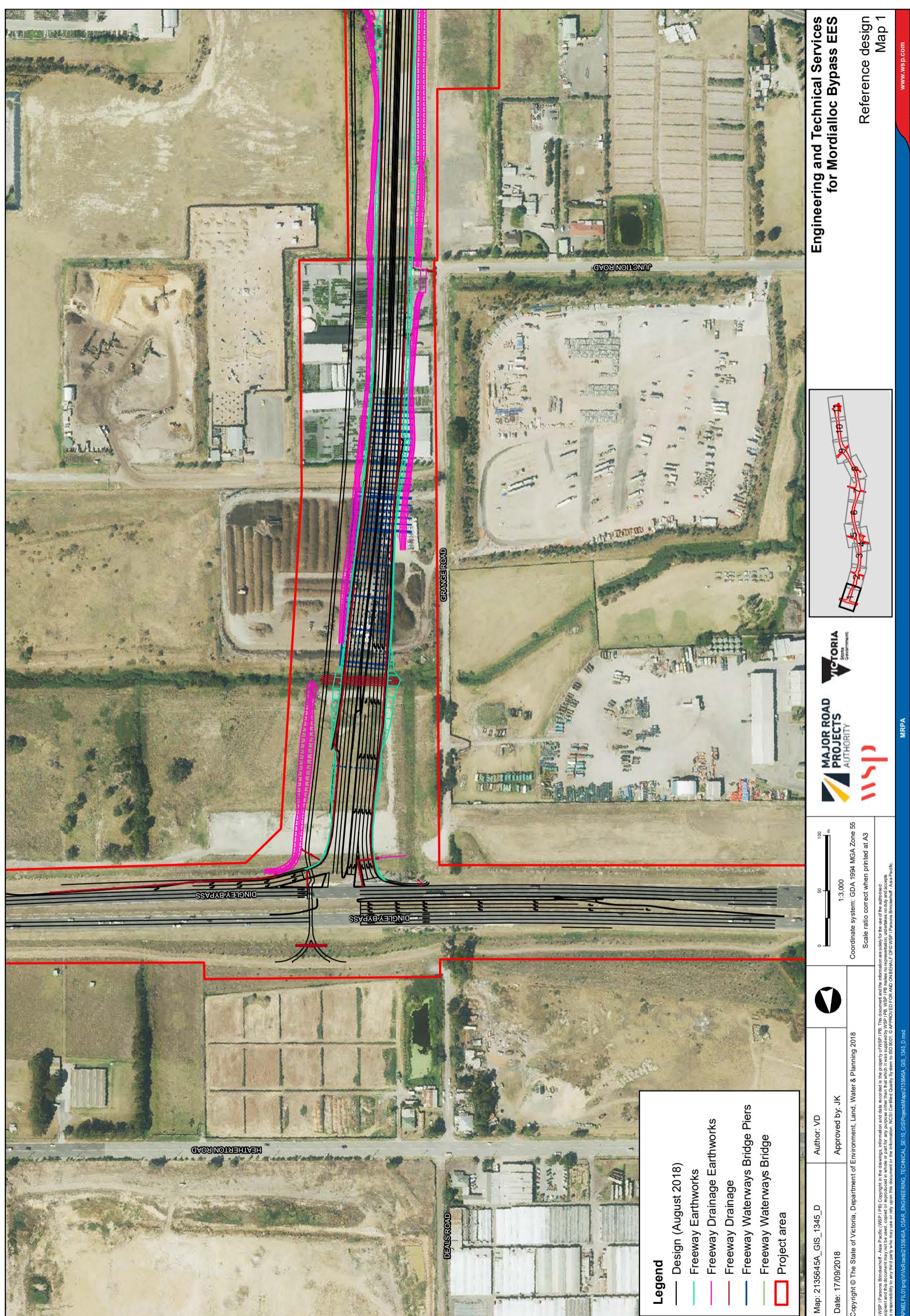
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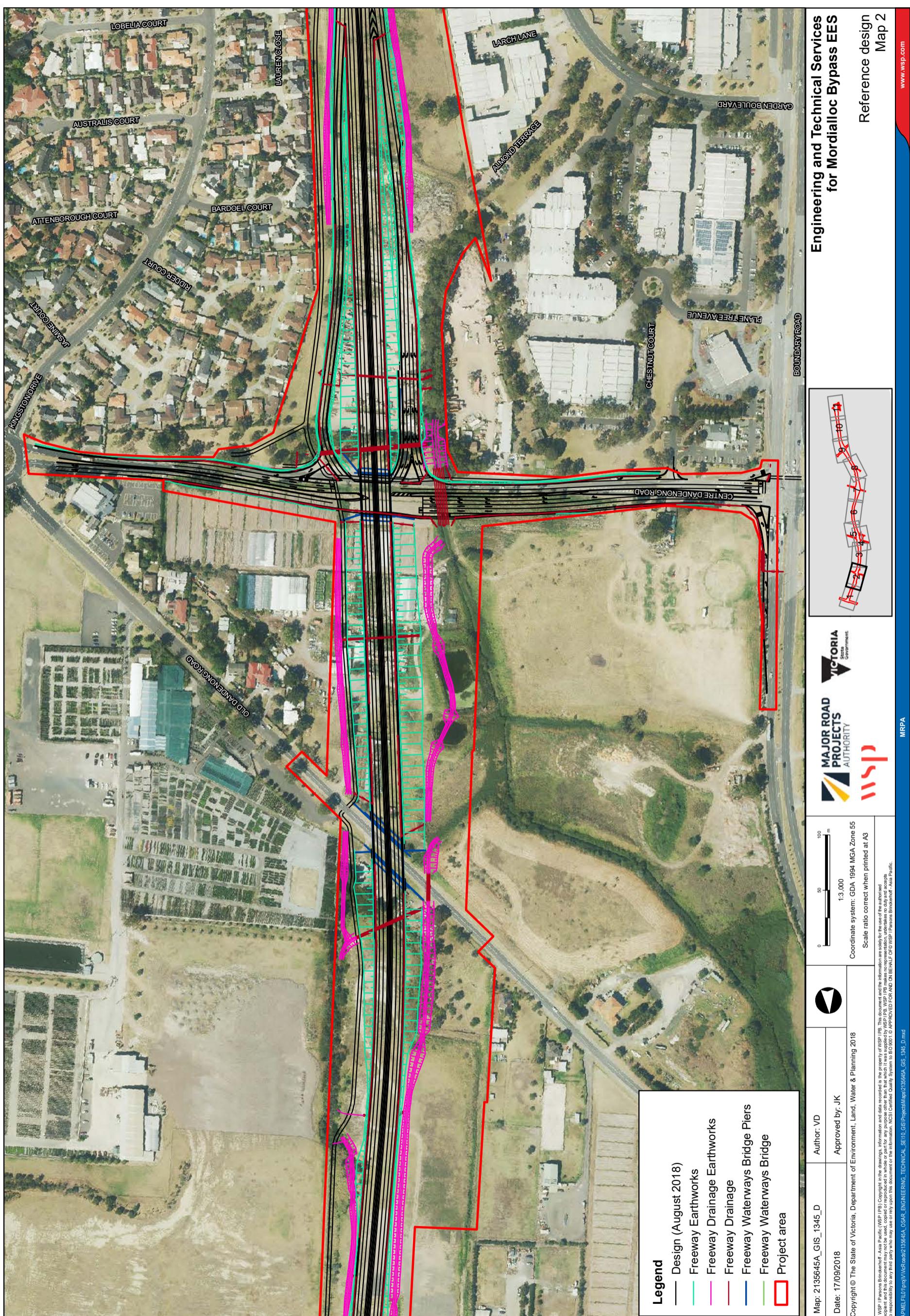


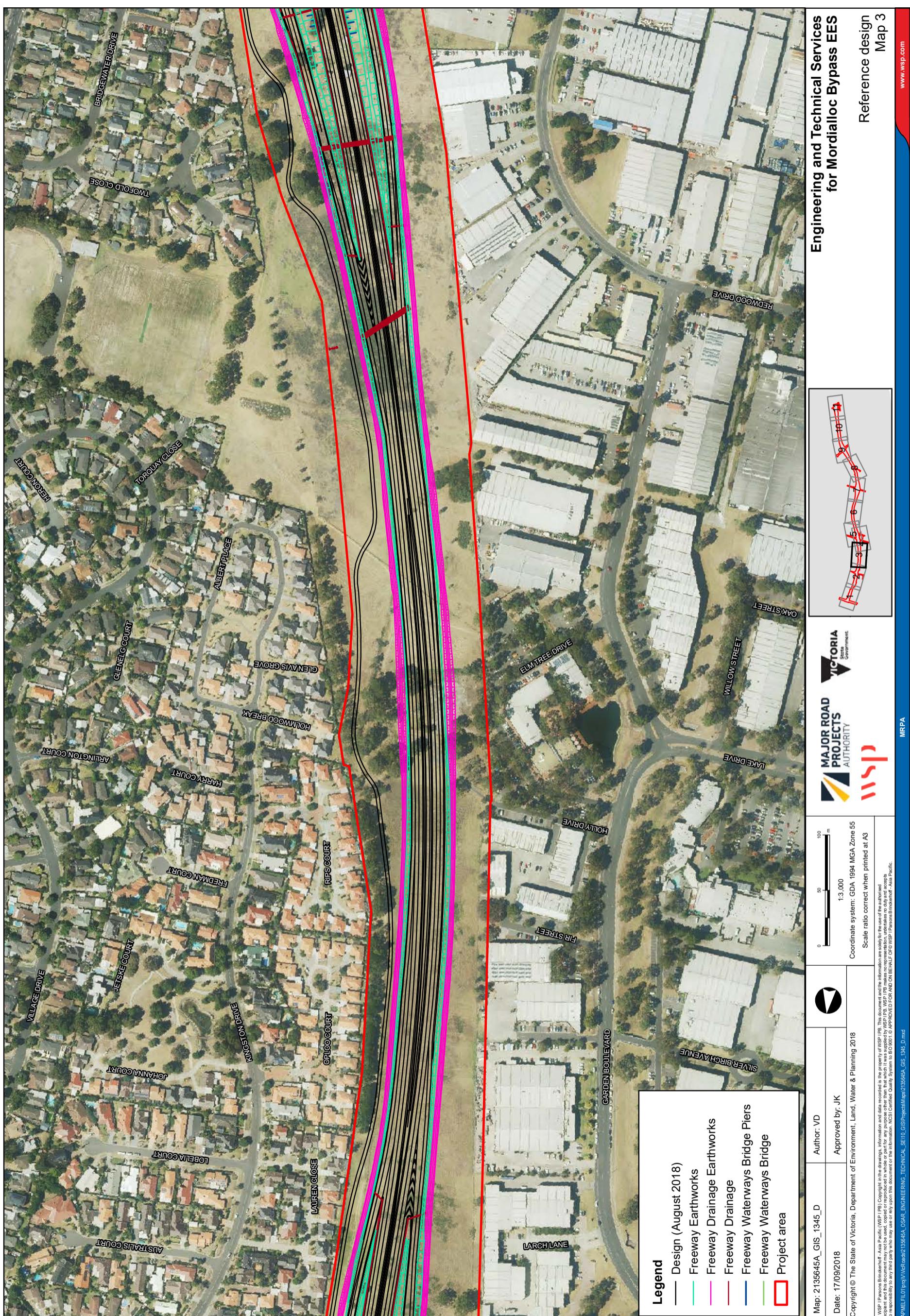
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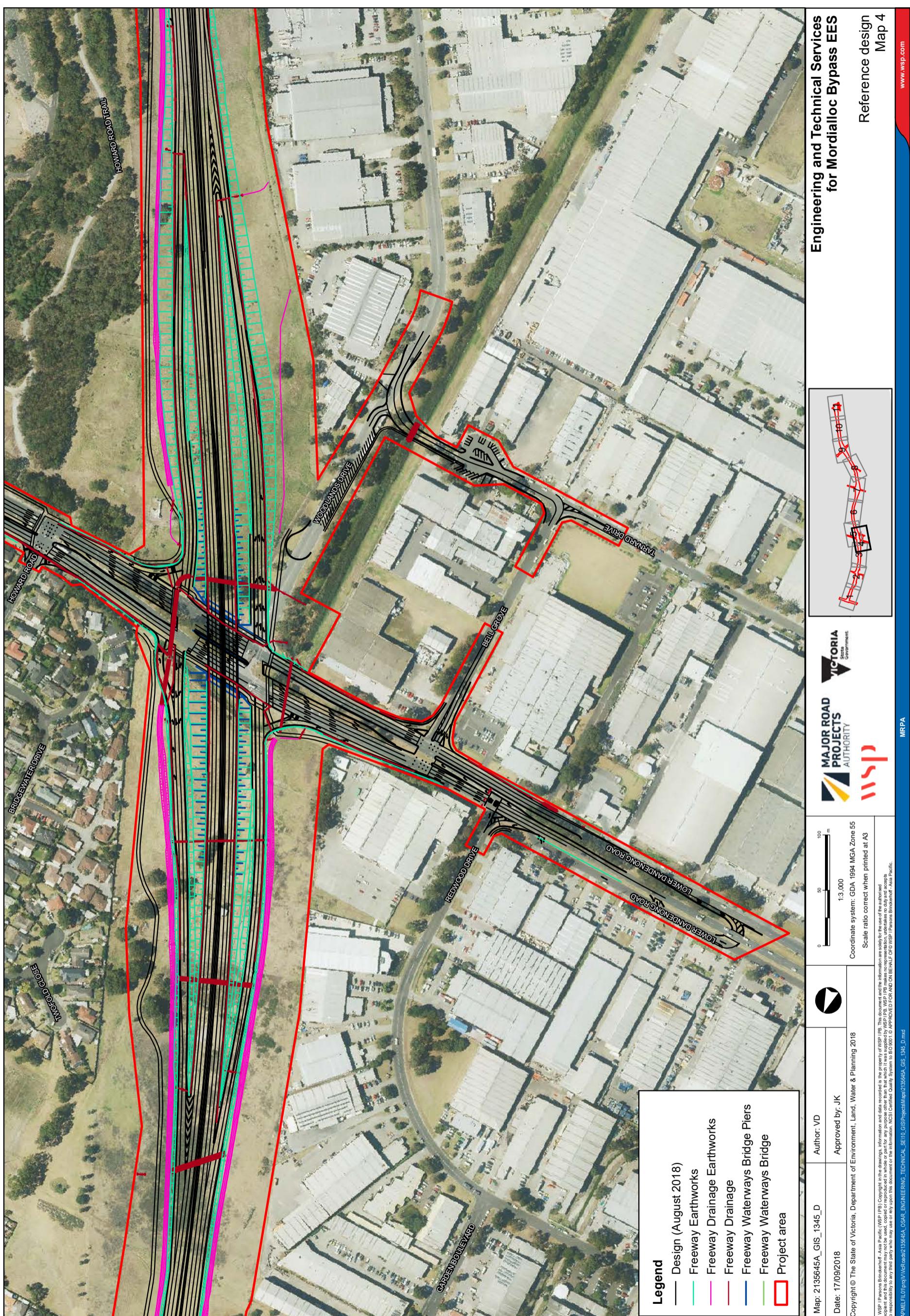
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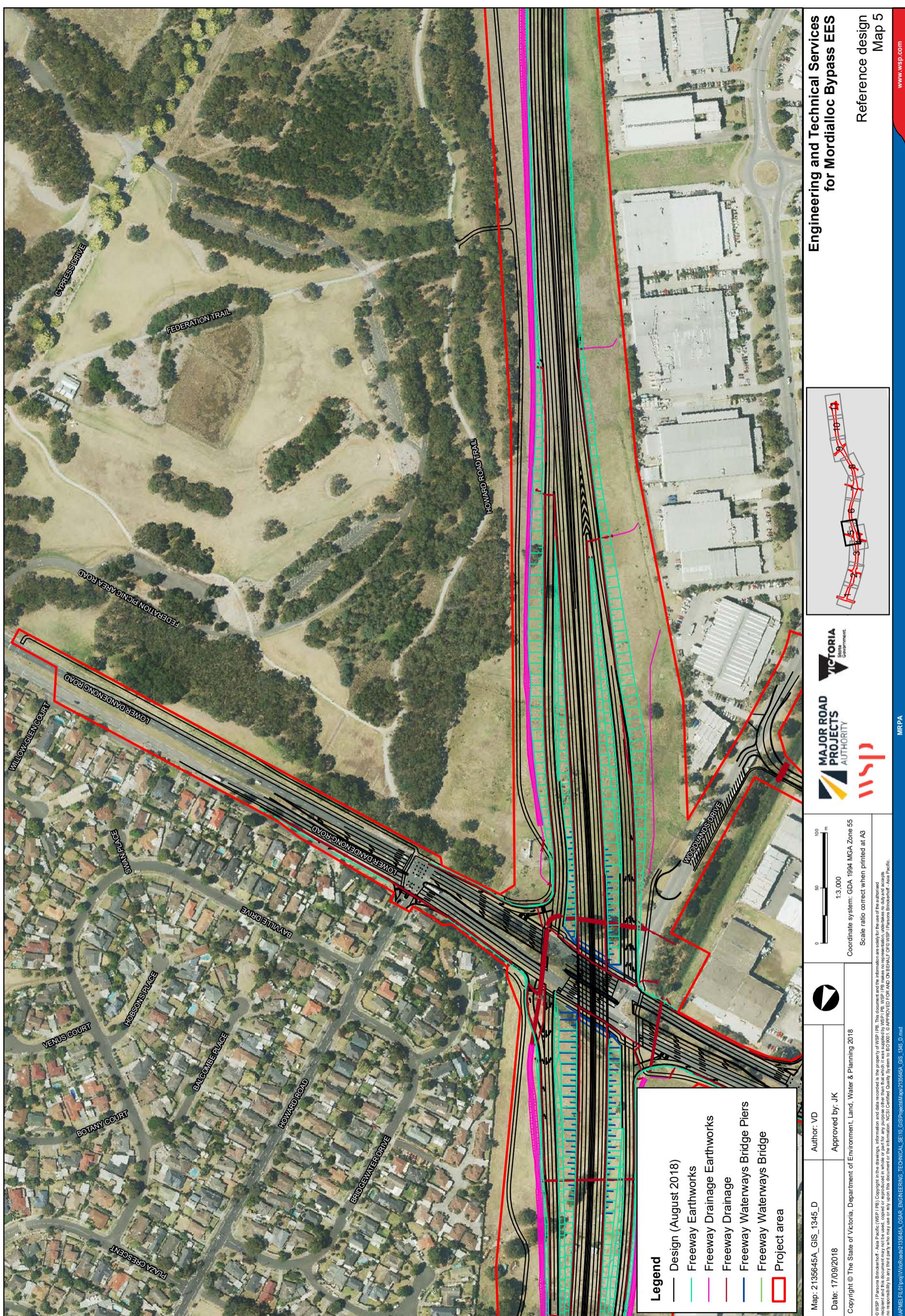
1 DESIGN

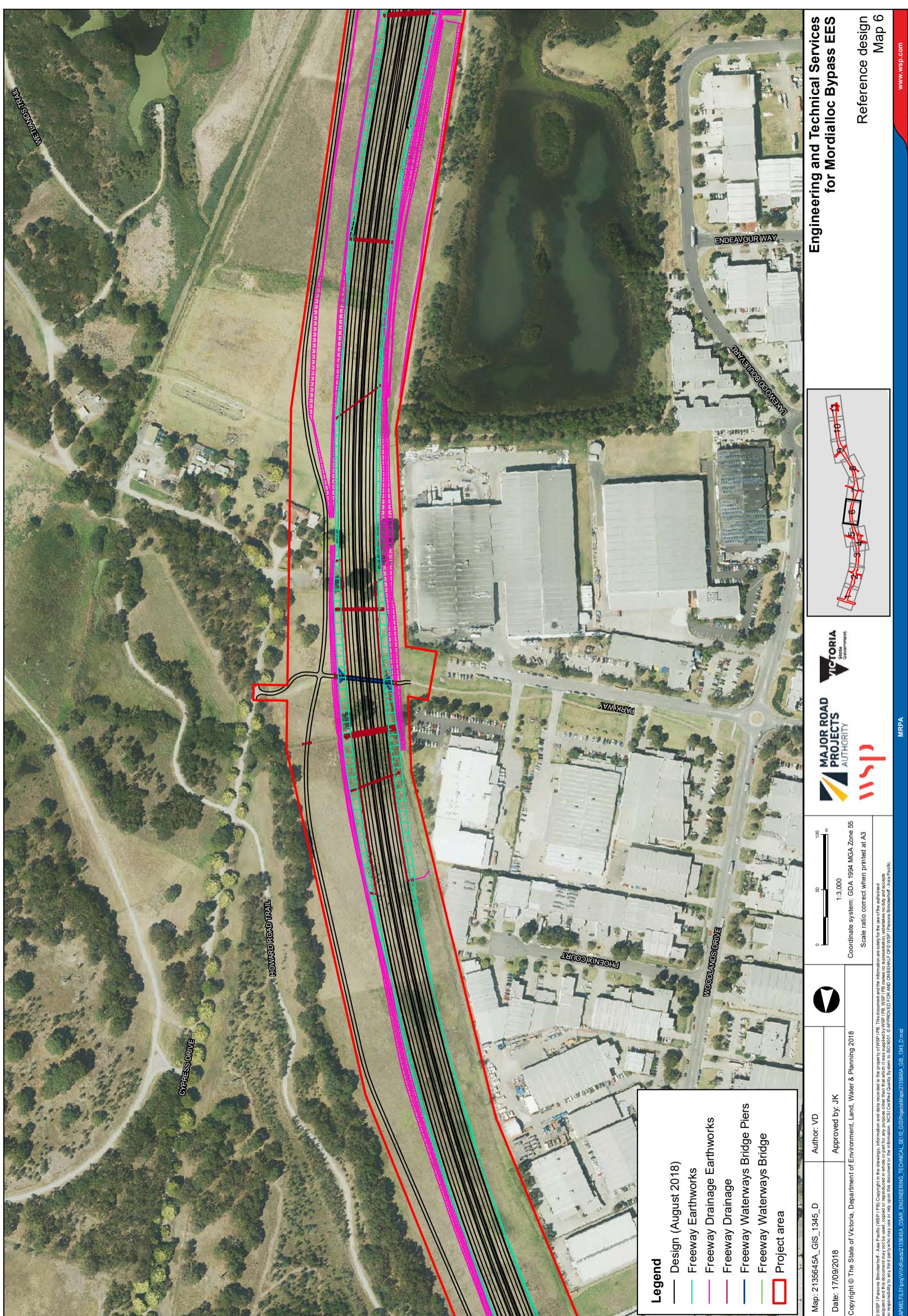


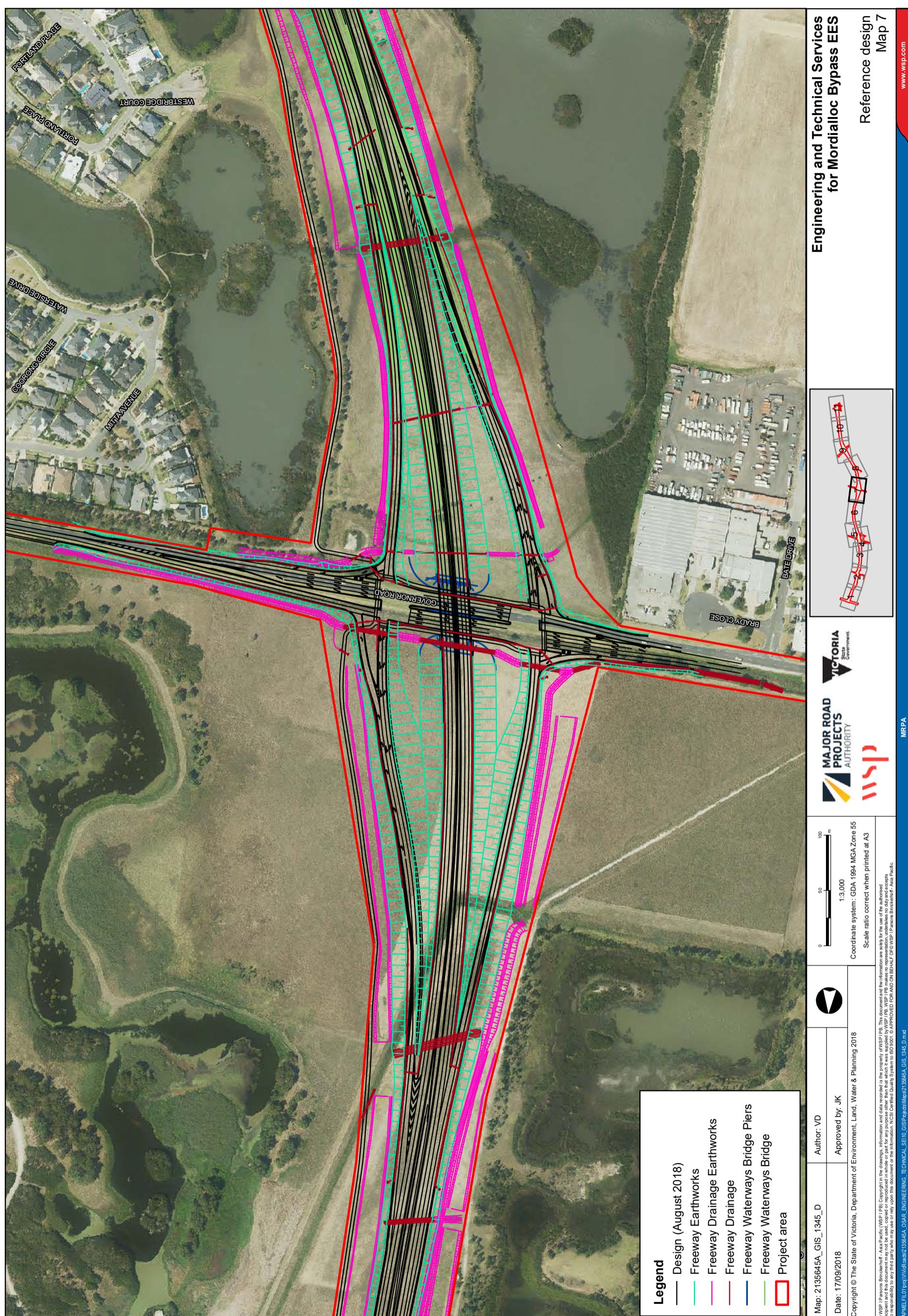


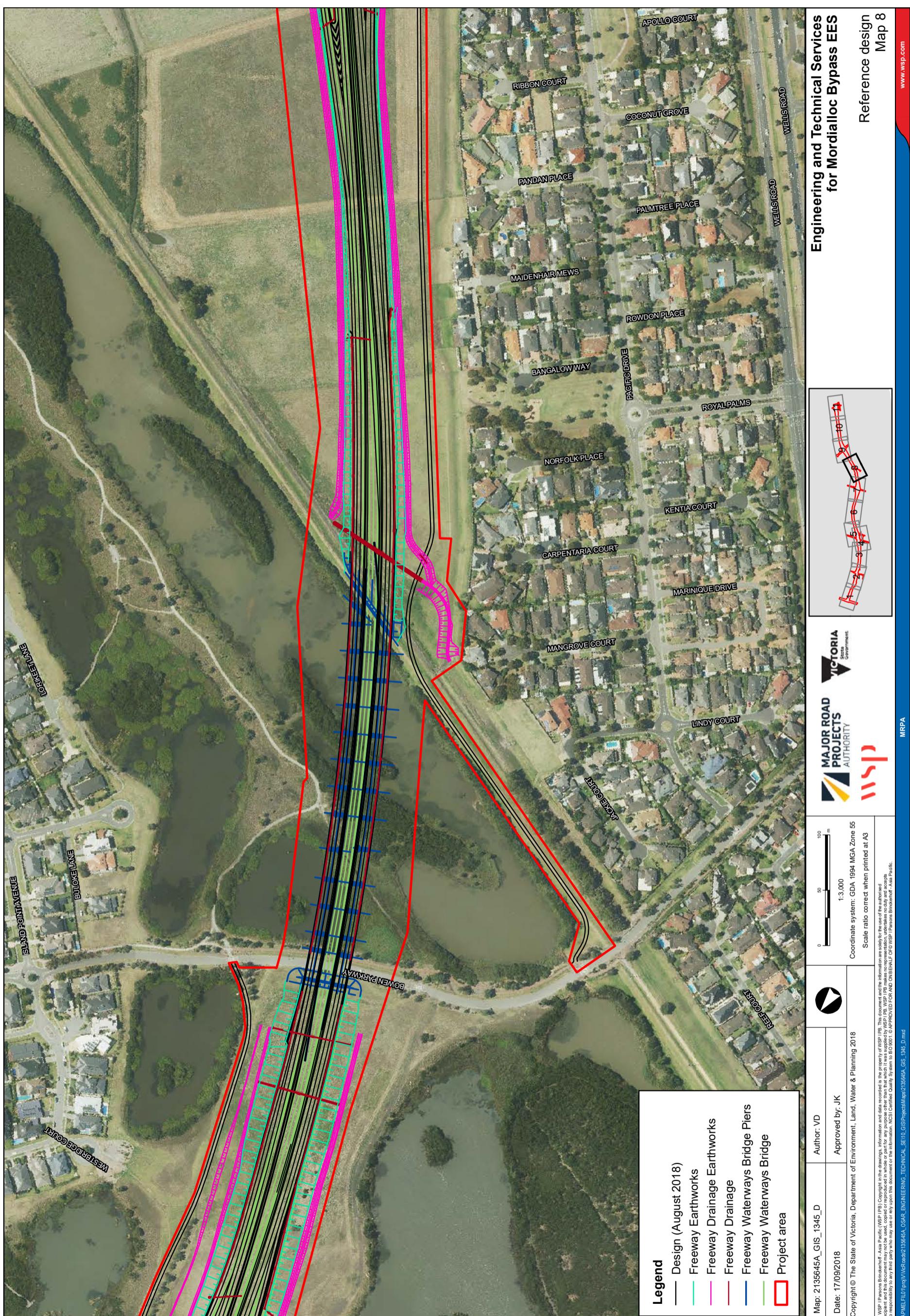


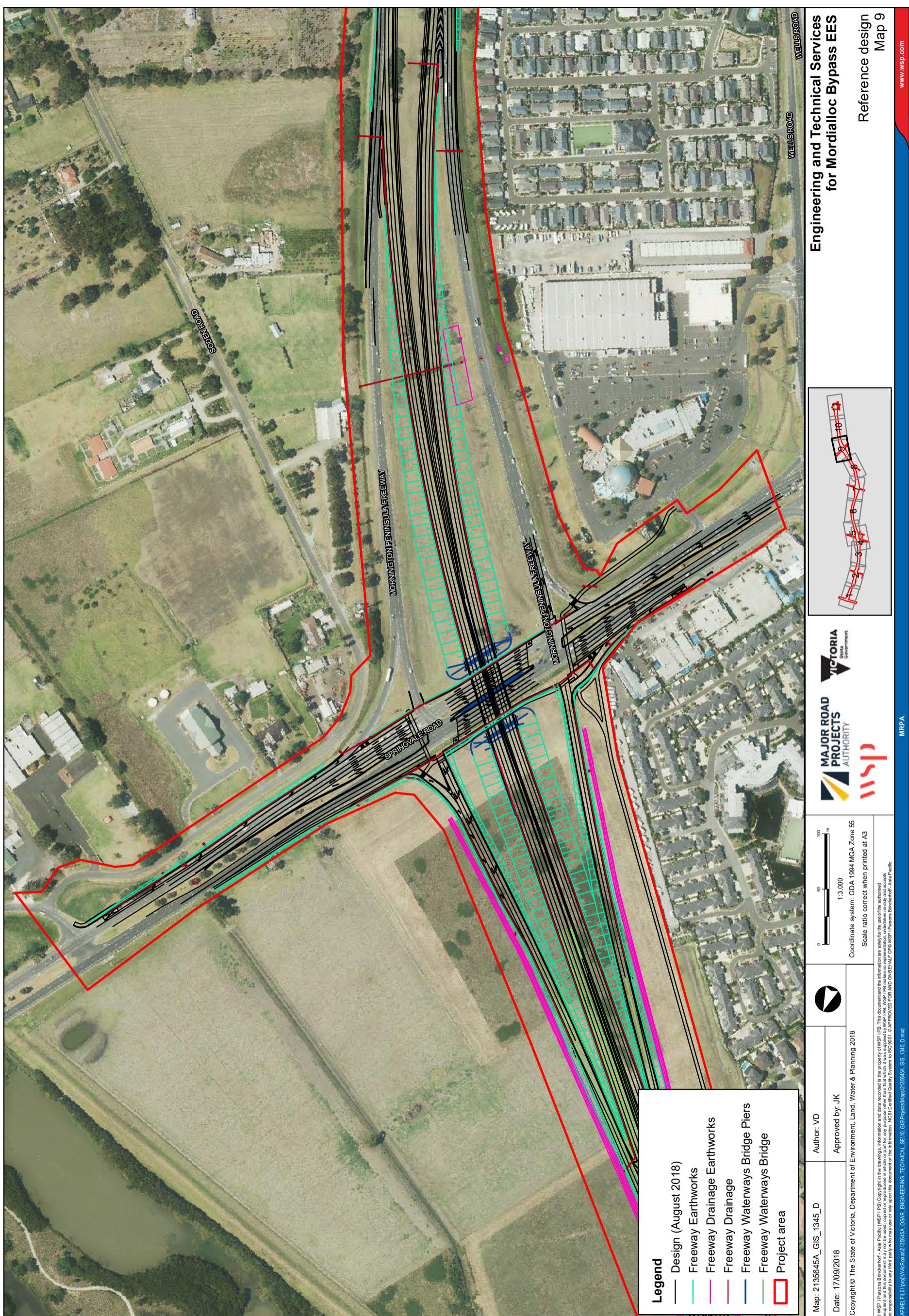


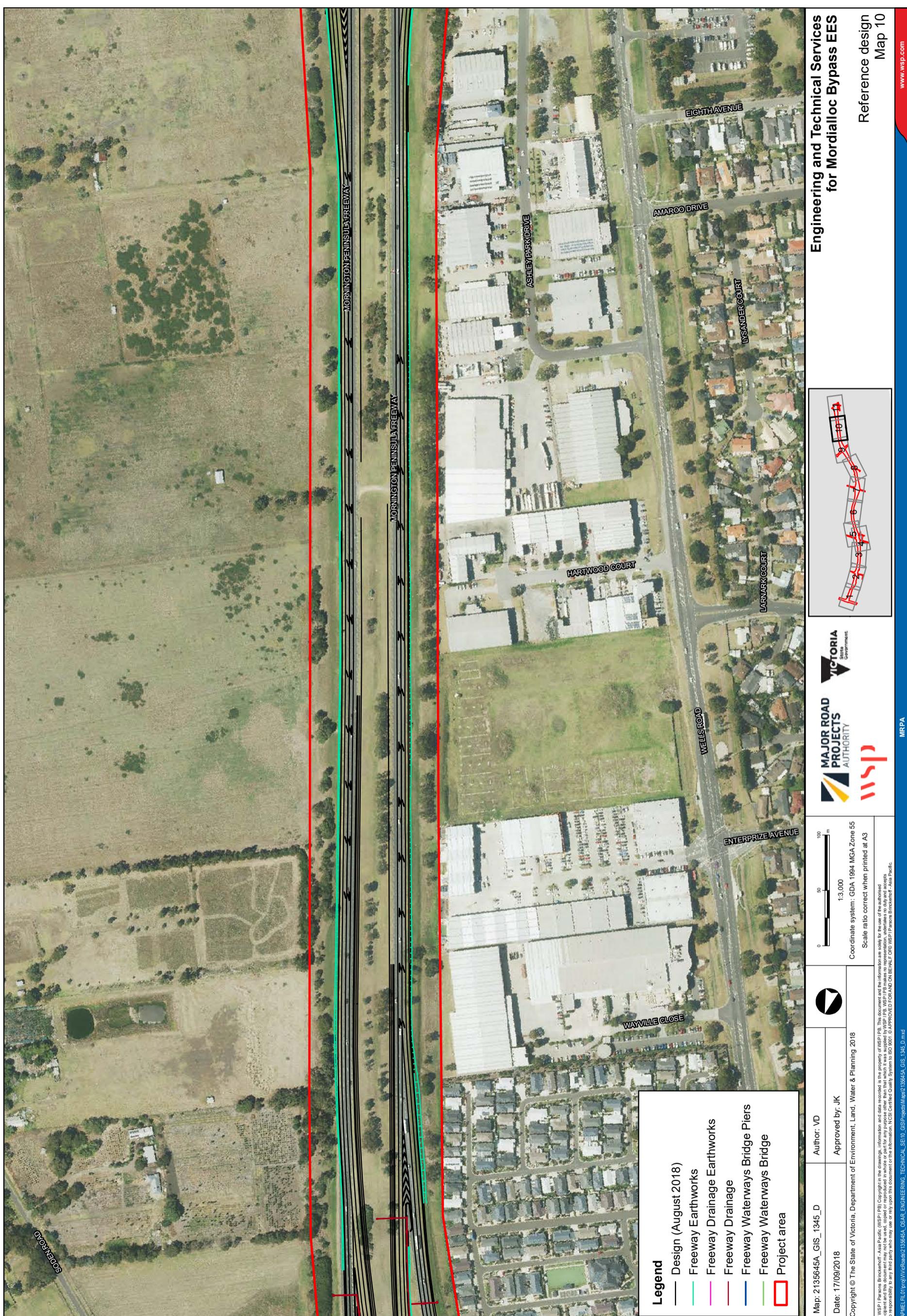


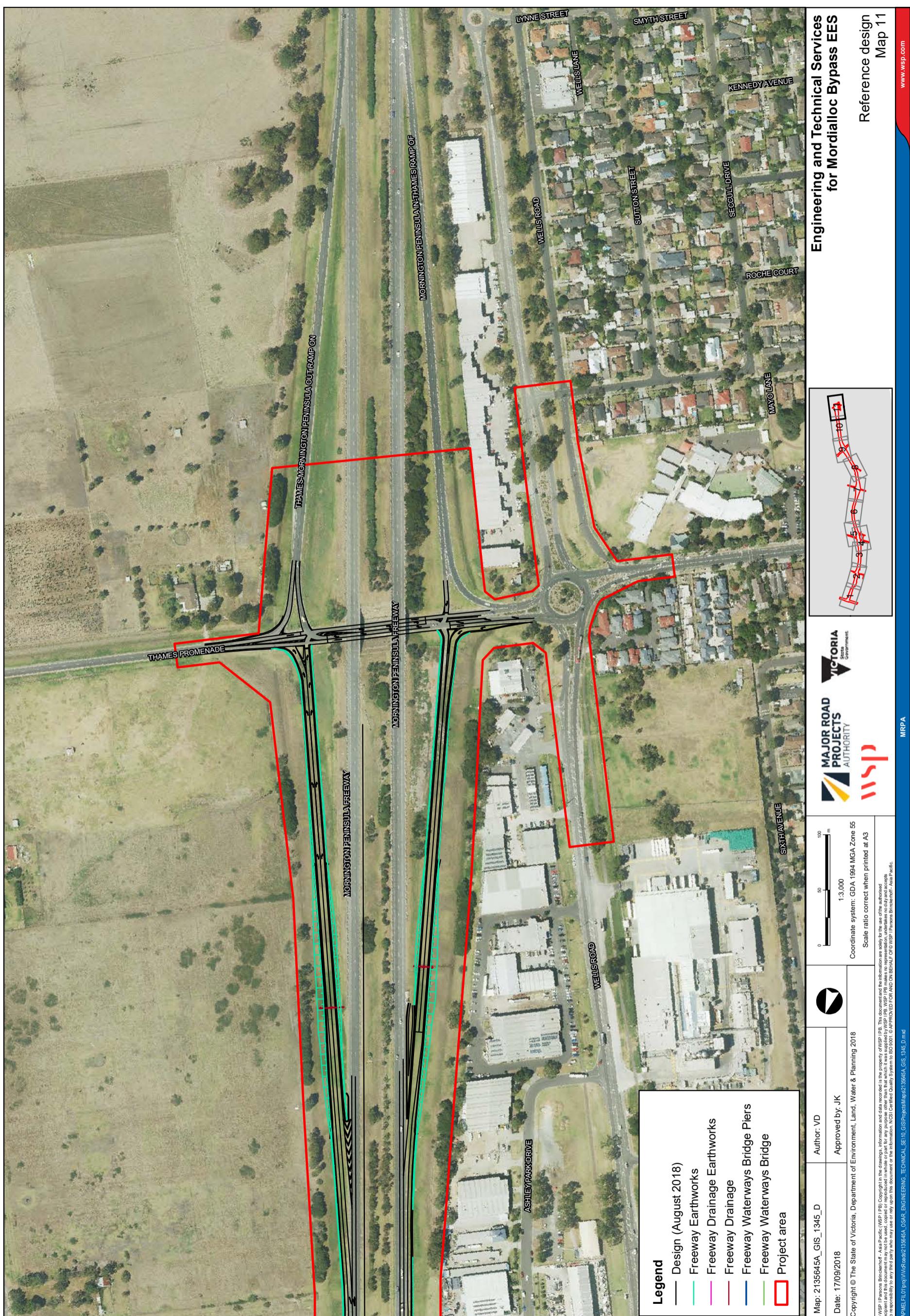


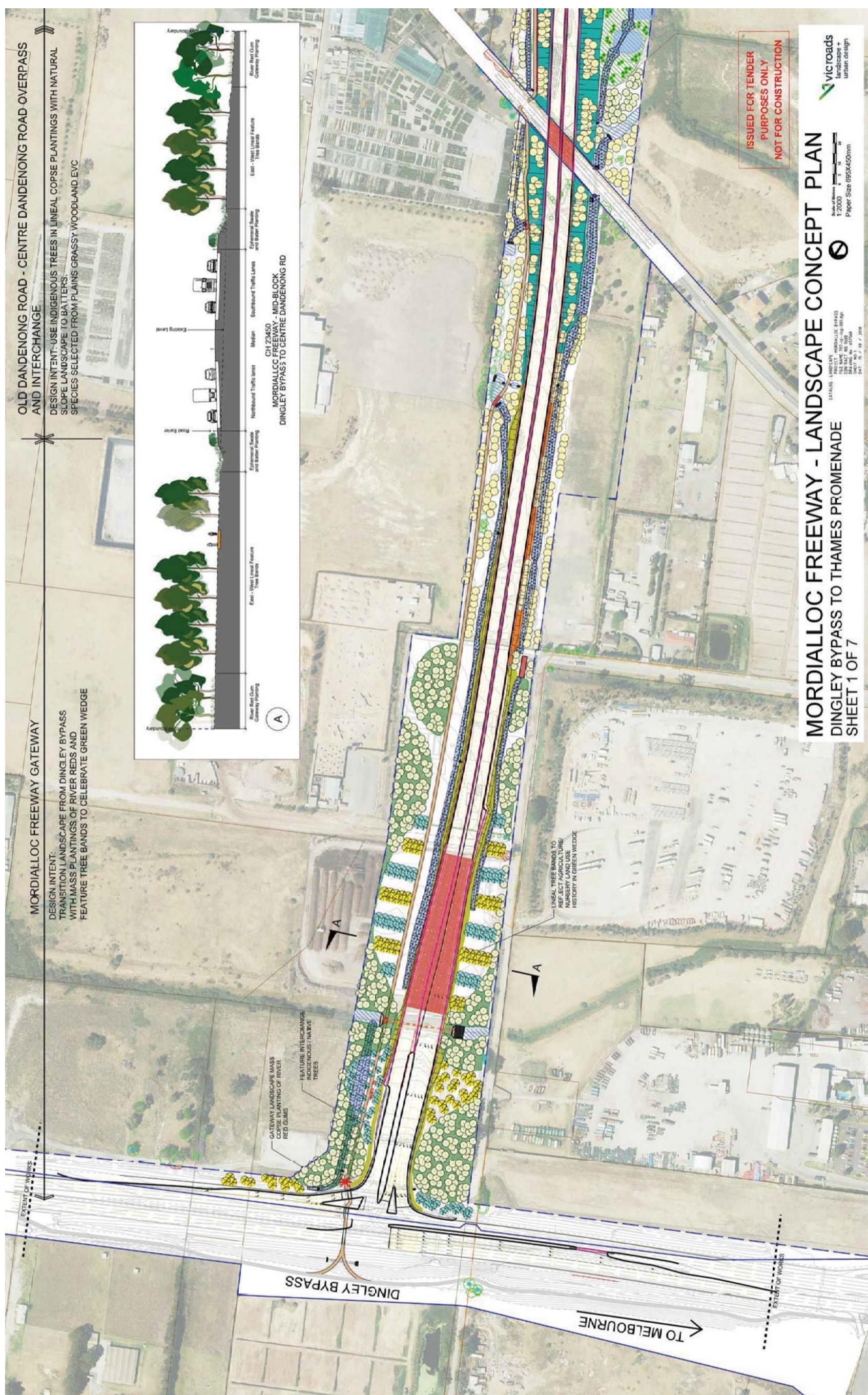


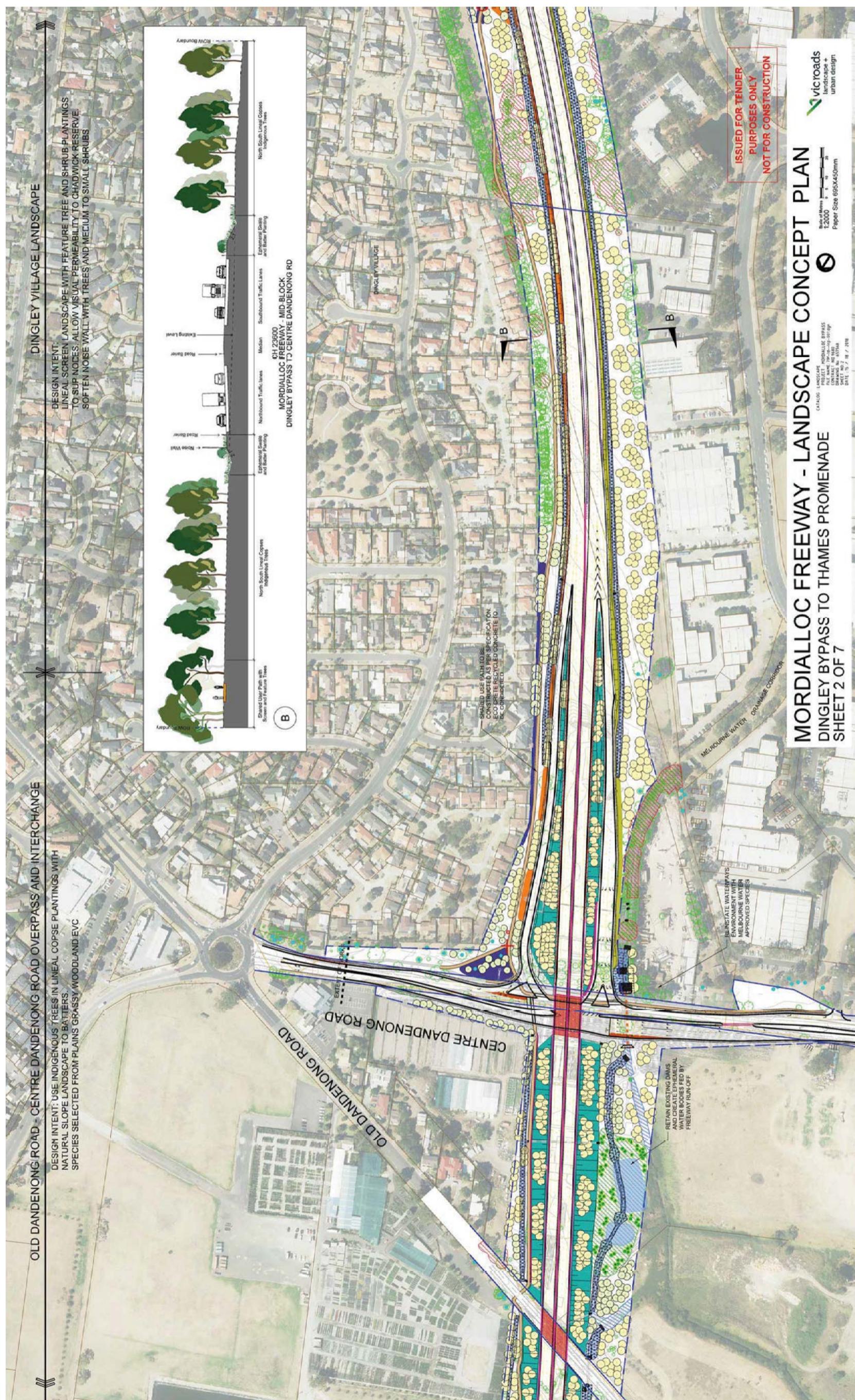


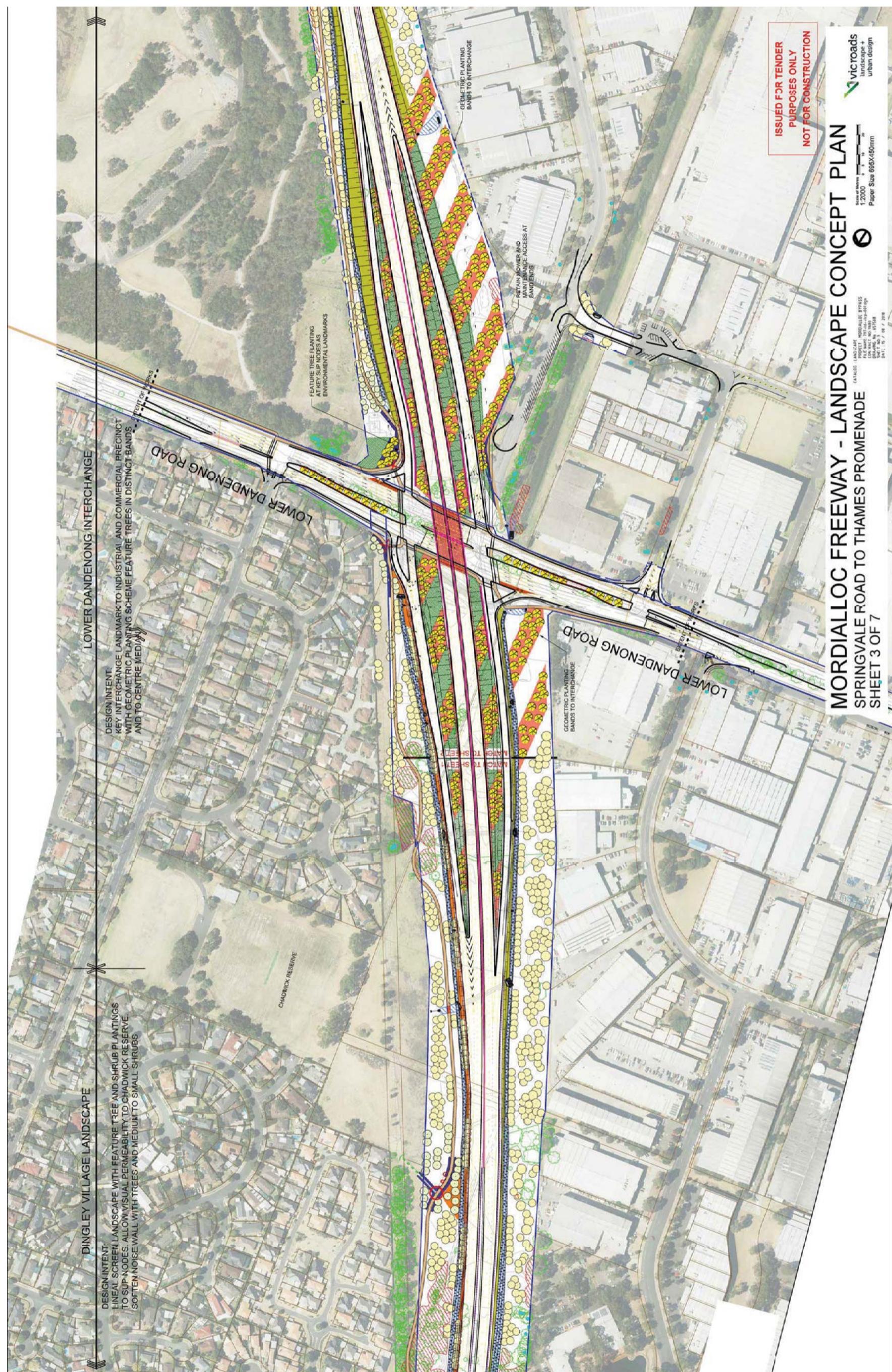


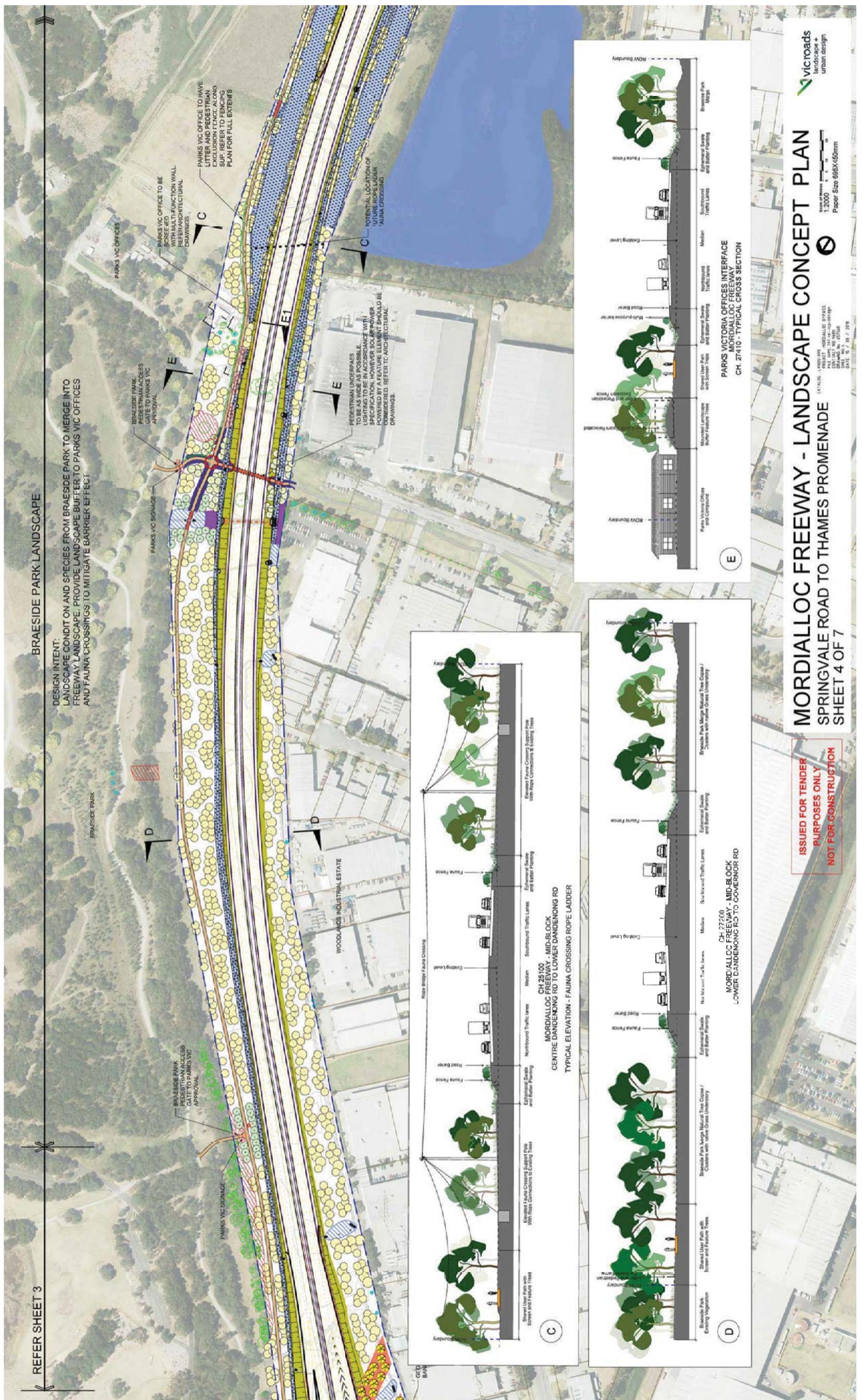


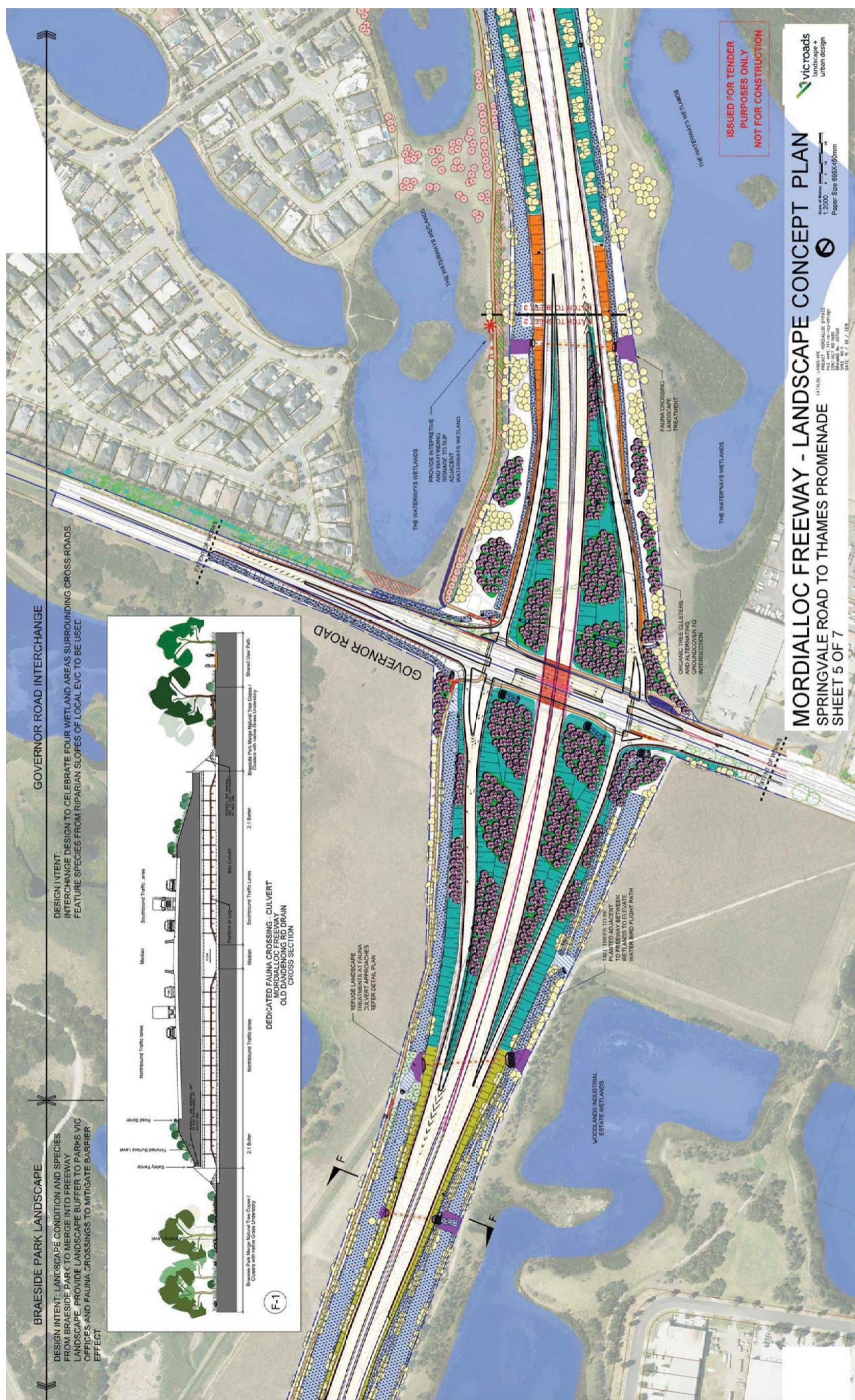


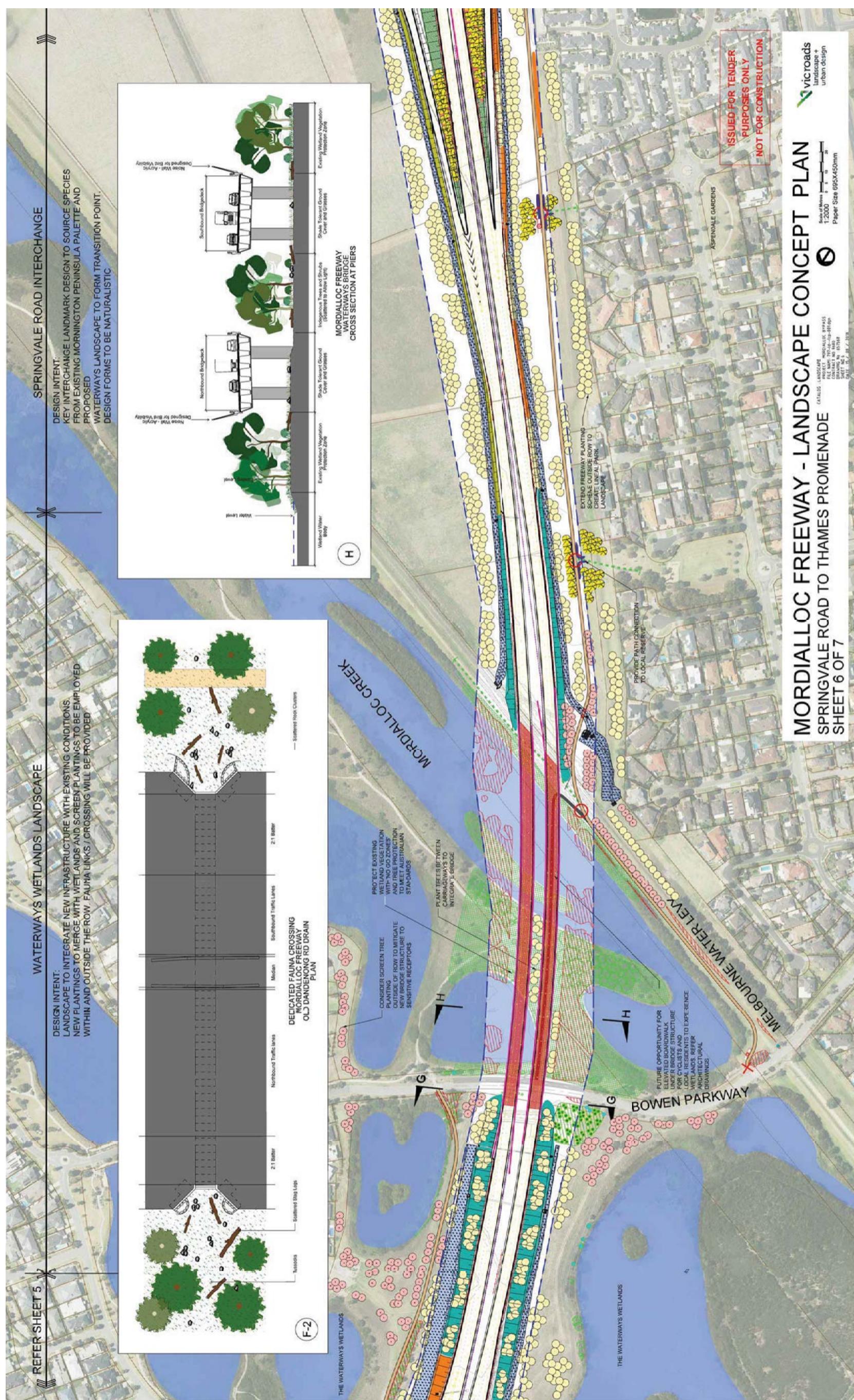














Preliminary Species List

	PLANTING - EXISTING	PLANTING - PROPOSED	
GEND			EXISTING TREES
INTNING - EXISTING			EXISTING TREES LIKELY TO BE RETAINED
INTNING - PROPOSED			NO GROWTHS
			TYPE 1 - INDIGENOUS TREES, NATIVE TREES
			TYPE 2 - FEATURE INDIGENOUS, NATIVE TREES
			TYPE 3 - FEATURE INDIGENOUS, NATIVE TREES
			TYPE 4 - INDIGENOUS, NATIVE SCREEN TREES
			TYPE 5 - FEATURE INTERCHANGE INDIGENOUS, NATIVE TREES
			TYPE 6 - FEATURE INTERCHANGE INDIGENOUS, NATIVE TREES
			TYPE 7 - CENTRE MEDIAN INDIGENOUS, NATIVE TREES

- W SAFETY BARRIER WIRE ROPE
- S SAFETY BARRIER GUARD FENCE
- E SAFETY BARRIER CONCRETE
- N EXISTING OR PROPOSED SECONDARY PATH LINK
- NE PROPOSED SHARED USER PATH (SUP)
- NW PROPOSED SUP UMBRELLA
- SE PROPOSED SUP UMBRELLA
- SW PROPOSED SHARED USER PATH (SUP)
- O WETLAND EXPERIENCE BOARDWALK OPPORTUNITY
- NO 2ND FENCE
- NO OVERHEAD POLE AND ROPE CROSSING
- NO INTEGRATED CLOUDY CLOUTER

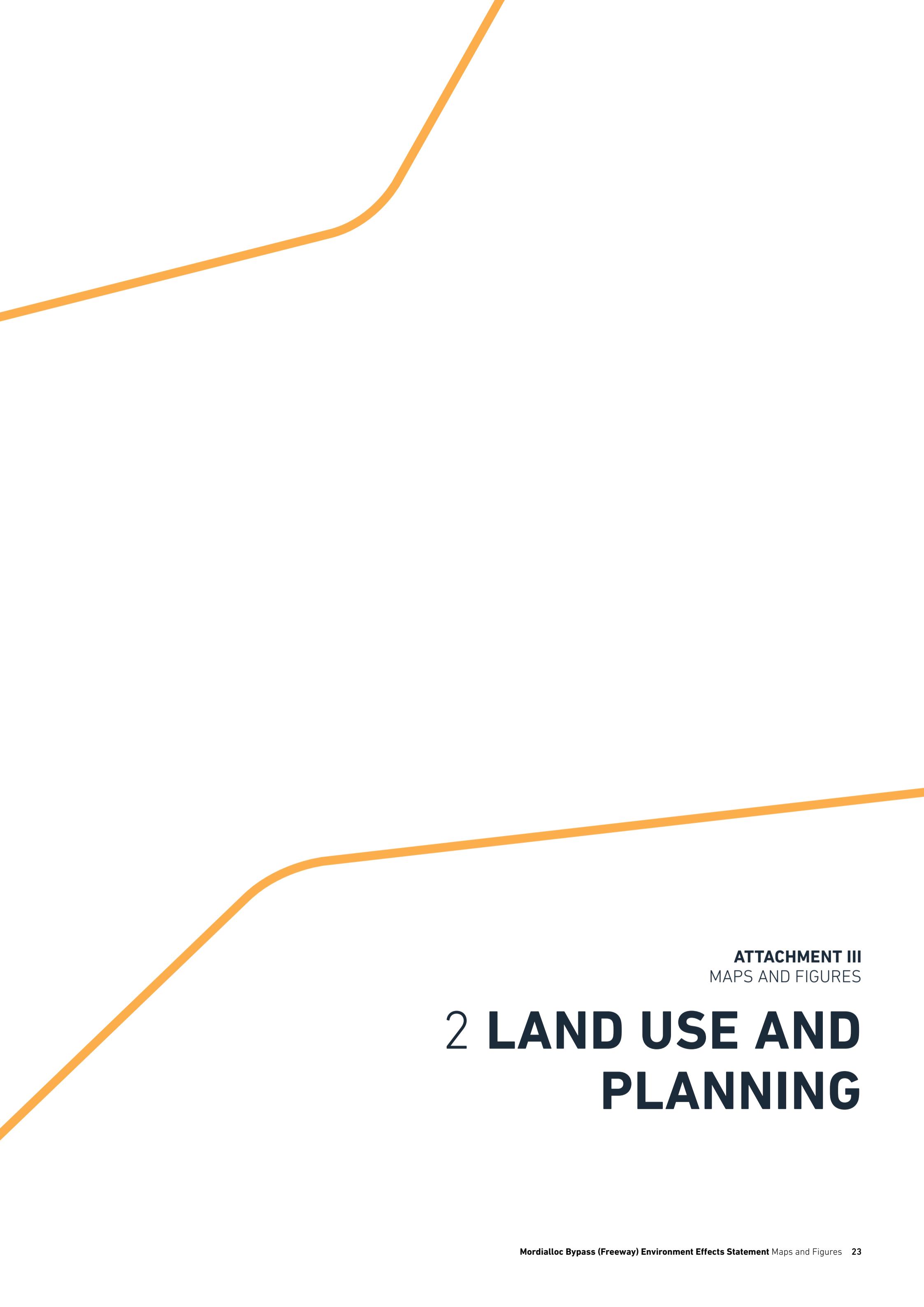
OTHER		BUILDING / UTILITIES STRUCTURE IN ROW
		PARKS VIC APPROVED PEDESTRIAN ACCESS GATE
		STRUCTURAL RETAINING WALL
		PROPOSED PROJECT BOUNDARY : PROJECT BOUNDARY
		WF1 - PRIMARY WAYFINDING SIGN
		WF2 - SECONDARY WAYFINDING SIGN
		WF3 - MINOR WAYFINDING SIGN
		BENCH SEAT
		BICYCLE RACK
		BICYCLE FIX STATION
		DRINKING FOUNTAIN

**ISSUED FOR TENDER
PURPOSES ONLY
NOT FOR CONSTRUCTION**



MORDIA LOC FREEWAY - PLANT SCHEDULE AND LEGEND

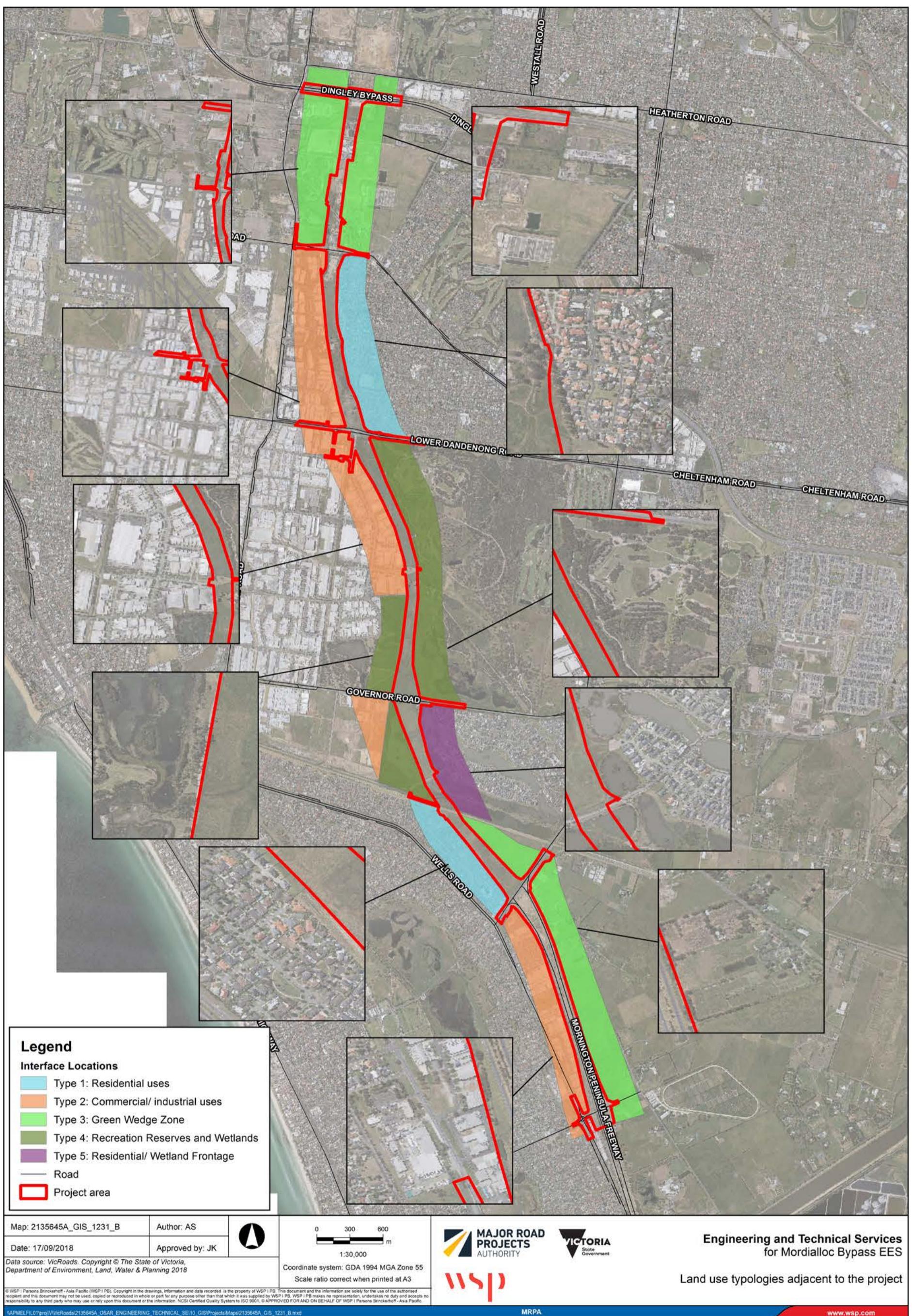
SPRINGVALE ROAD TO THAMES PROMENADE
SHEET 1 OF 1



ATTACHMENT III
MAPS AND FIGURES

2 LAND USE AND PLANNING

2.1 Land use typologies adjacent to the project

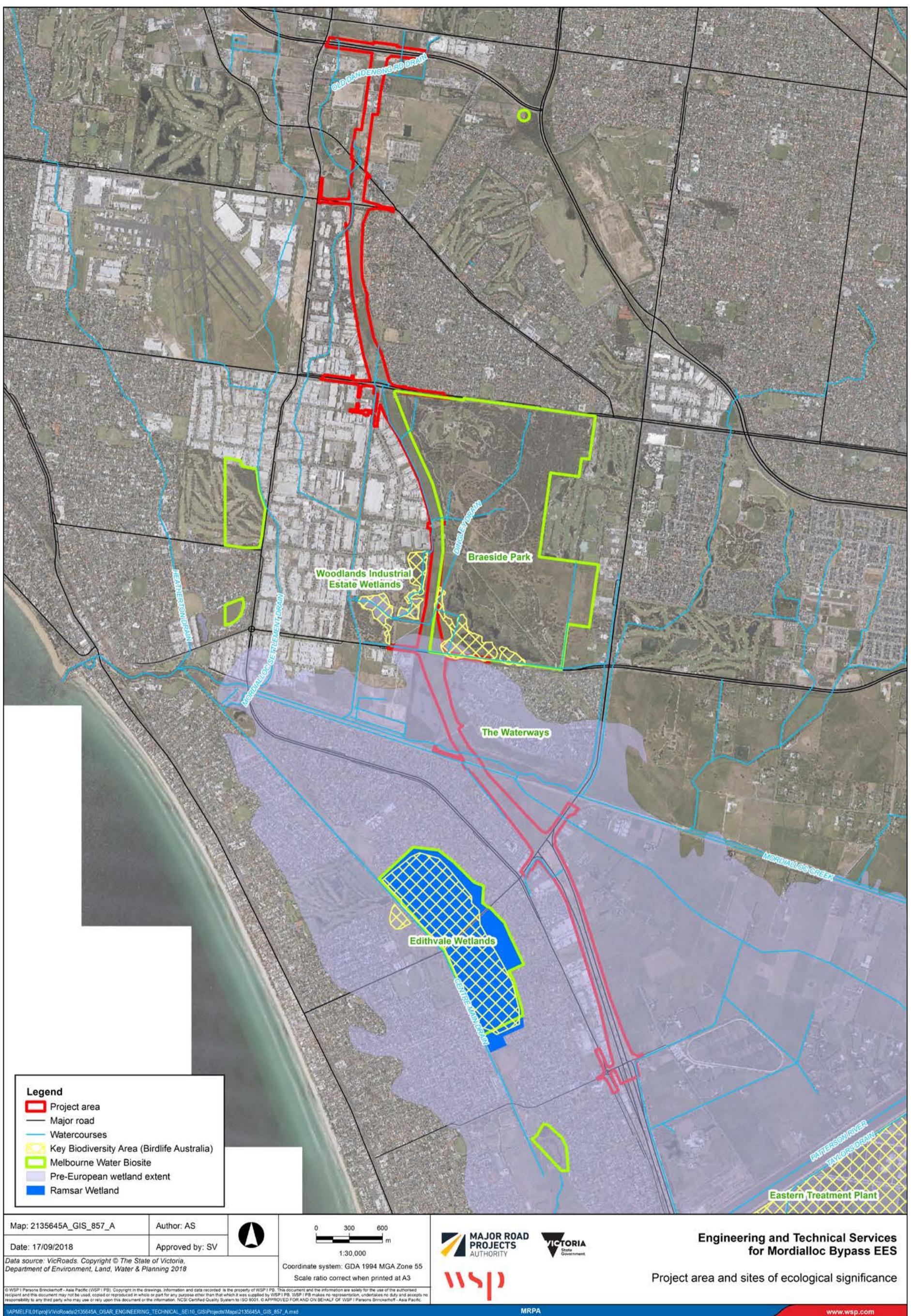




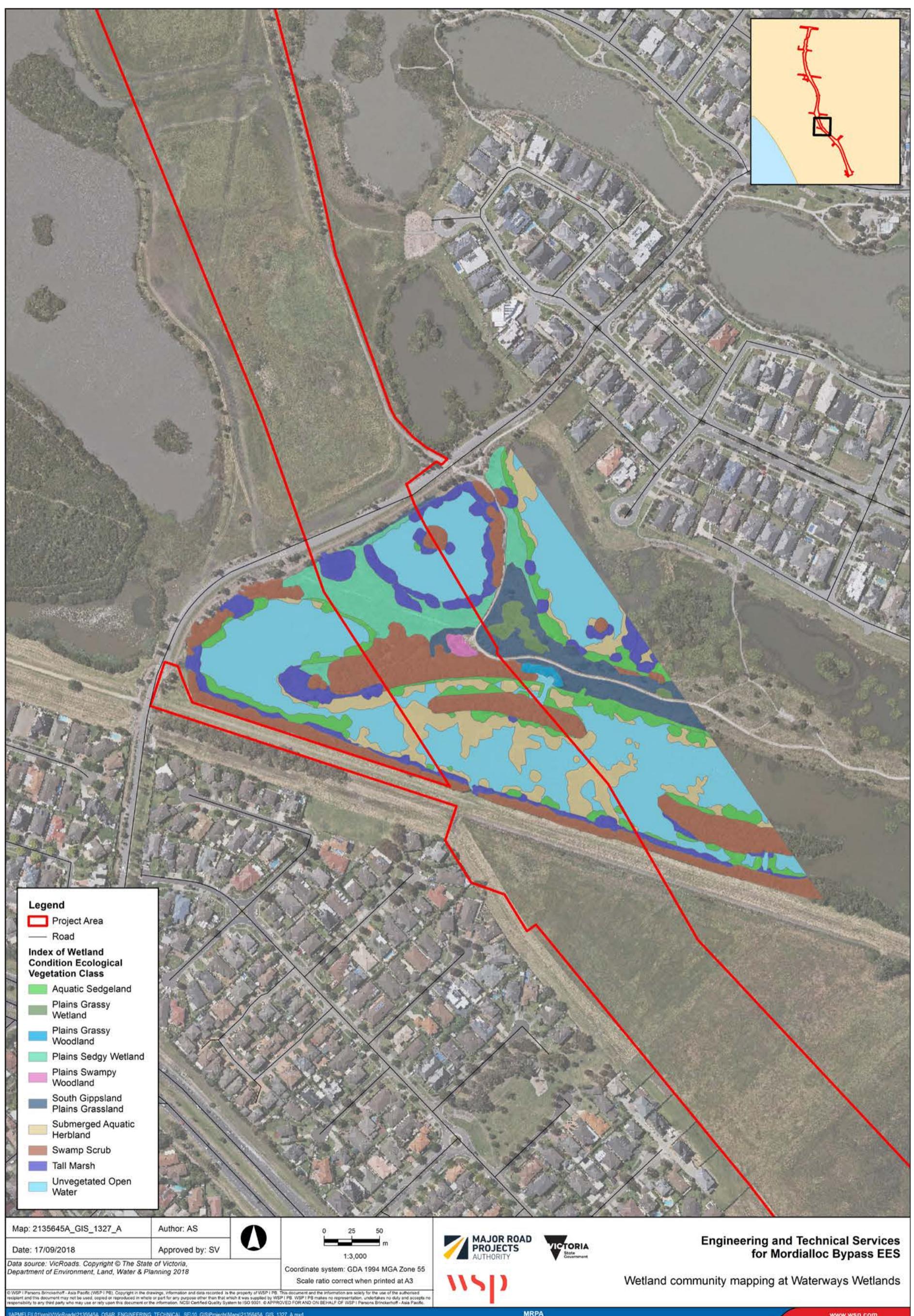
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MAPS AND FIGURES

3 BIODIVERSITY

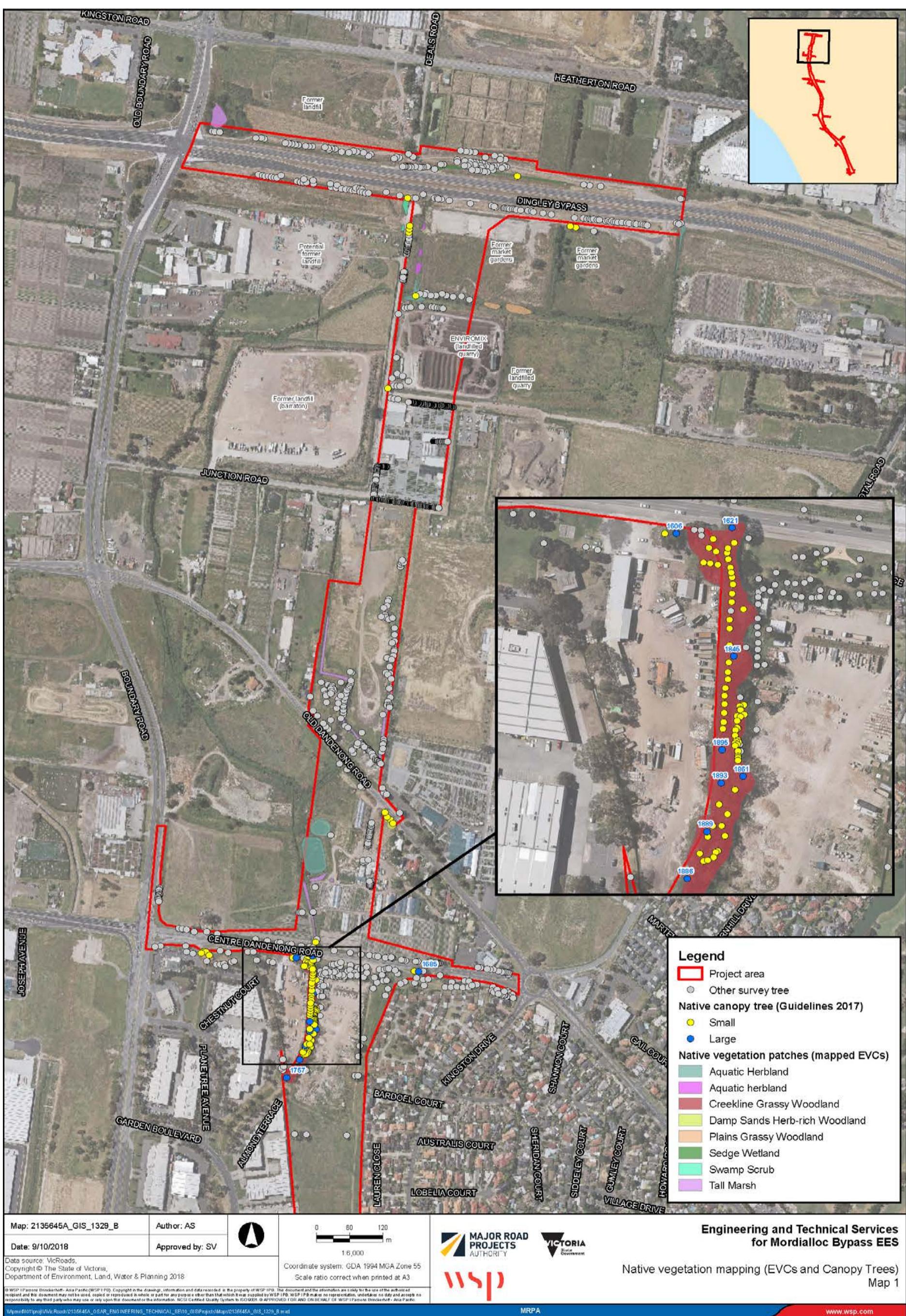
3.1 Project area and sites of ecological significance



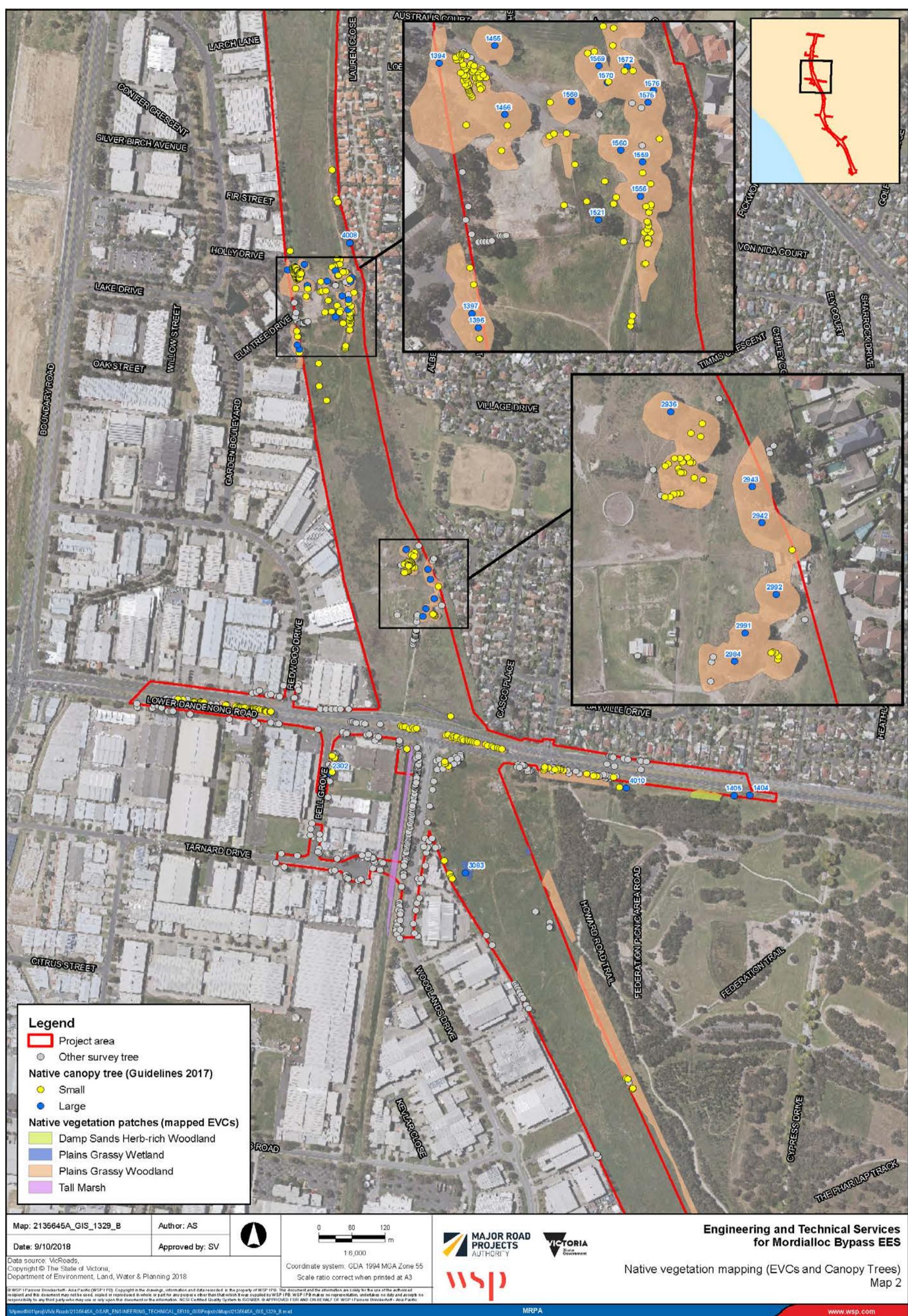
3.2 Wetland community mapping at Waterways Wetlands



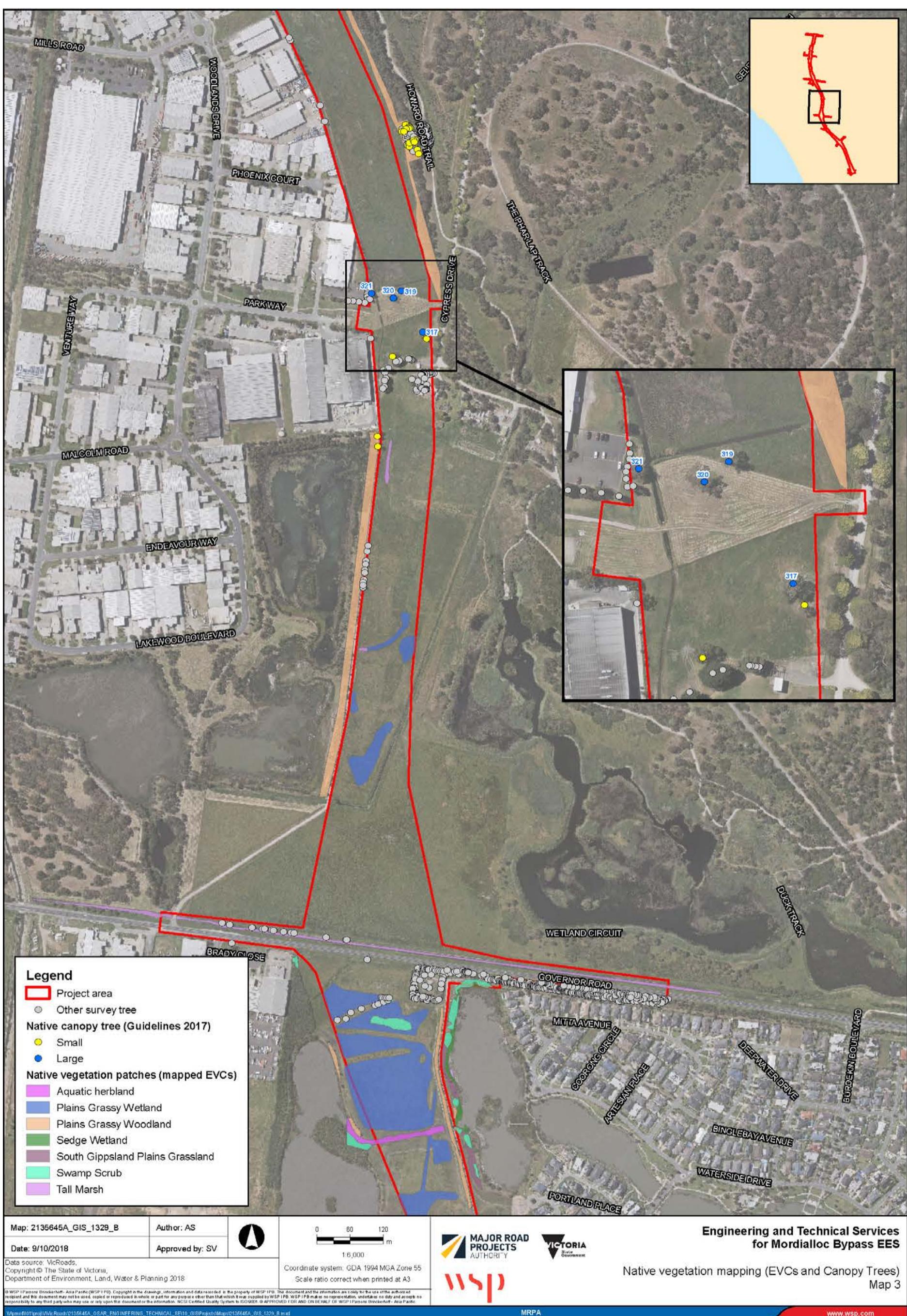
3.3 Native vegetation mapping (EVCs and Canopy Trees) (Map 1 of 5)



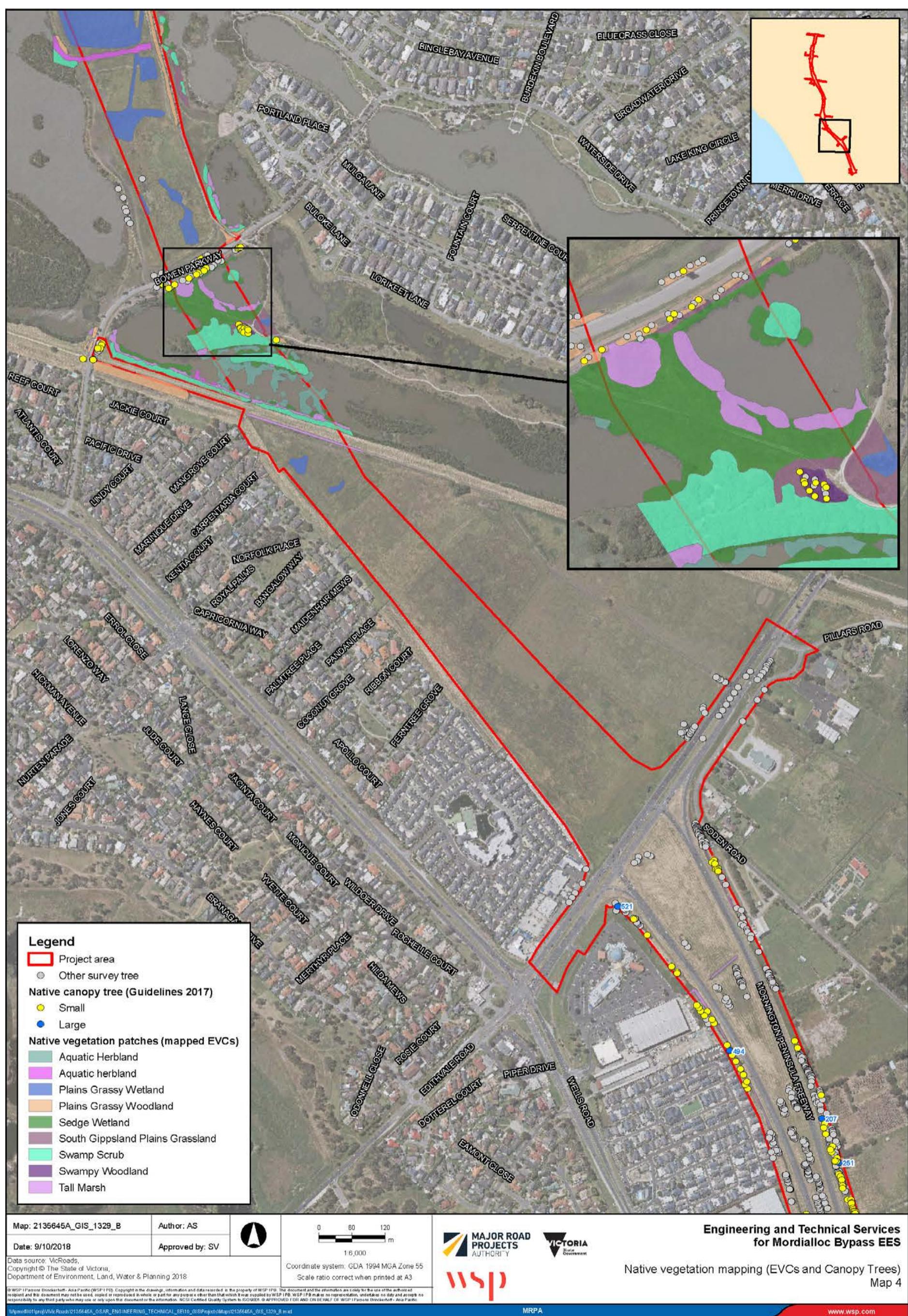
3.3 Native vegetation mapping (EVCs and Canopy Trees) (Map 2 of 5)



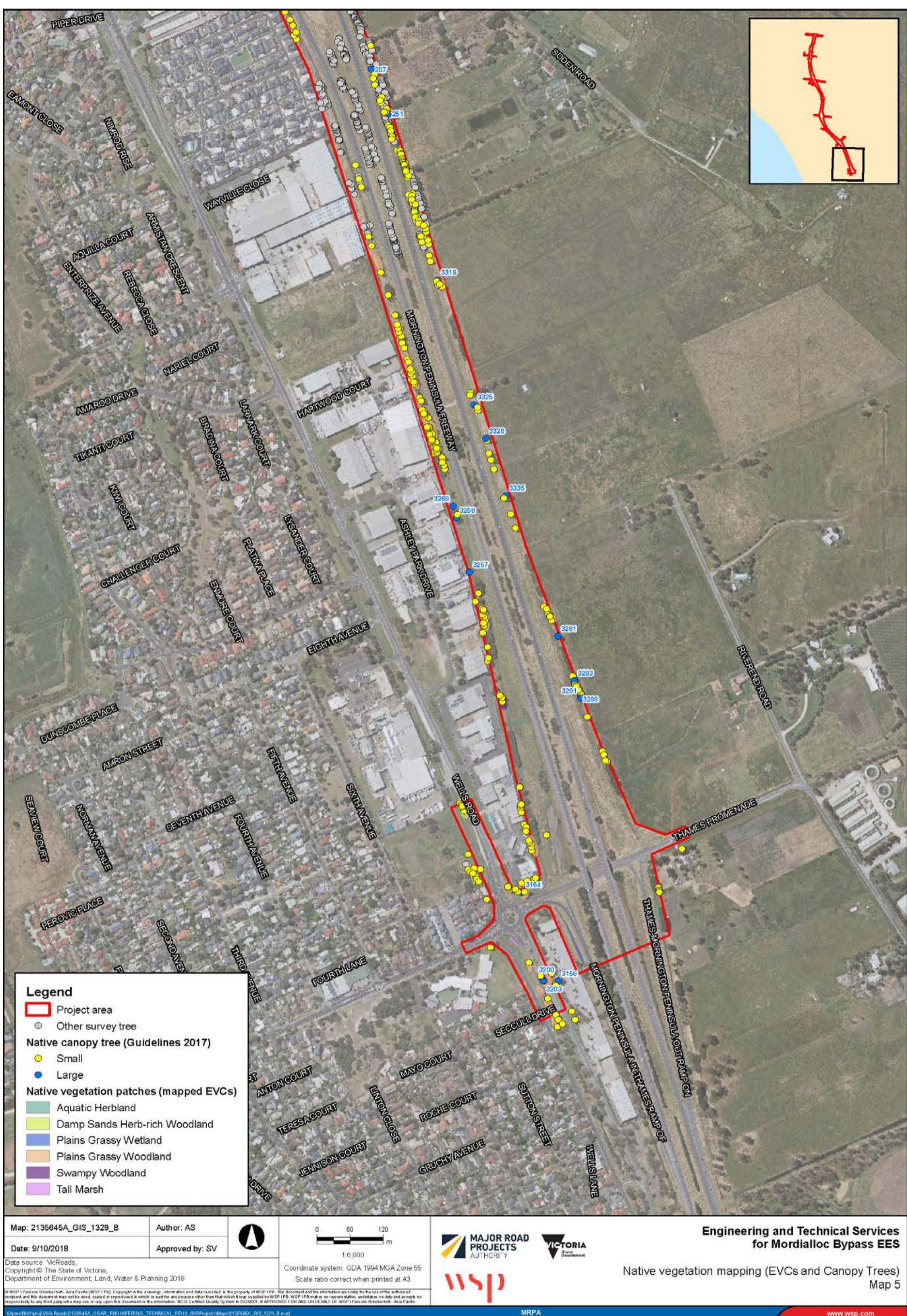
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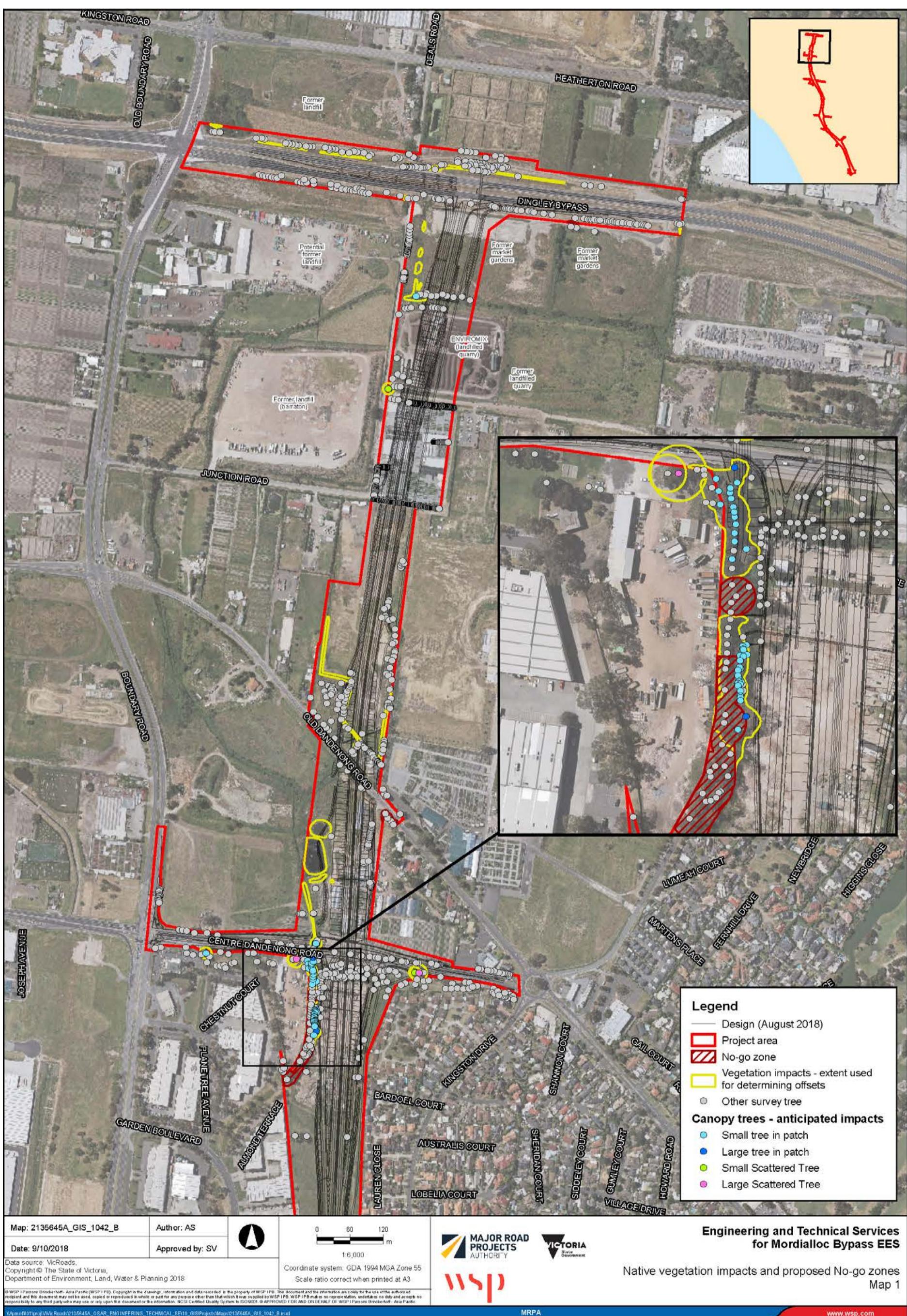
3.3 Native vegetation mapping (EVCs and Canopy Trees) (Map 4 of 5)



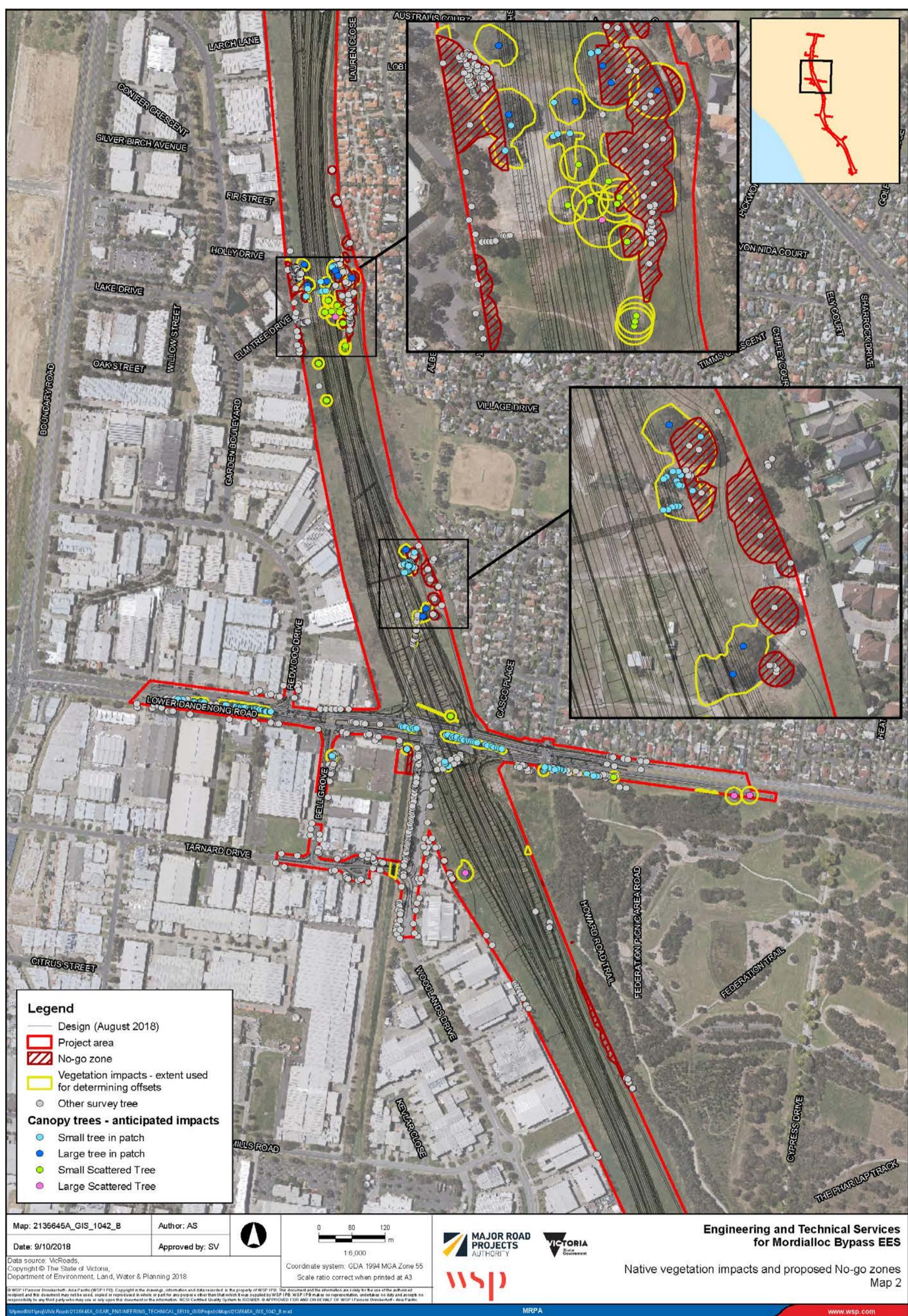
3.3 Native vegetation mapping (EVCs and Canopy Trees) (Map 5 of 5)



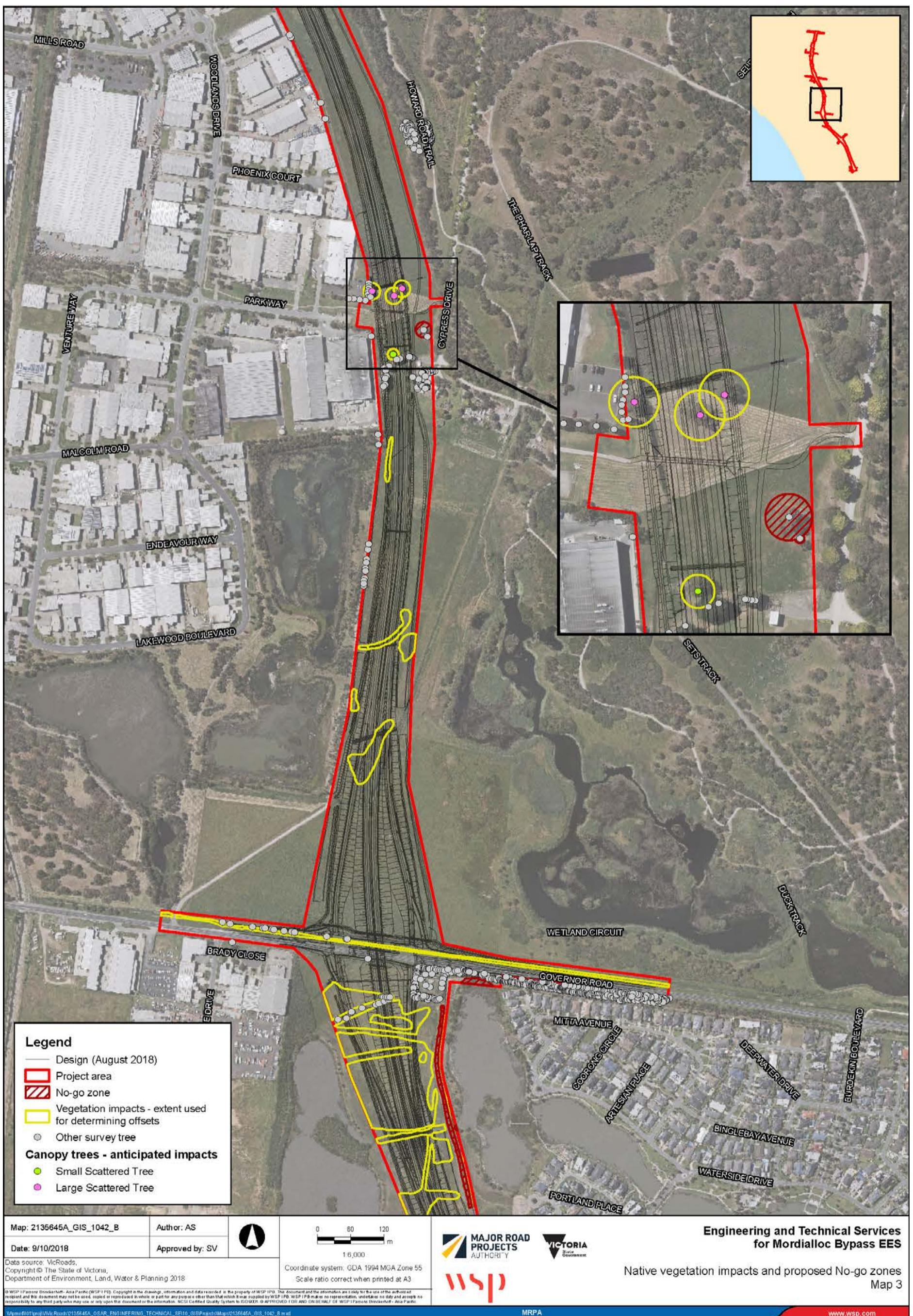
3.4 Native vegetation impacts and proposed No-go zones (Map 1 of 5)



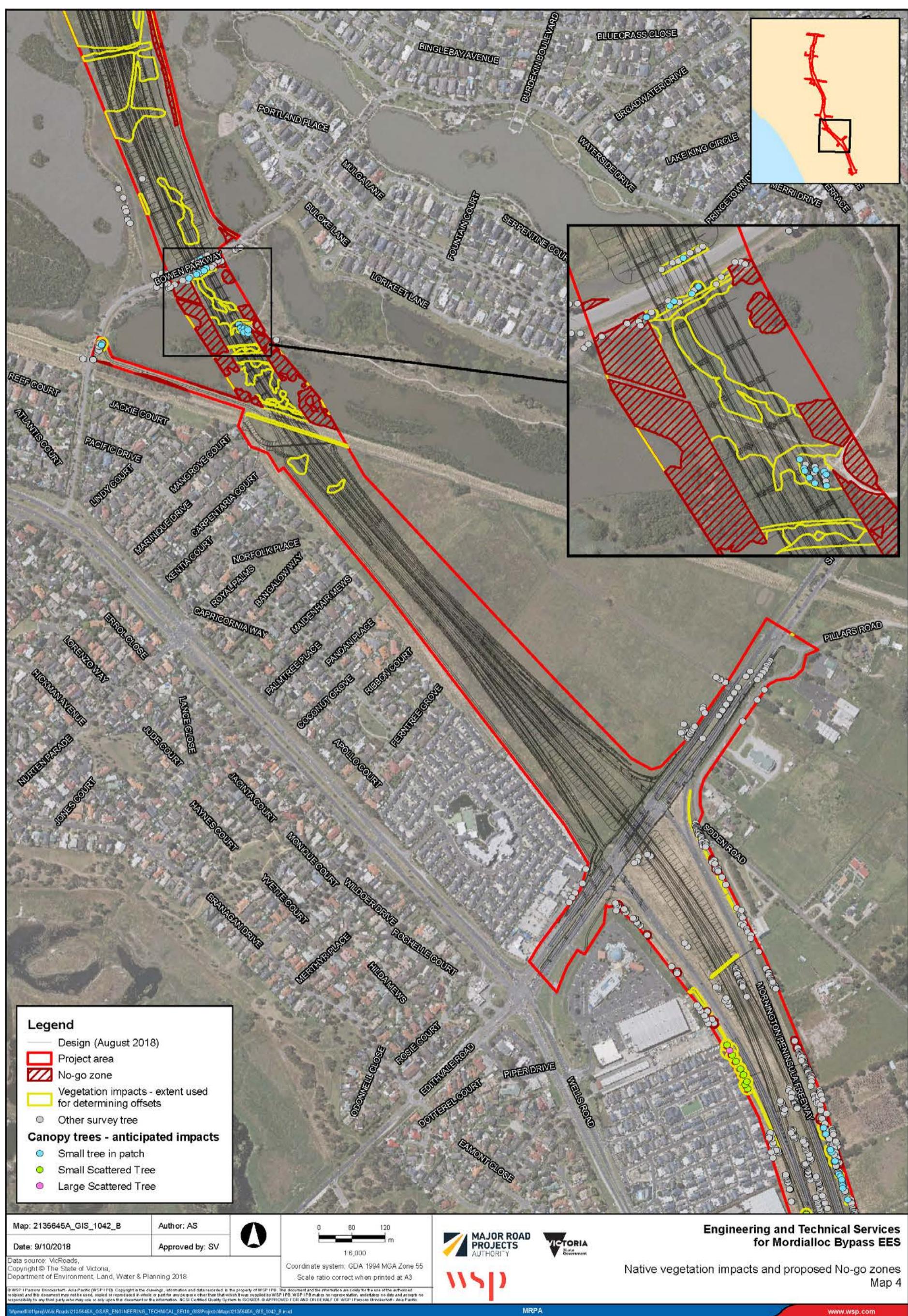
3.4 Native vegetation impacts and proposed No-go zones (Map 2 of 5)



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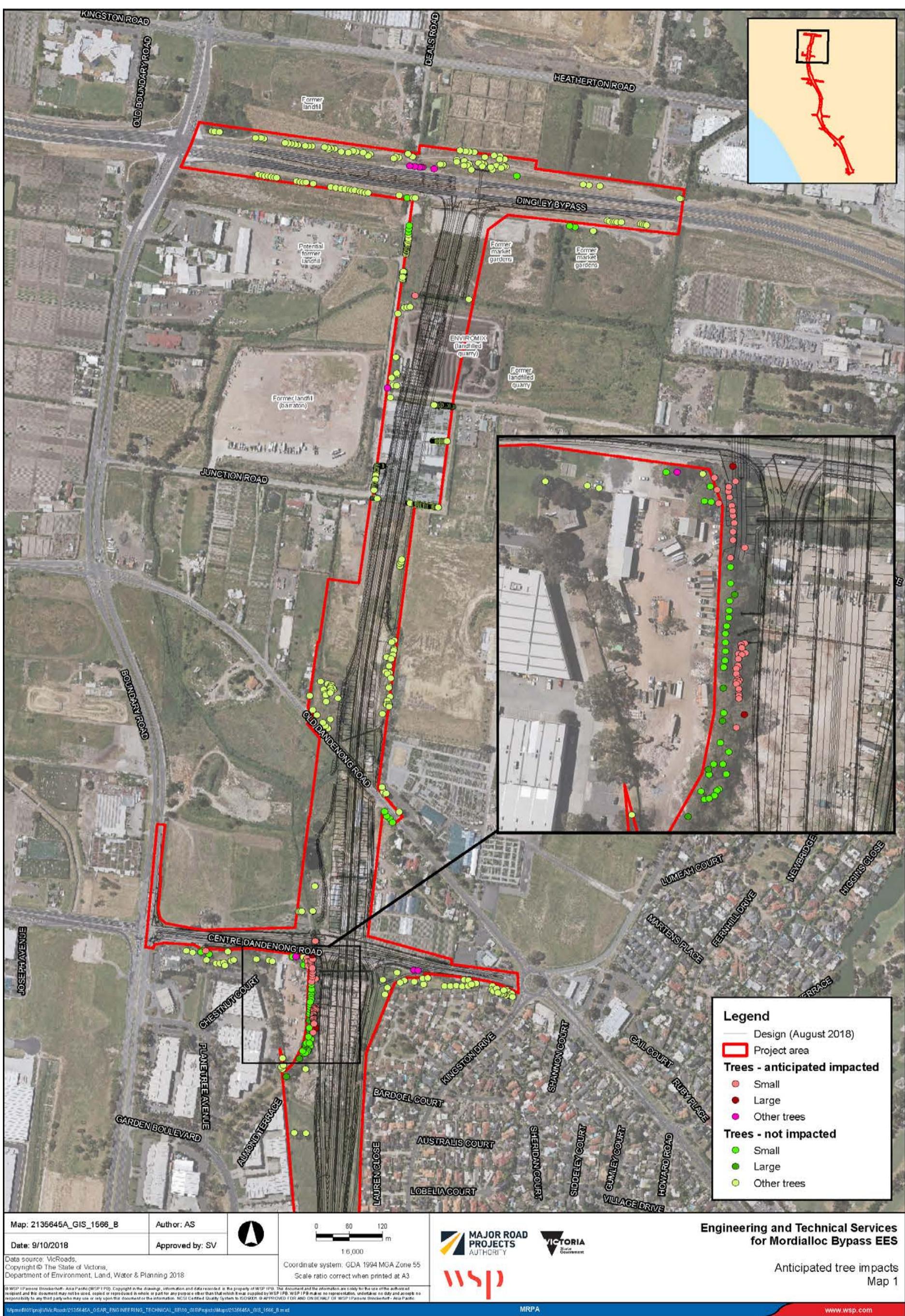
3.4 Native vegetation impacts and proposed No-go zones (Map 4 of 5)



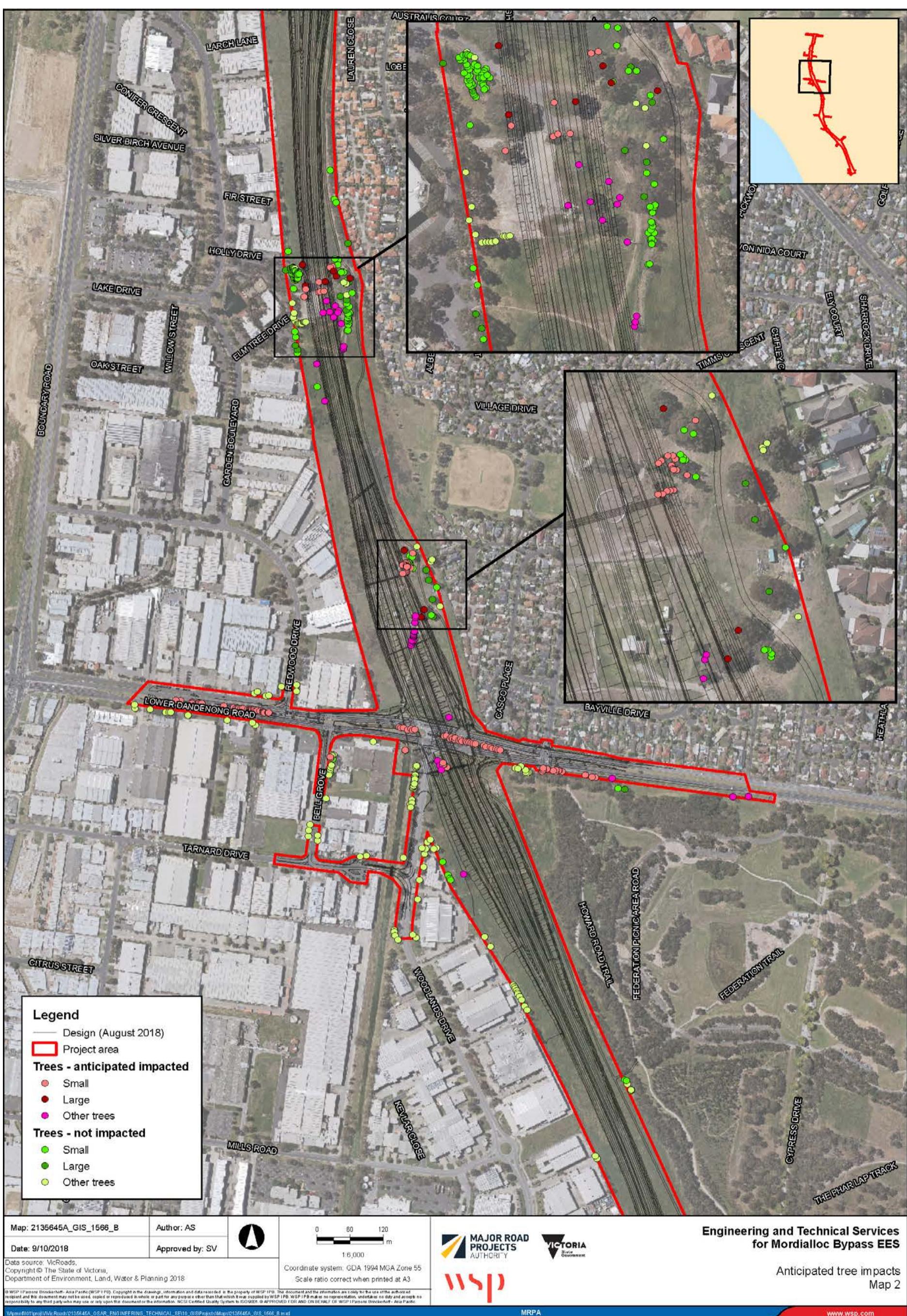
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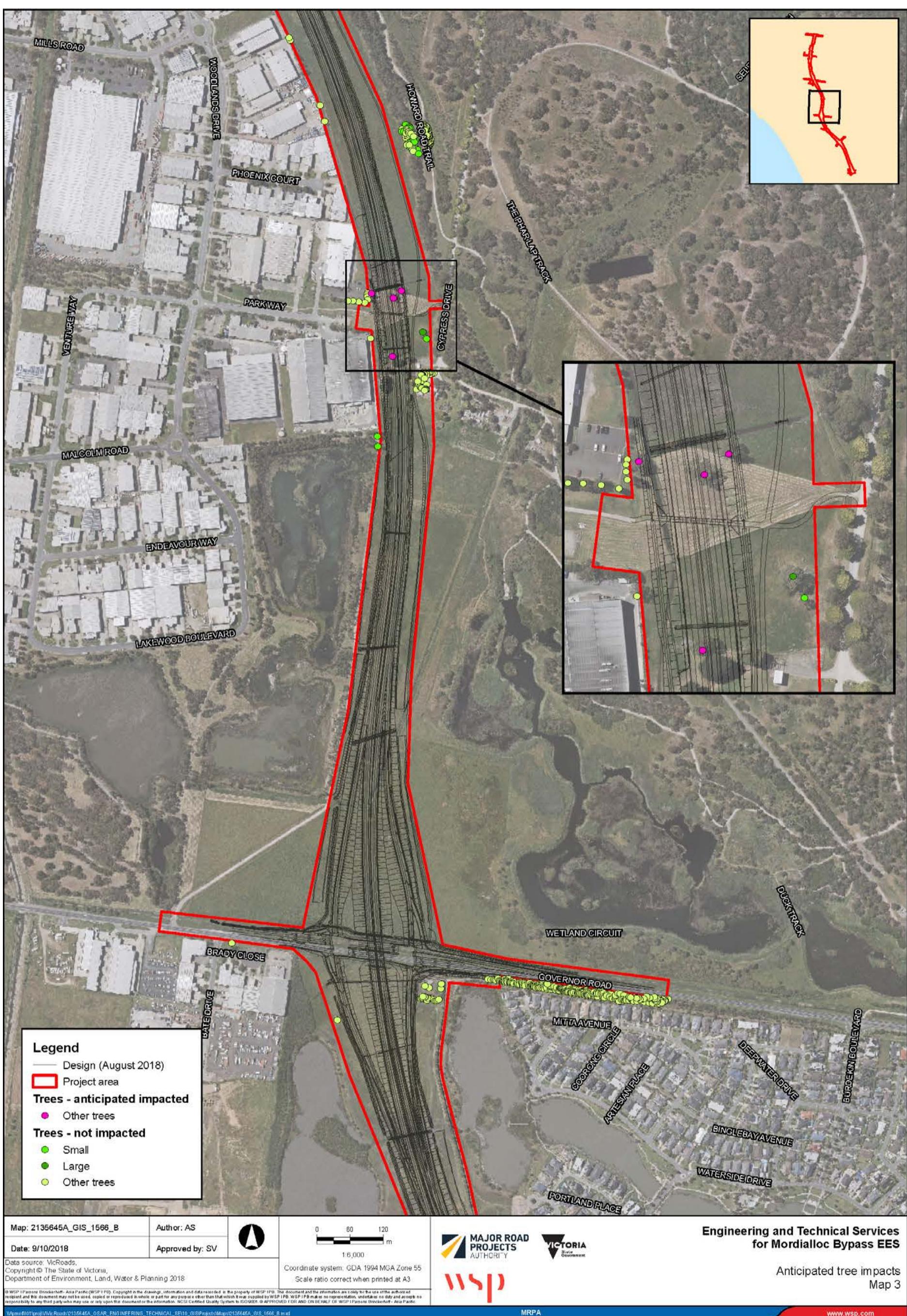


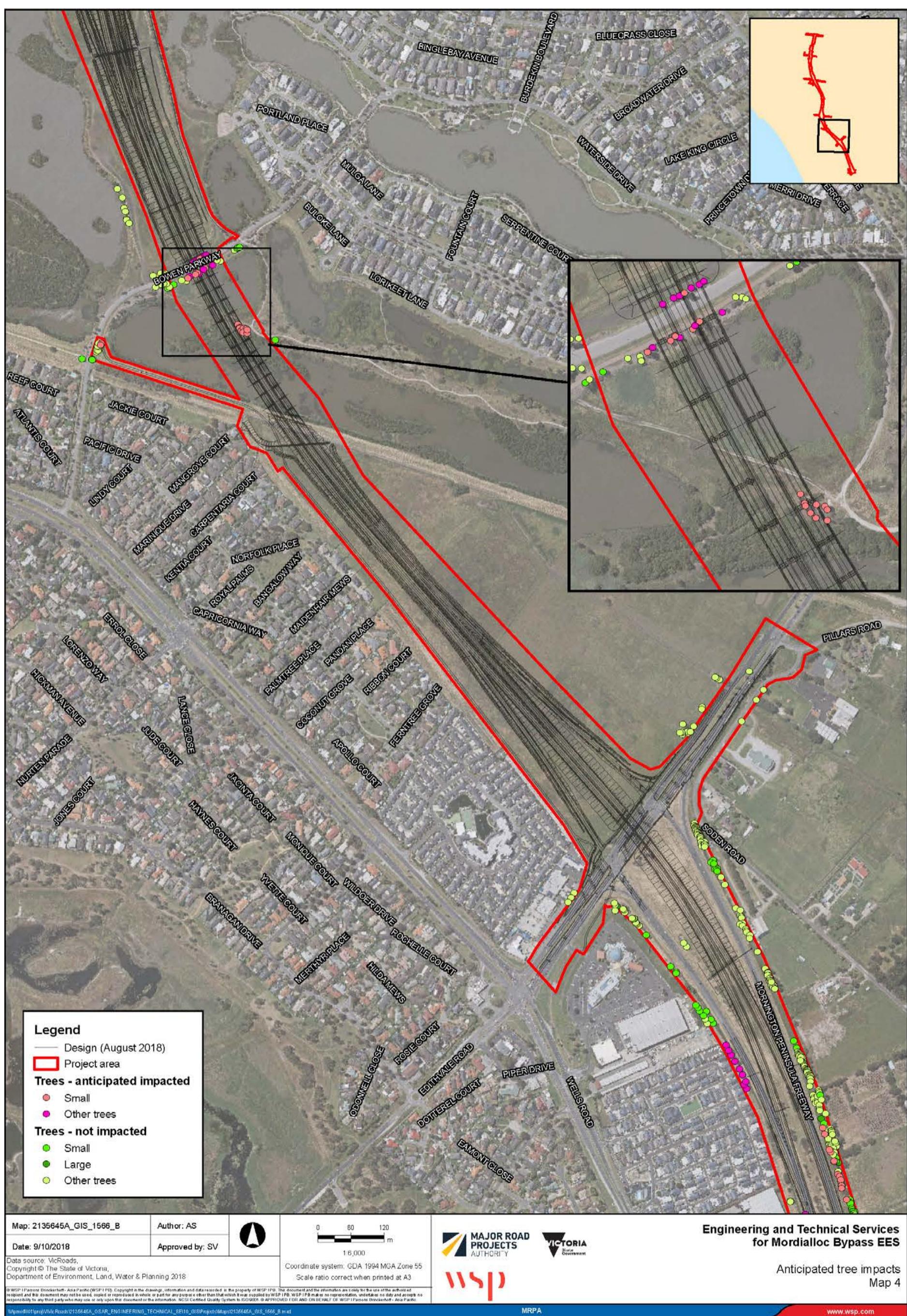
3.5 Anticipated tree impacts (Map 1 of 5)

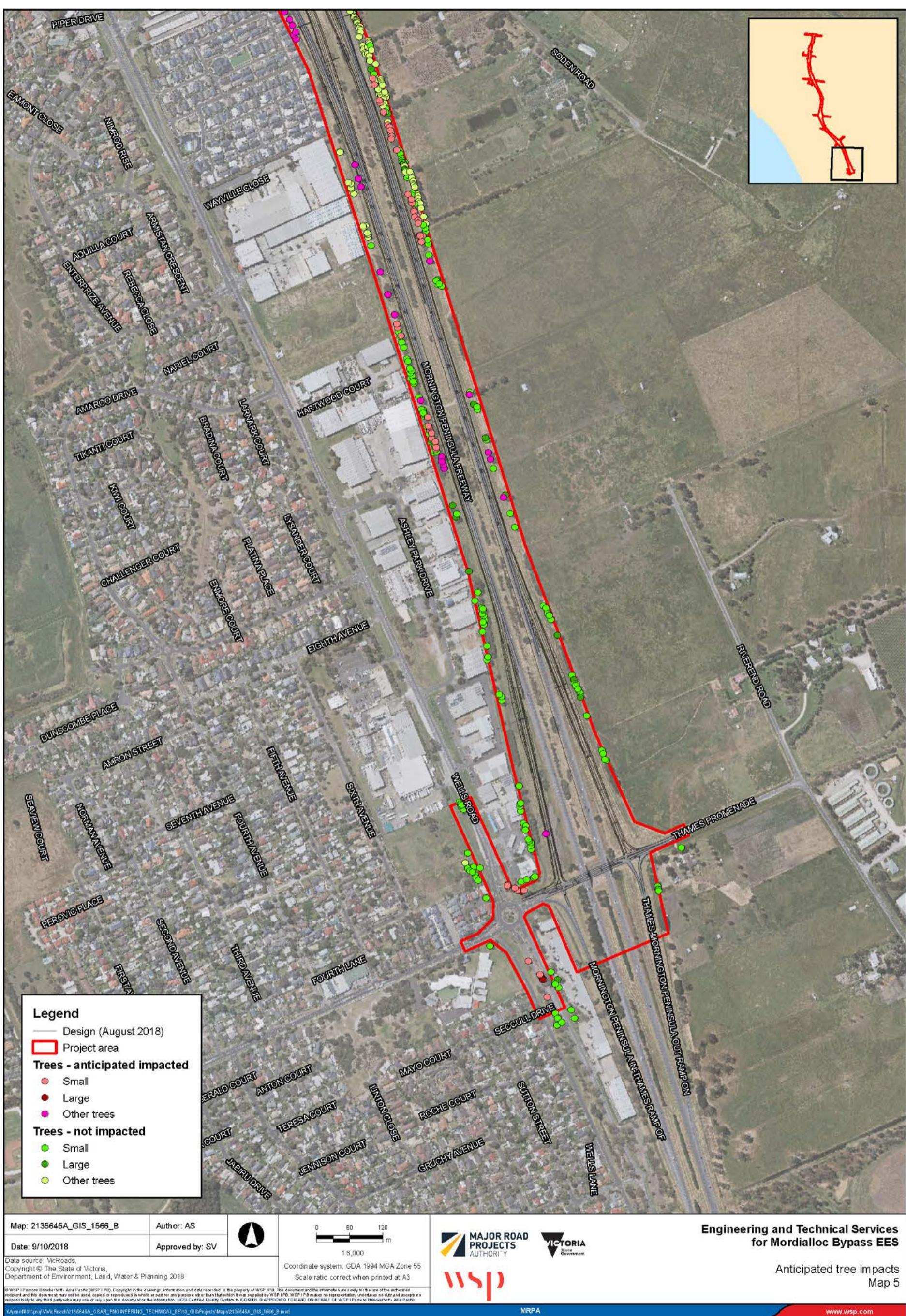


3.5 Anticipated tree impacts (Map 2 of 5)

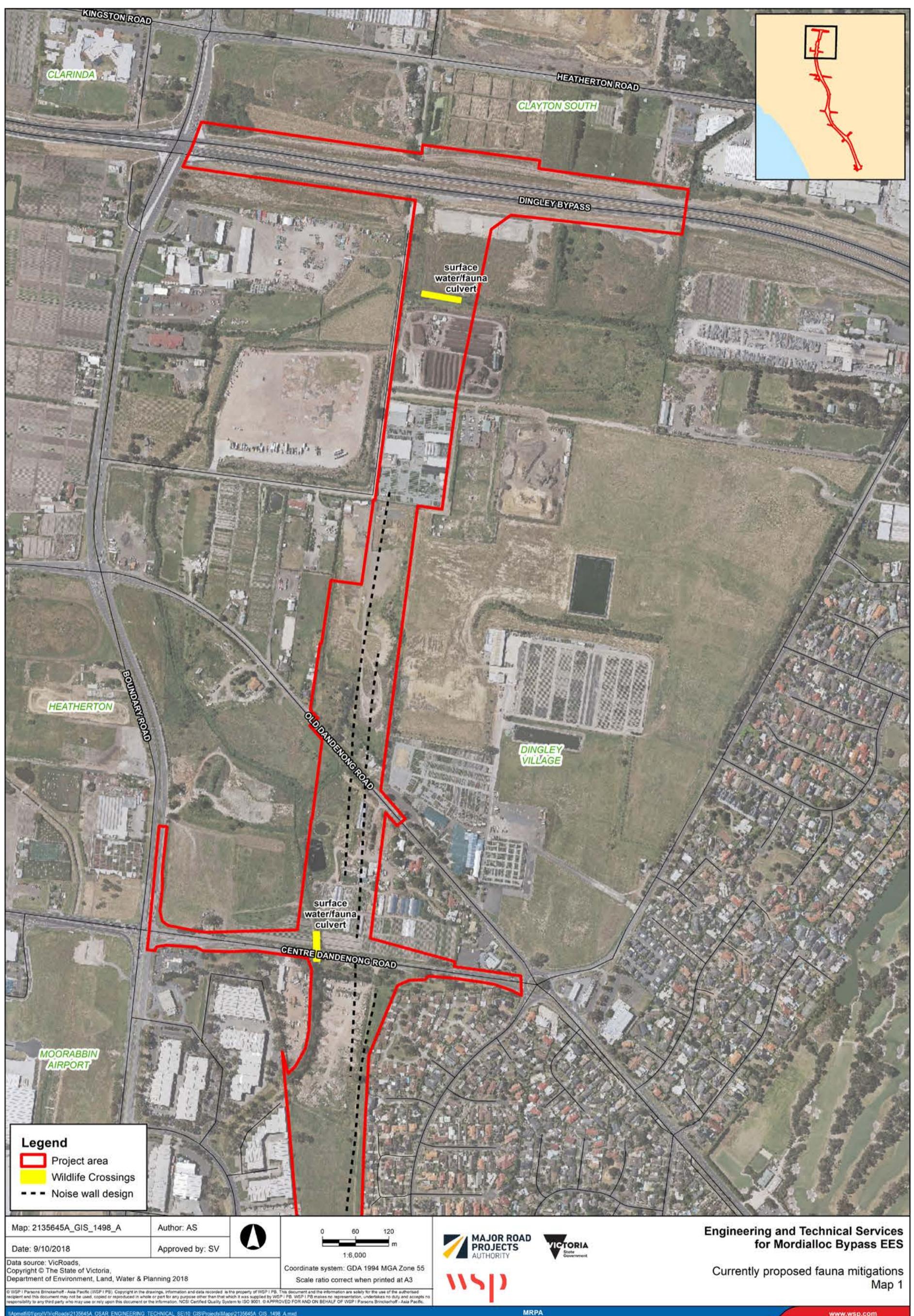








3.6 Currently proposed fauna mitigations (Map 1 of 5)



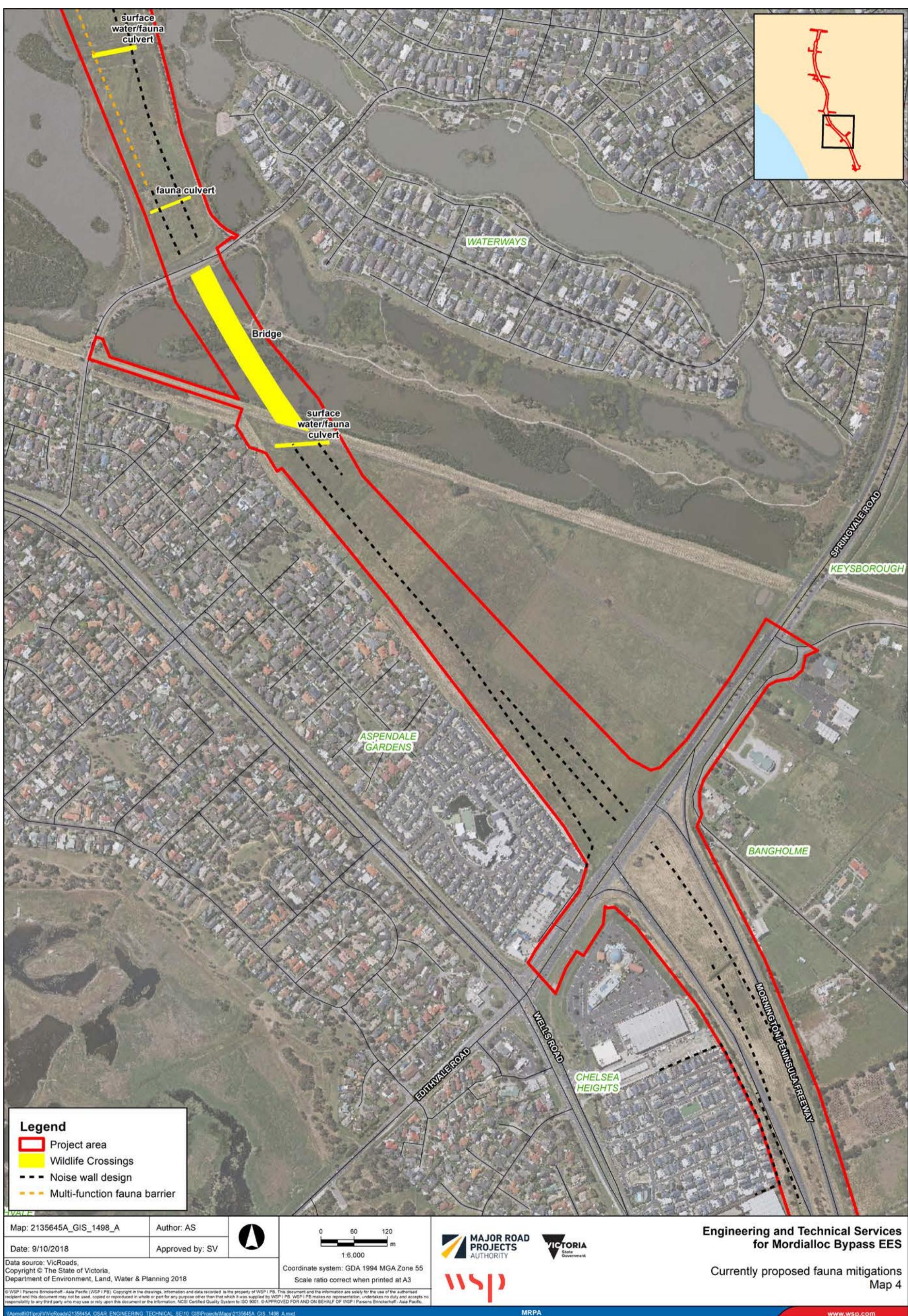
3.6 Currently proposed fauna mitigations (Map 2 of 5)



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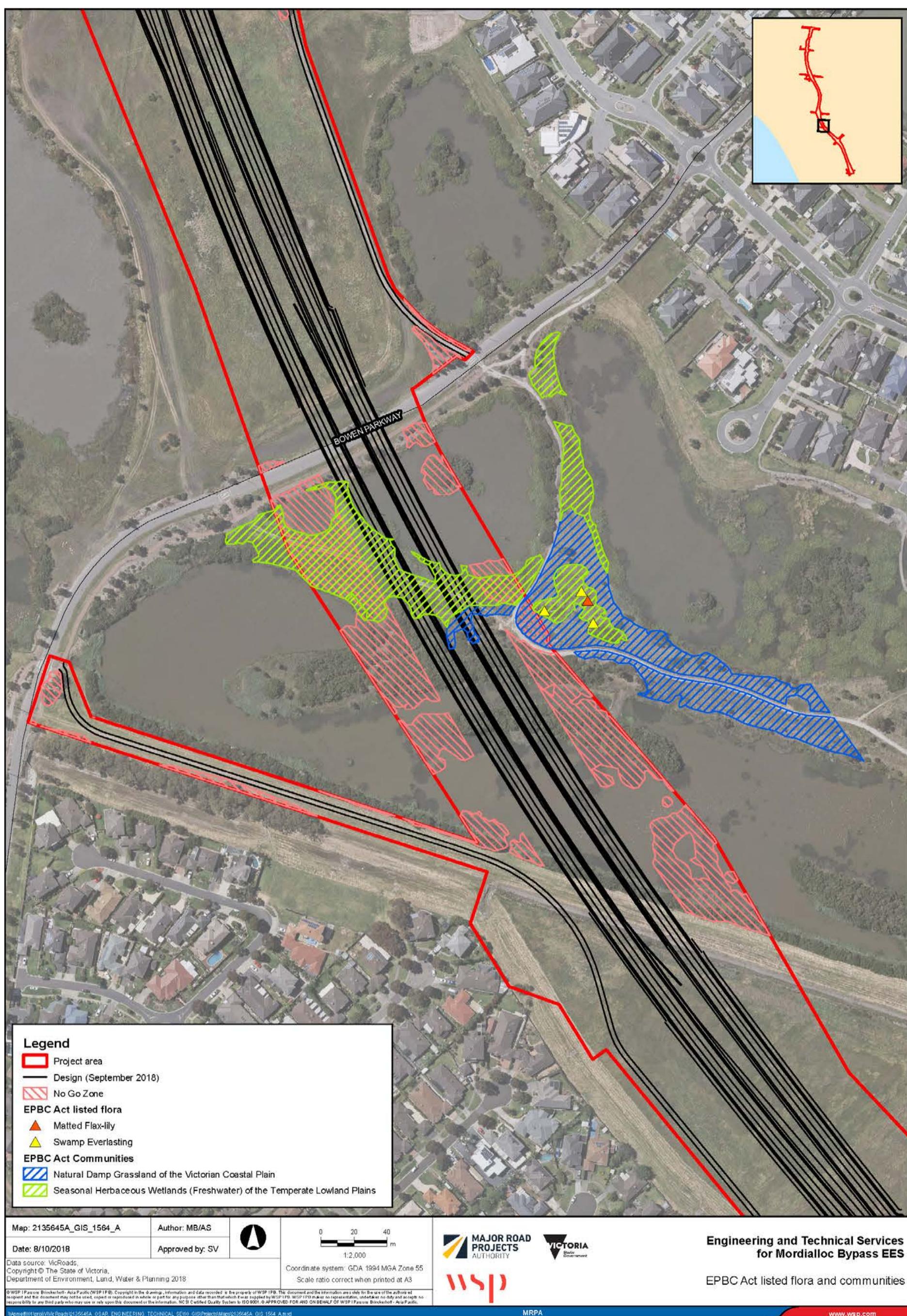


3.6 Currently proposed fauna mitigations (Map 4 of 5)

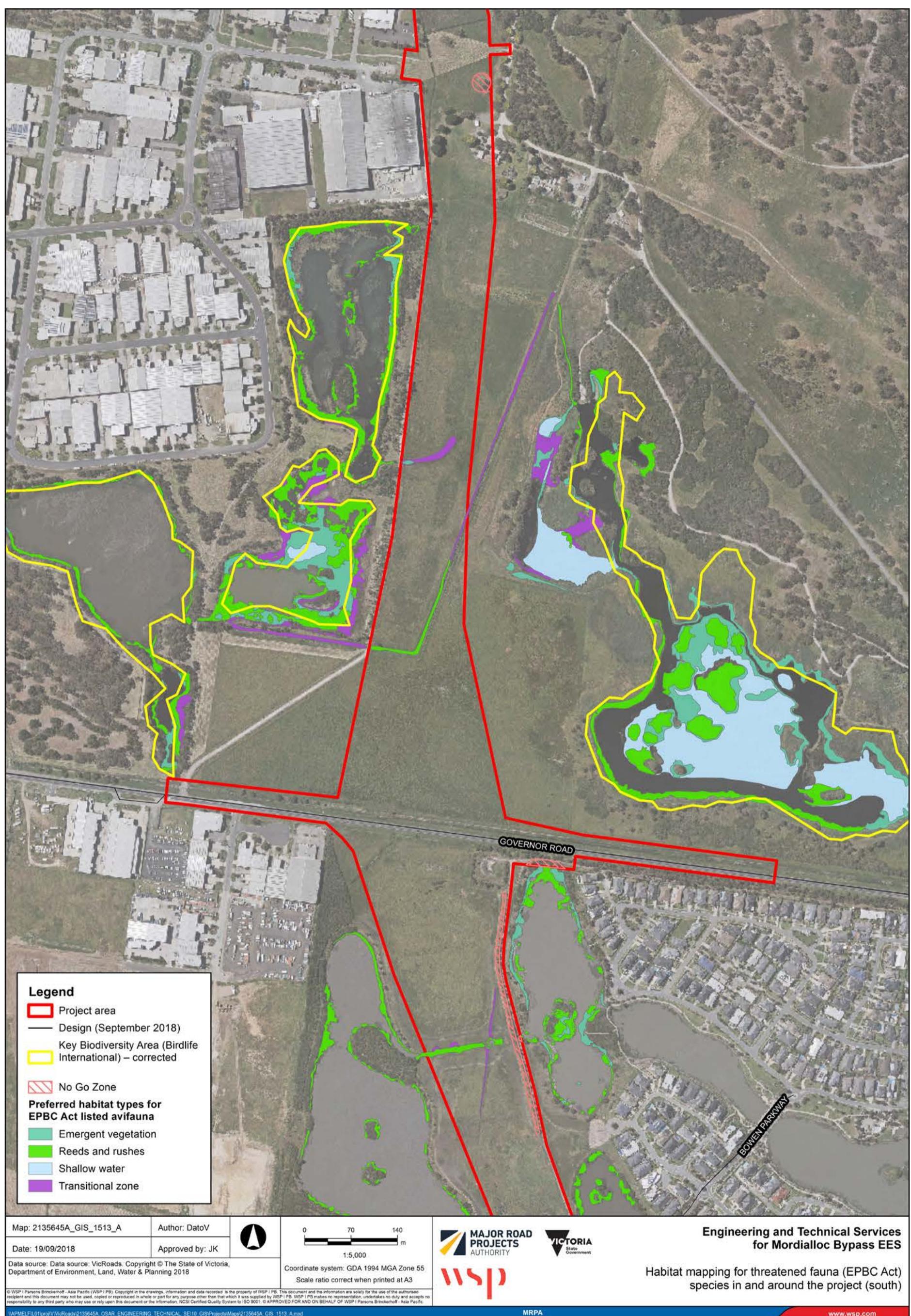


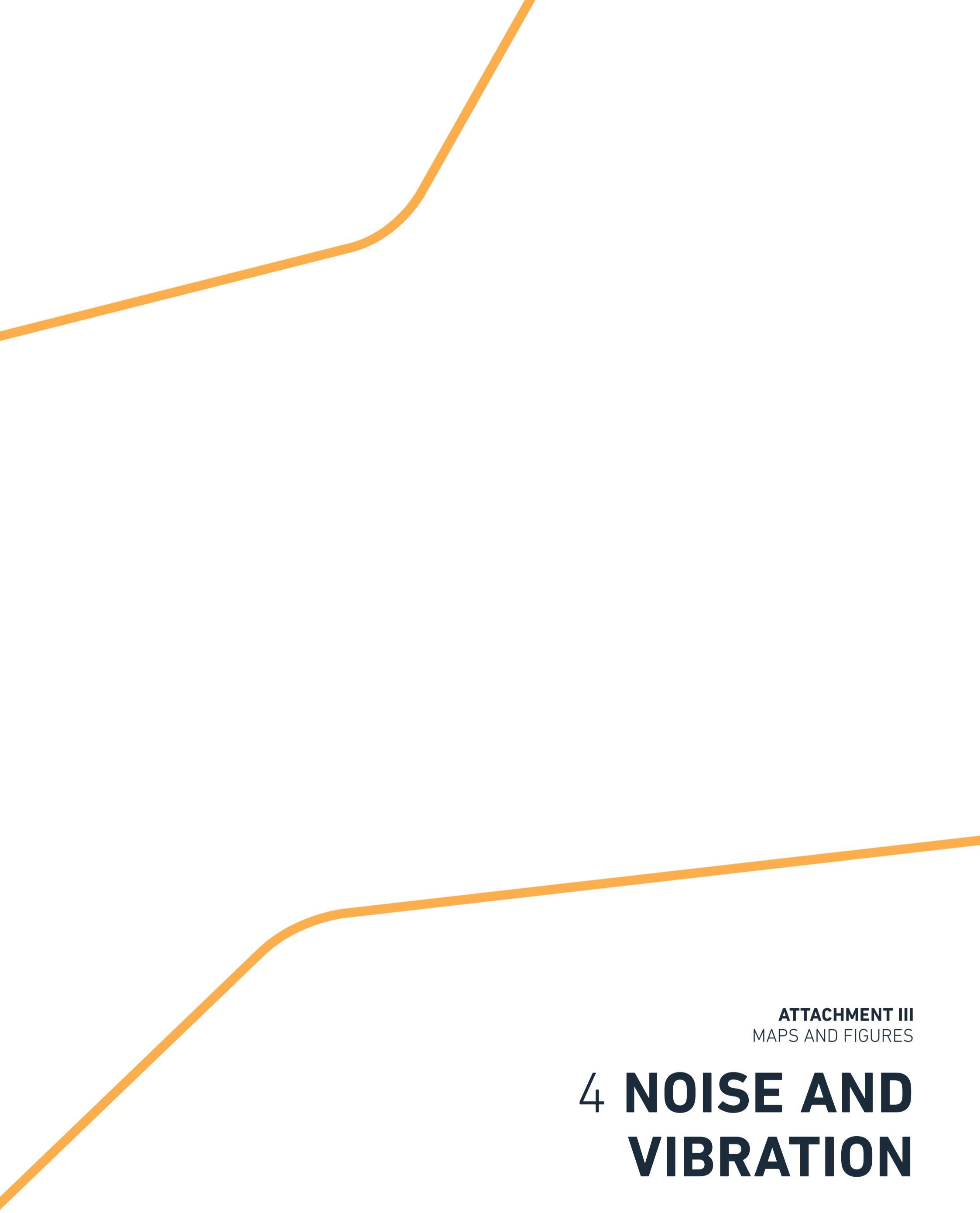
3.6 Currently proposed fauna mitigations (Map 5 of 5)





3.8 Habitat mapping for threatened fauna (EPBC Act) species in and around the project (south)





ATTACHMENT III
MAPS AND FIGURES

4 NOISE AND VIBRATION

4.1 Noise monitoring locations



4.2 Predicted 2031 noise levels without mitigation measures (Map 1 of 7)



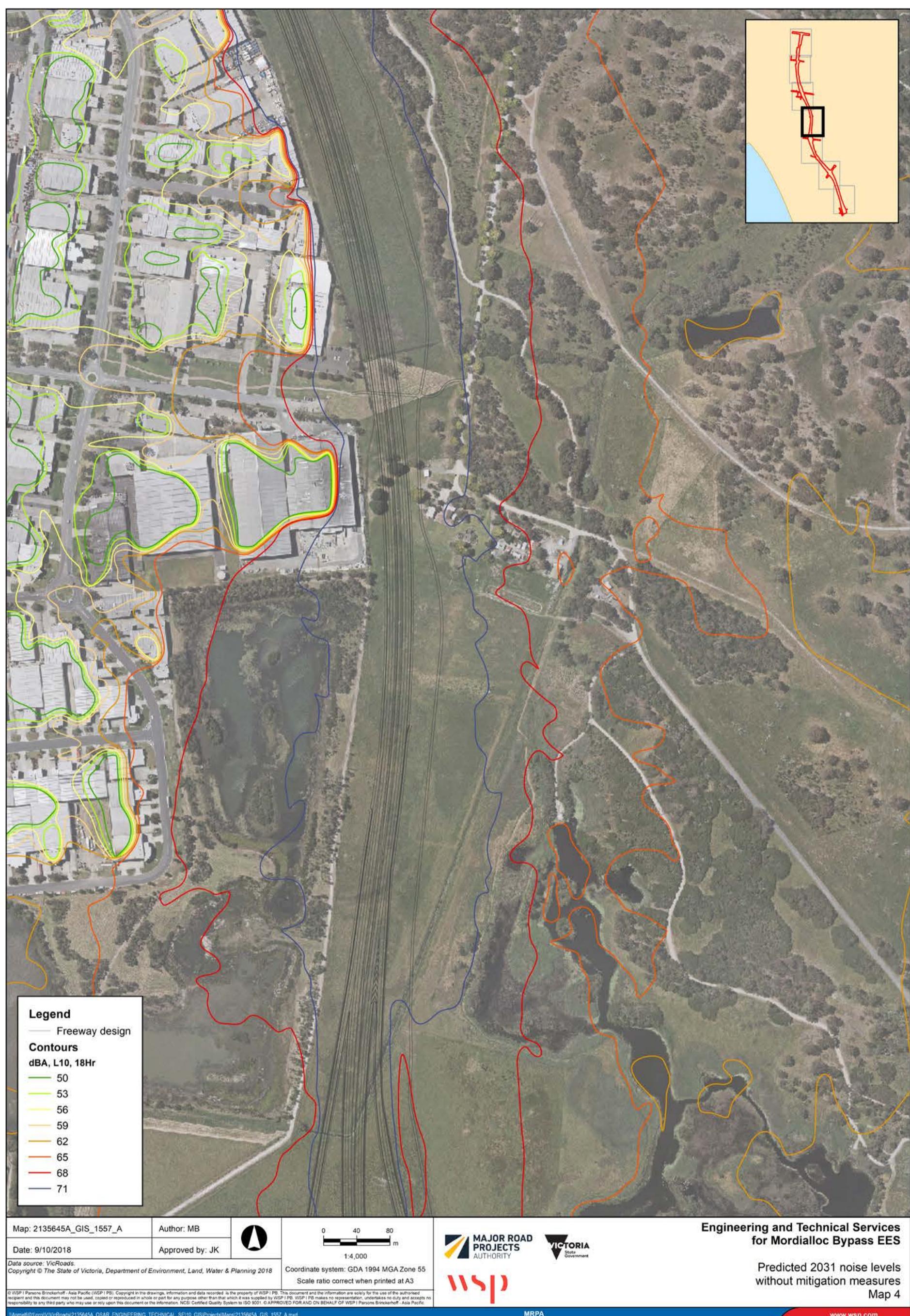
4.2 Predicted 2031 noise levels without mitigation measures (Map 2 of 7)



4.2 Predicted 2031 noise levels without mitigation measures (Map 3 of 7)



4.2 Predicted 2031 noise levels without mitigation measures (Map 4 of 7)



4.2 Predicted 2031 noise levels without mitigation measures (Map 5 of 7)



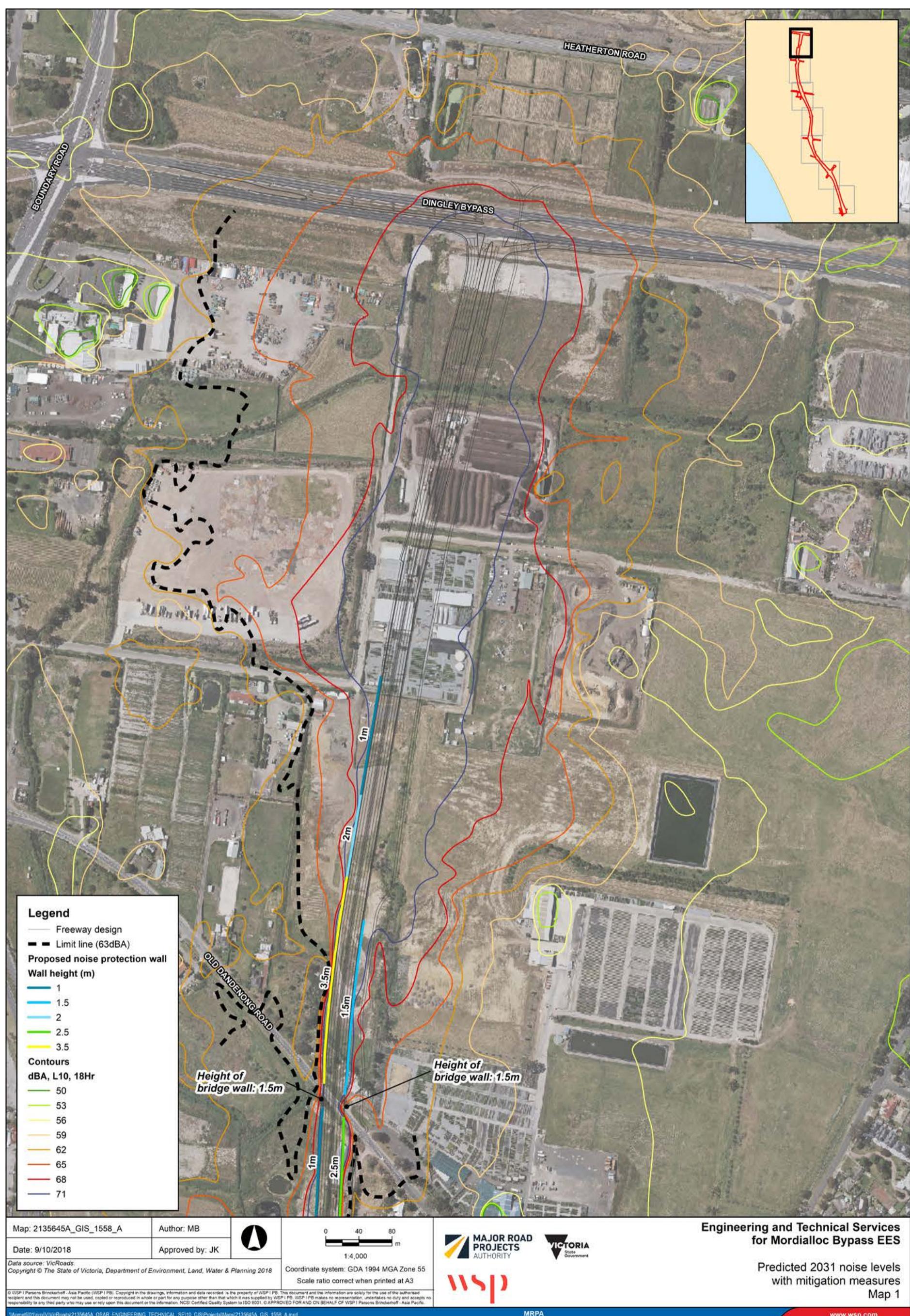
4.2 Predicted 2031 noise levels without mitigation measures (Map 6 of 7)



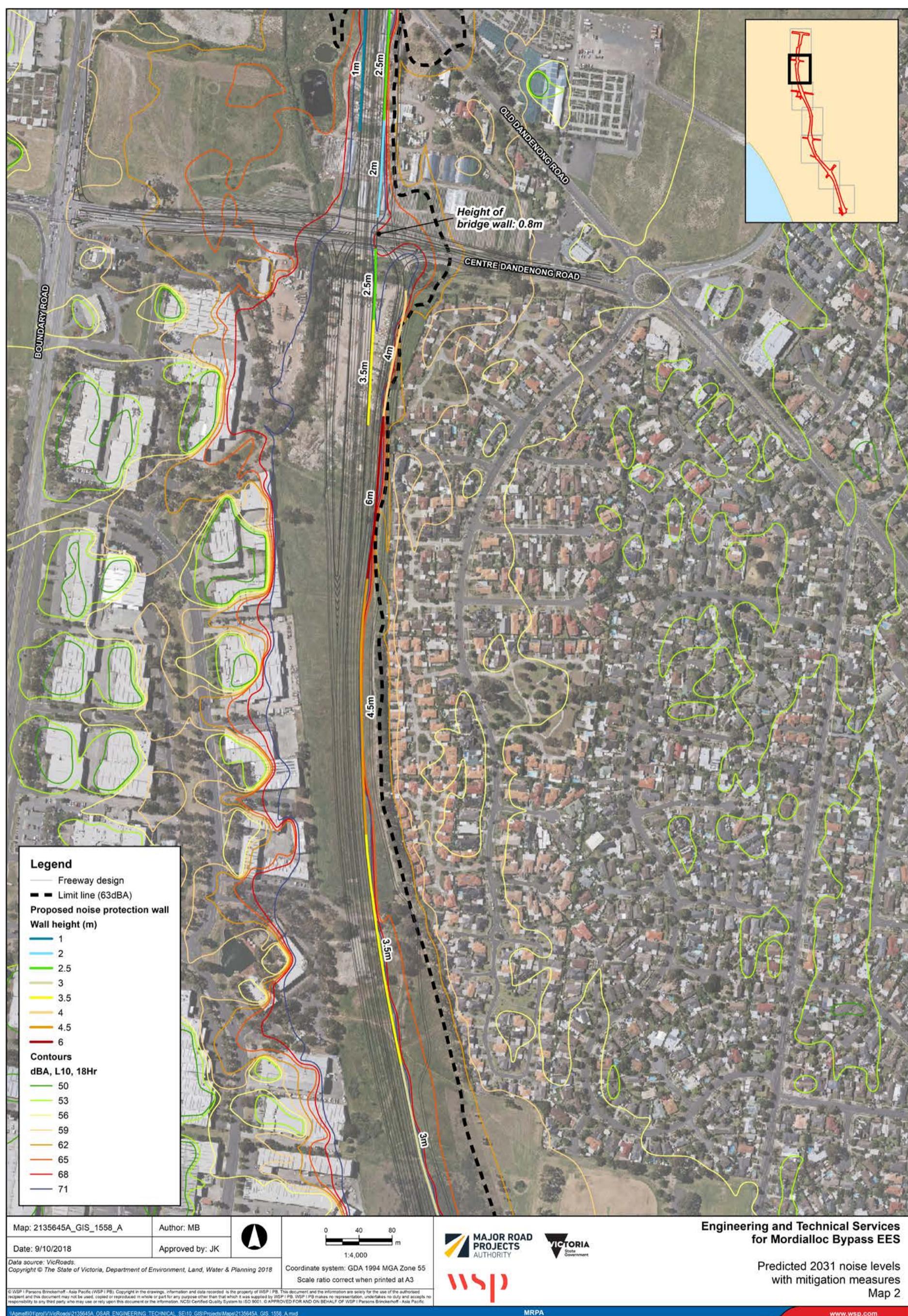
4.2 Predicted 2031 noise levels without mitigation measures (Map 7 of 7)



4.3 Predicted 2031 noise levels with mitigation measures (Map 1 of 7)



4.3 Predicted 2031 noise levels with mitigation measures (Map 2 of 7)



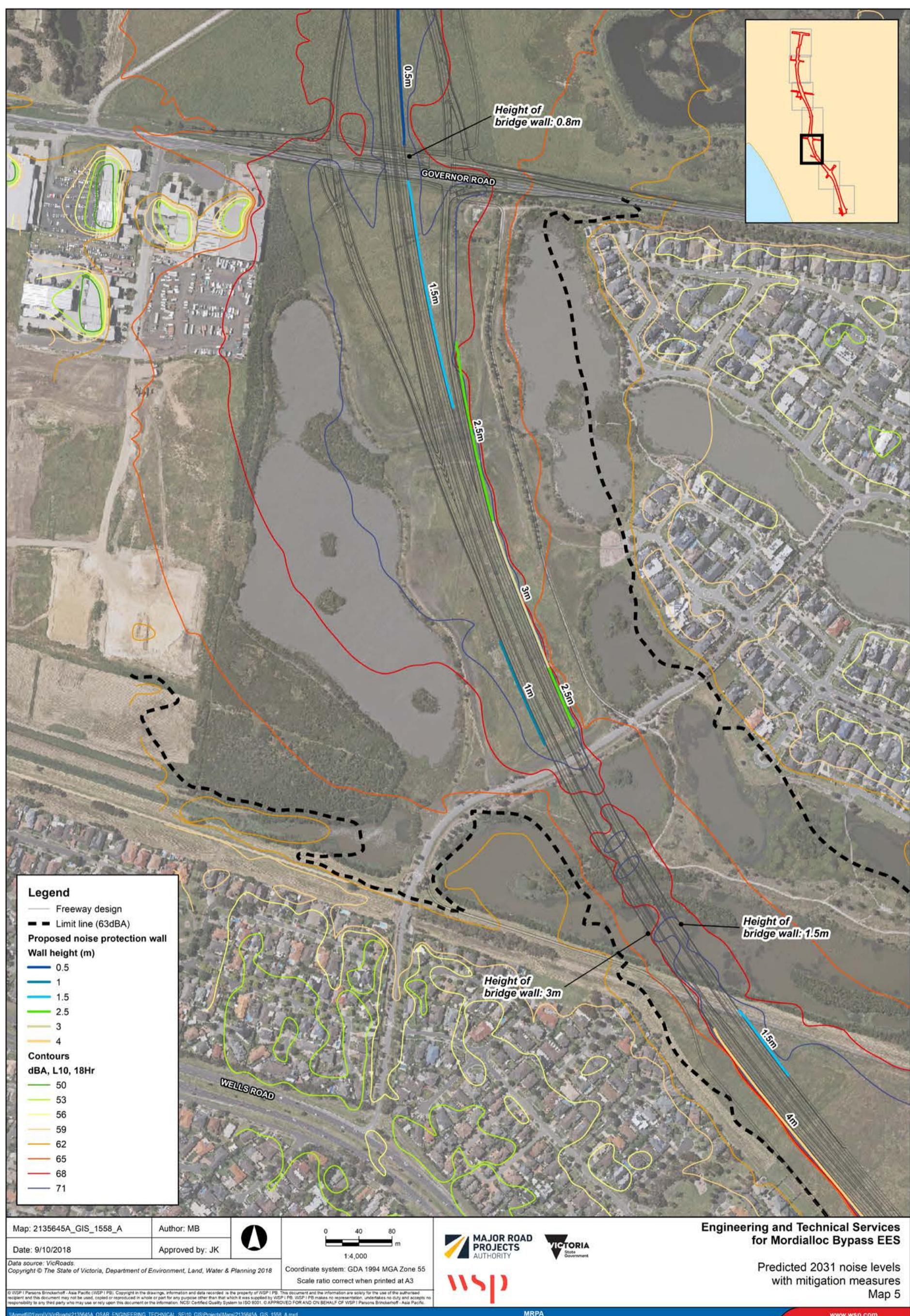
4.3 Predicted 2031 noise levels with mitigation measures (Map 3 of 7)



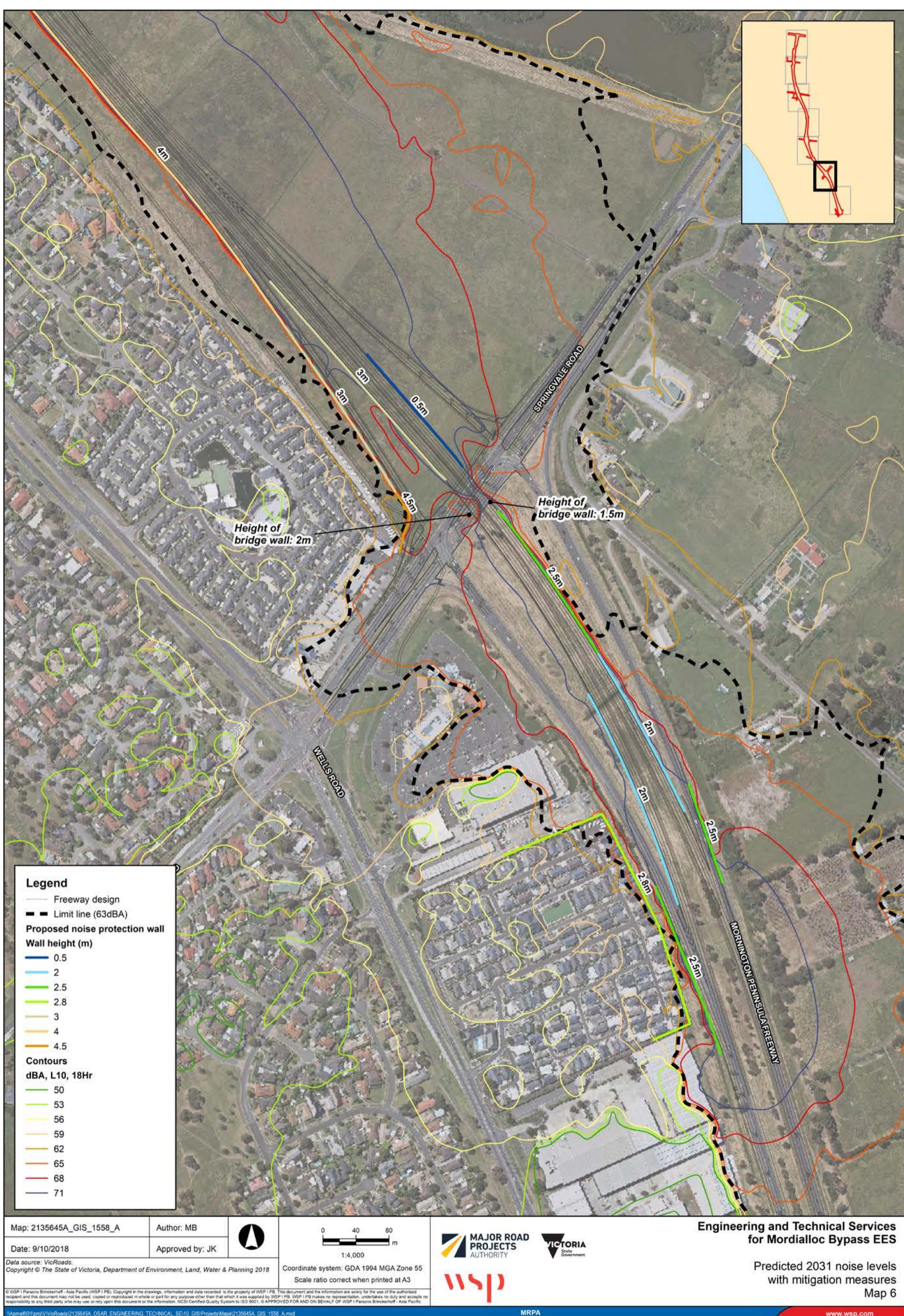
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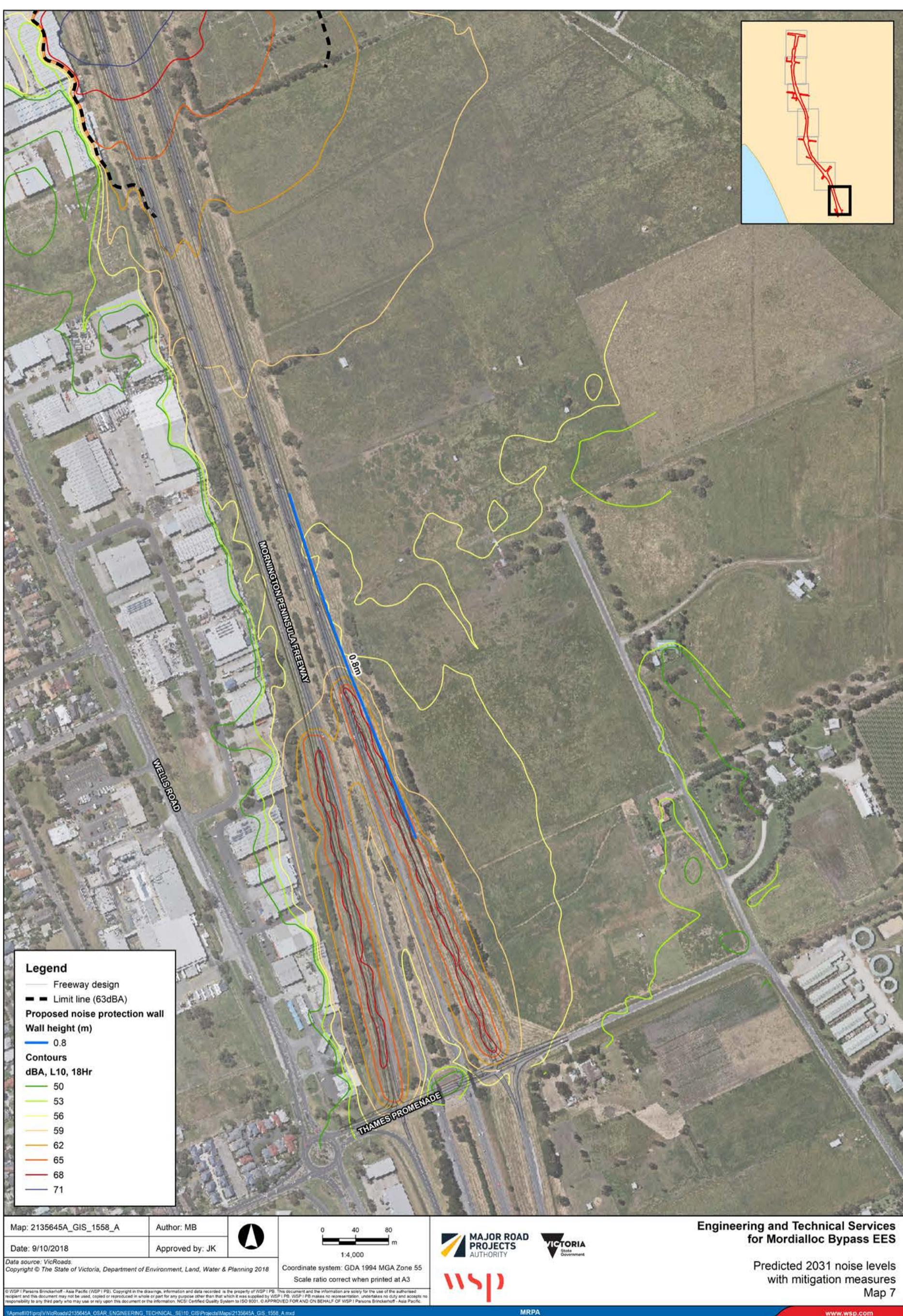
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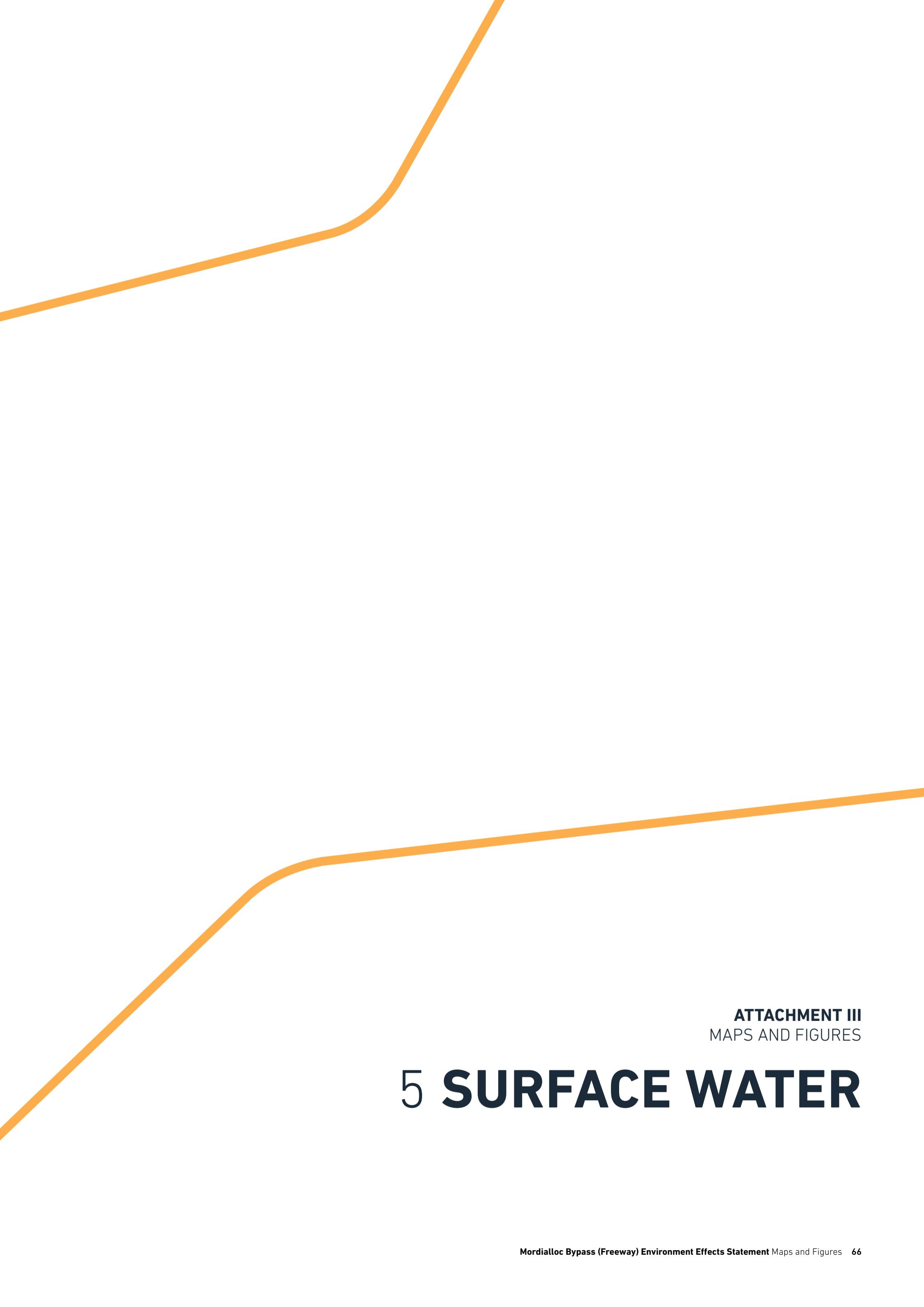


4.3 Predicted 2031 noise levels with mitigation measures (Map 6 of 7)



4.3 Predicted 2031 noise levels with mitigation measures (Map 7 of 7)

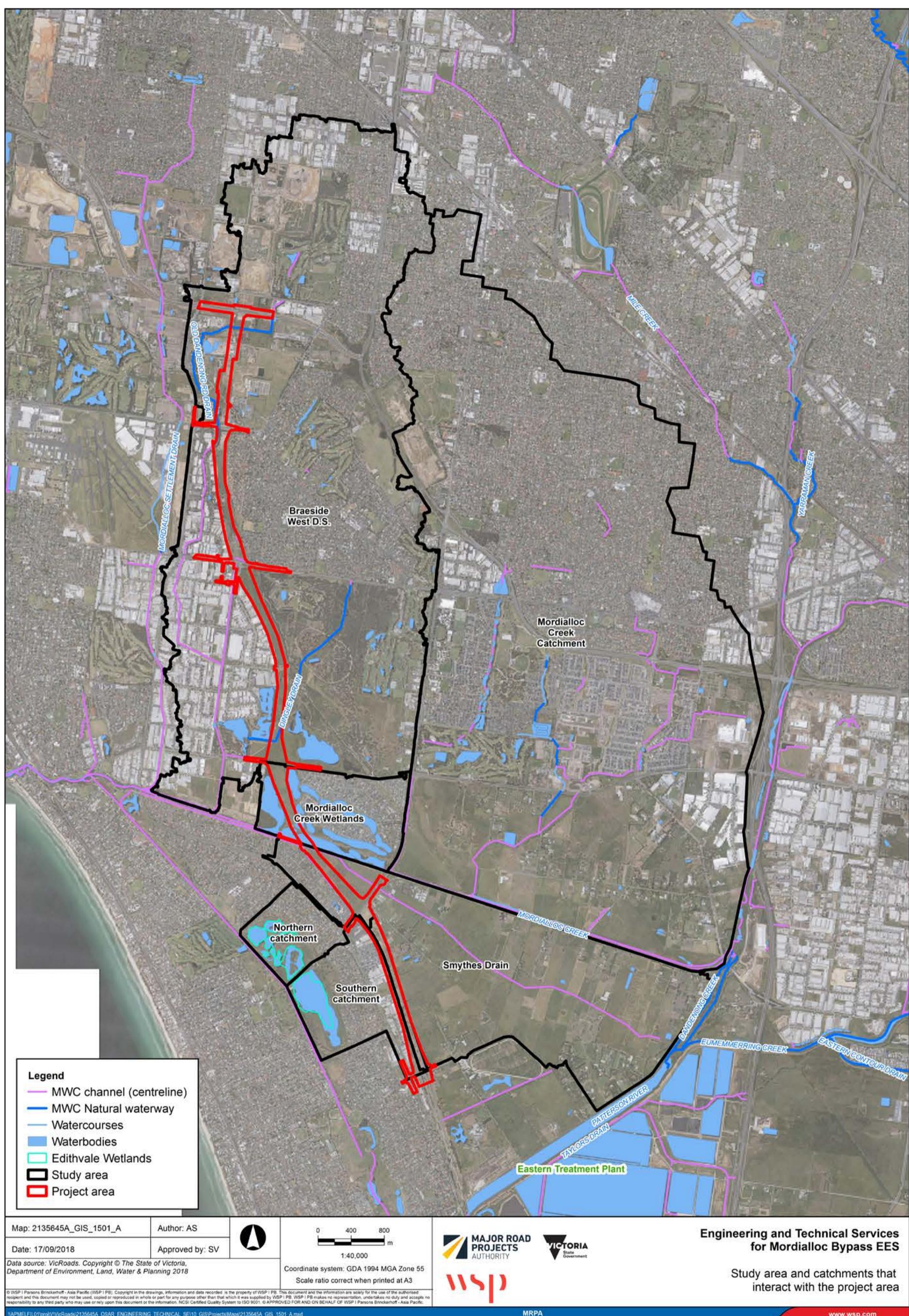




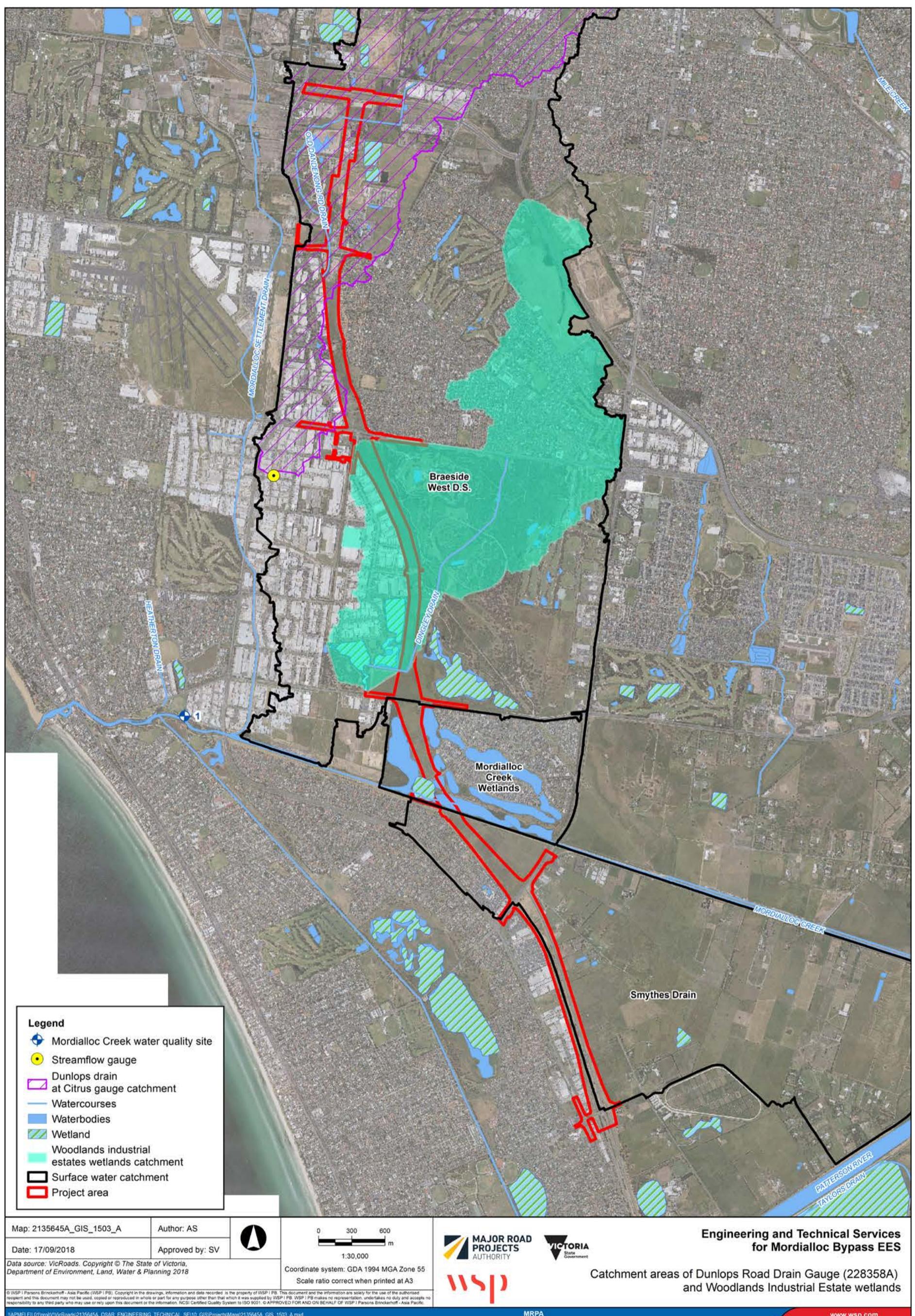
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5 SURFACE WATER

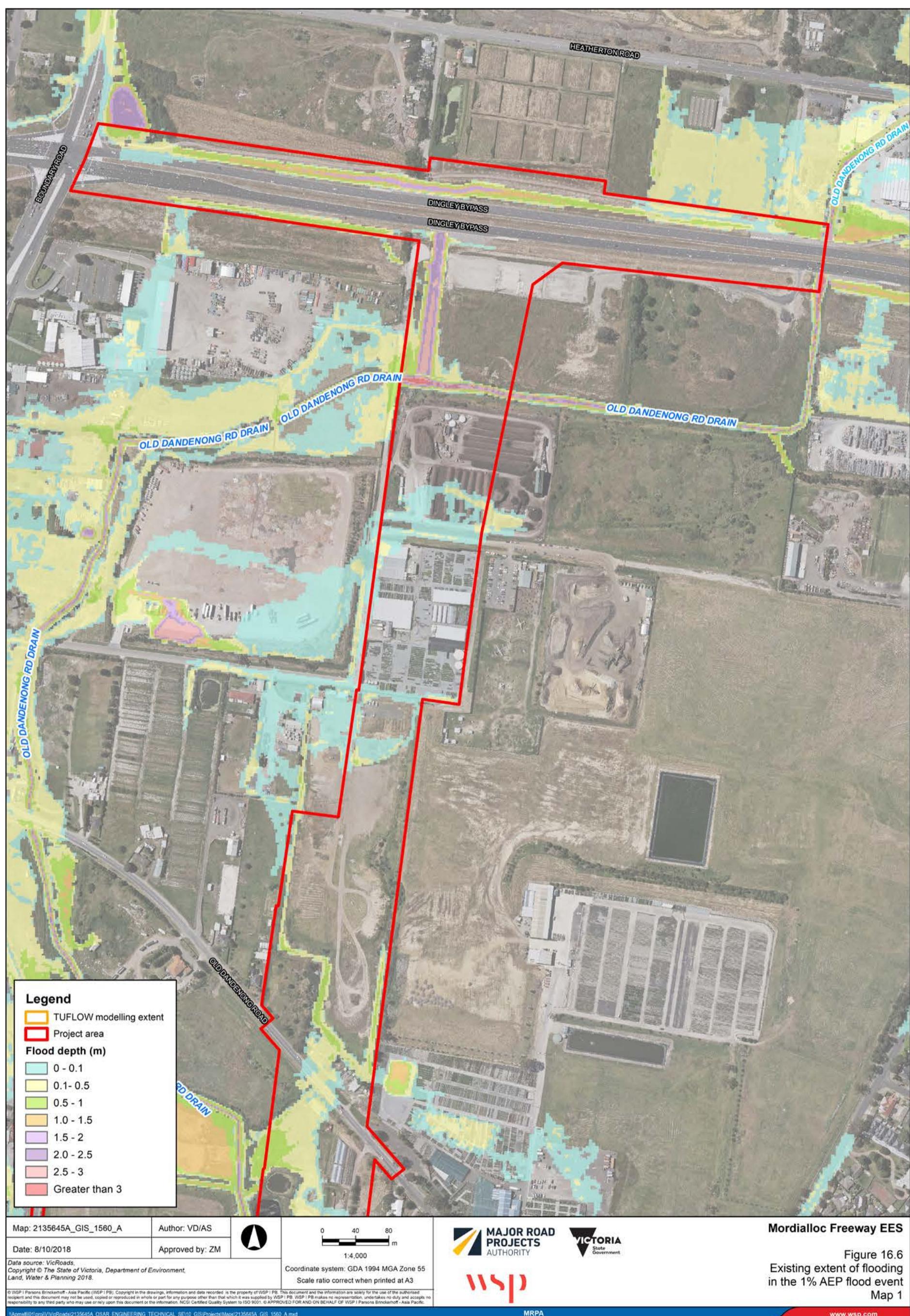
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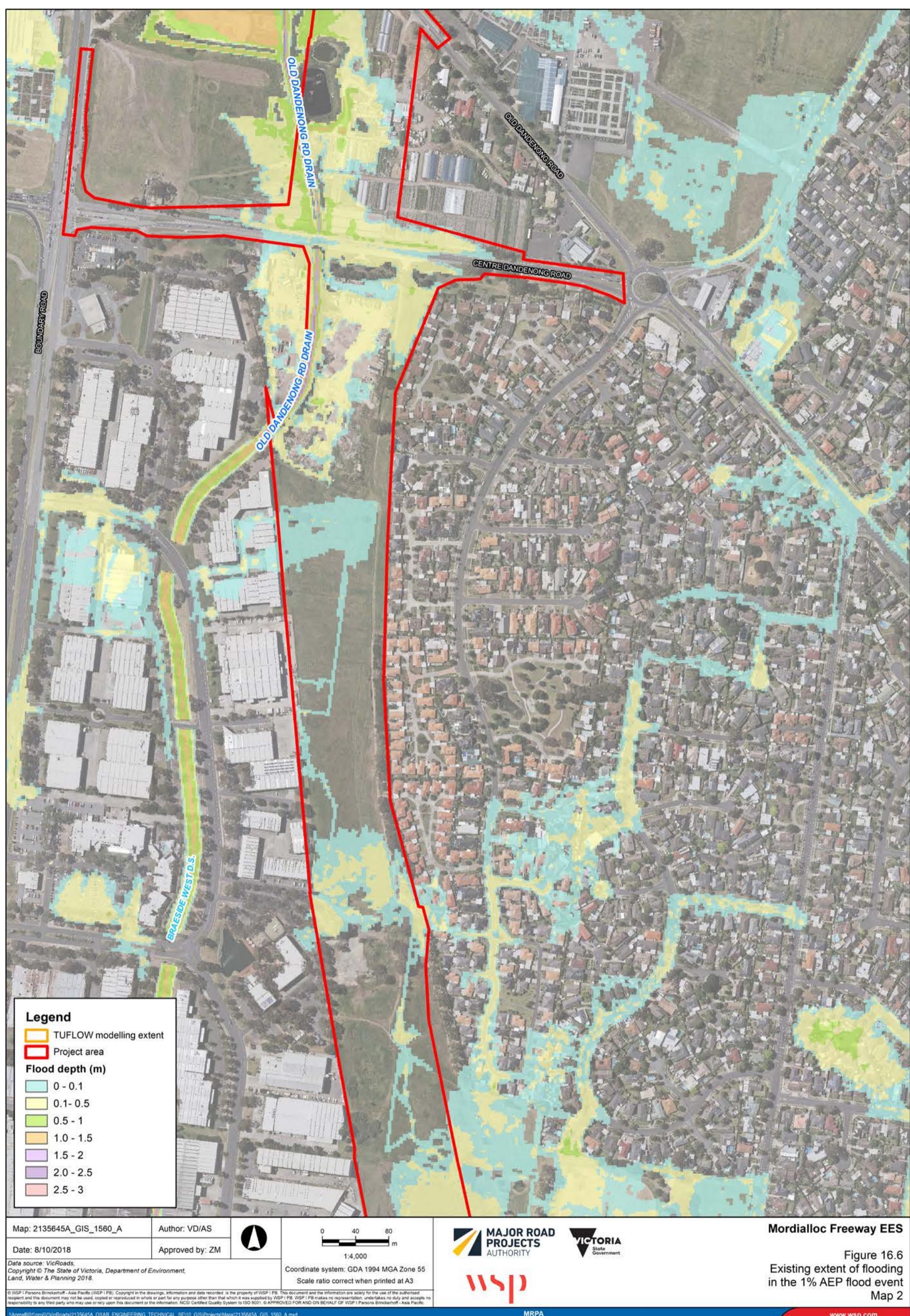
5.2 Catchment areas of Dunlops Road drain gauge (228358A) and Woodlands Industrial Estate Wetlands



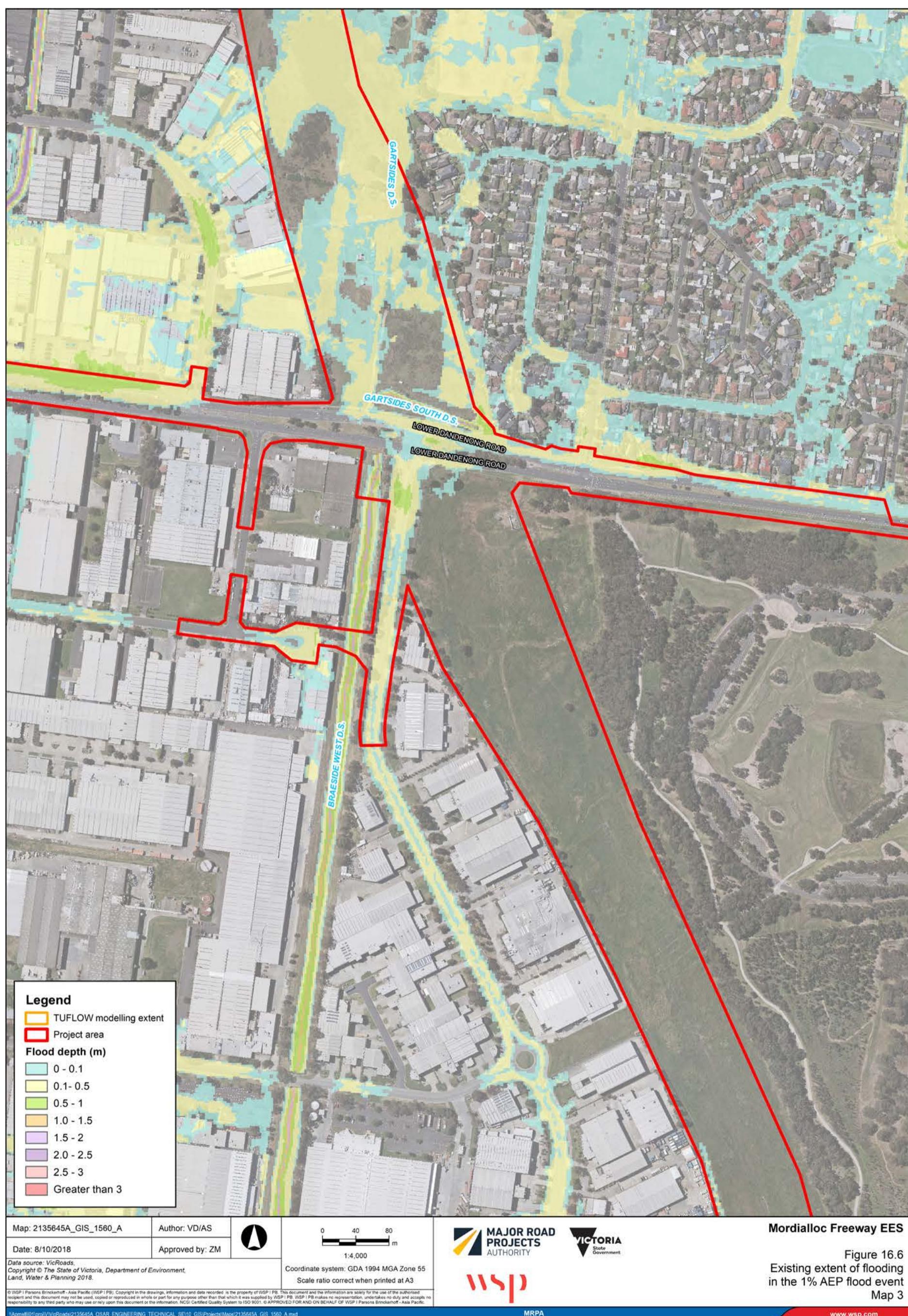
5.3 Existing extent of flooding in the 1% AEP flood event (Map 1 of 7)



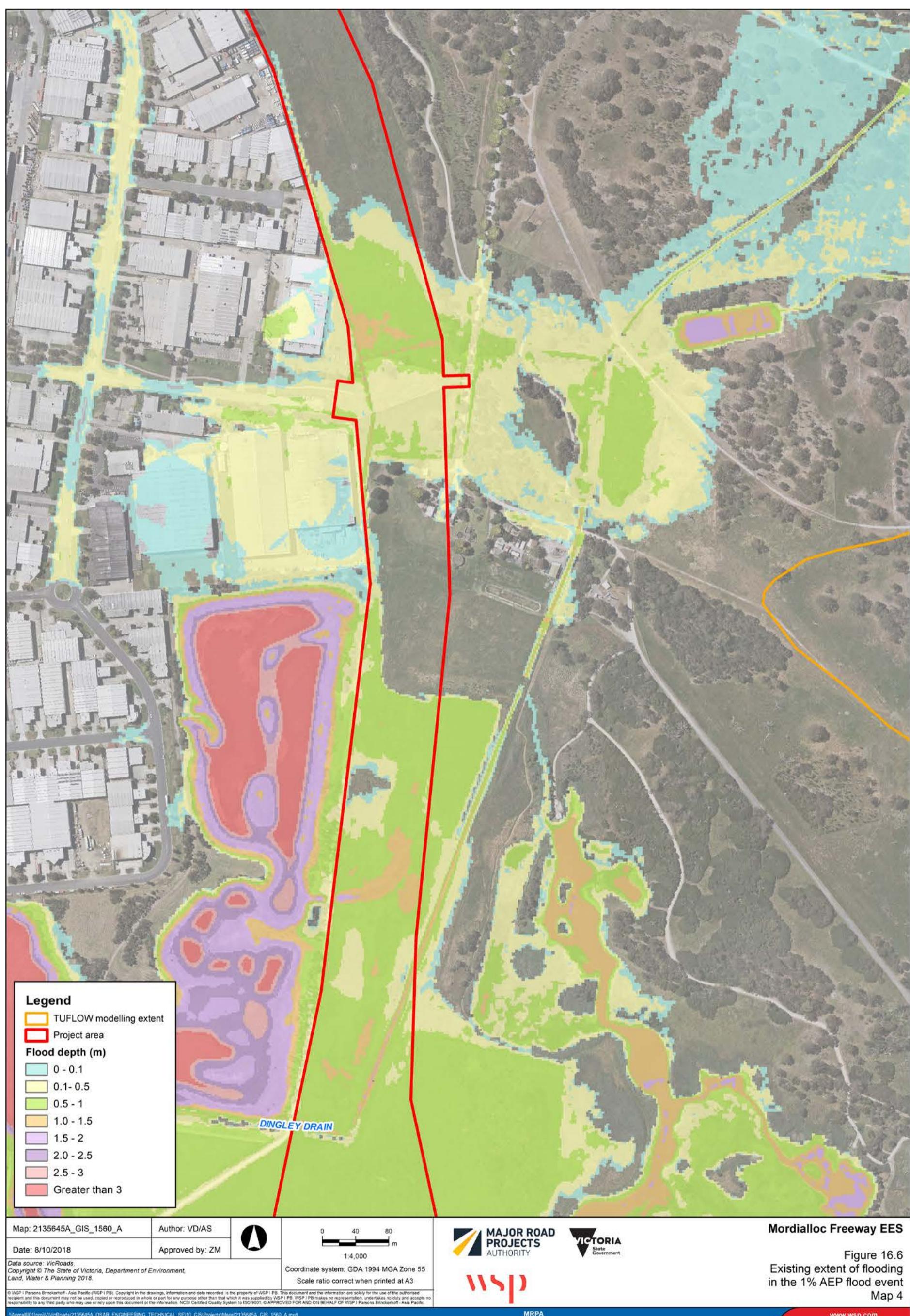
5.3 Existing extent of flooding in the 1% AEP flood event (Map 2 of 7)



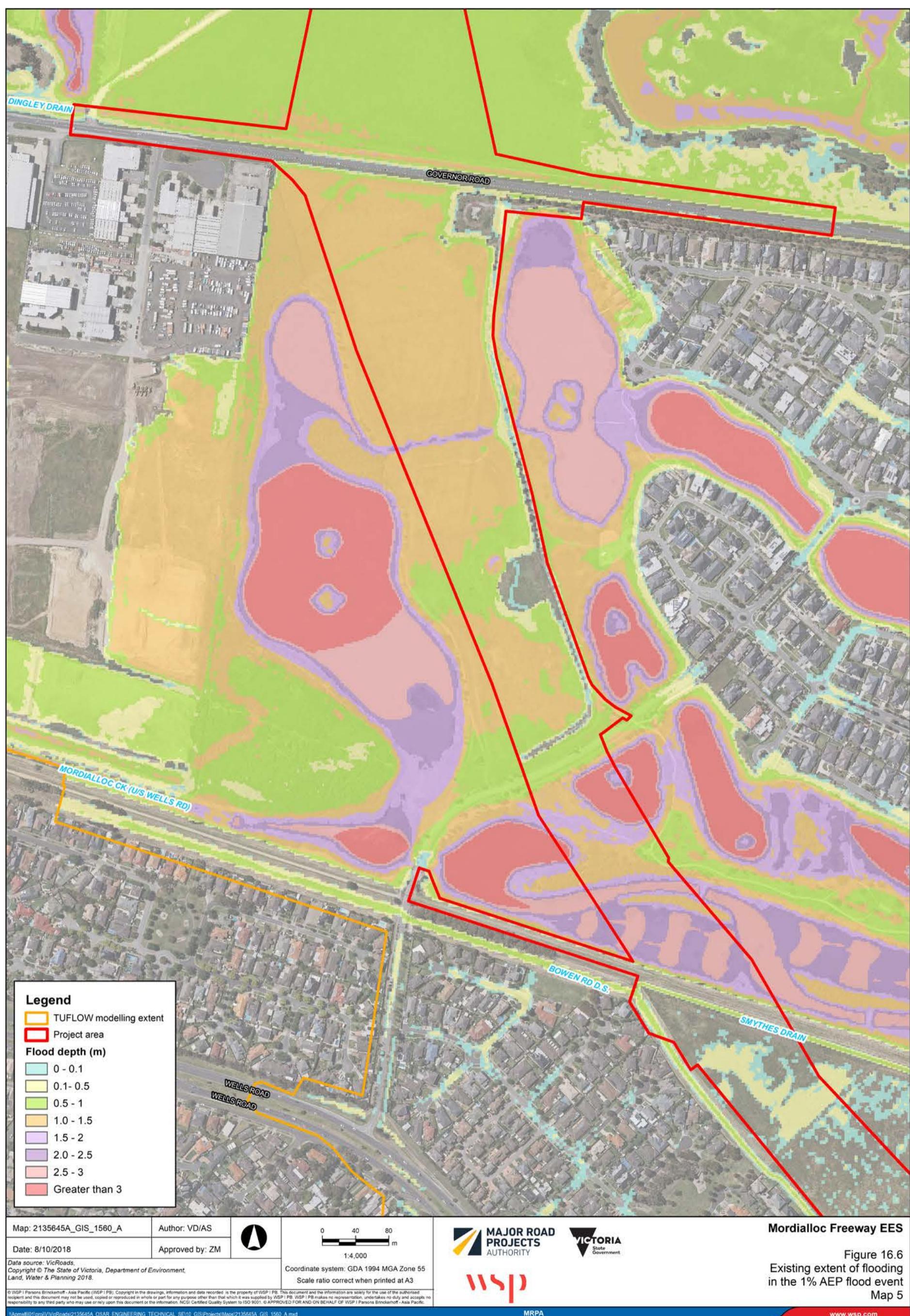
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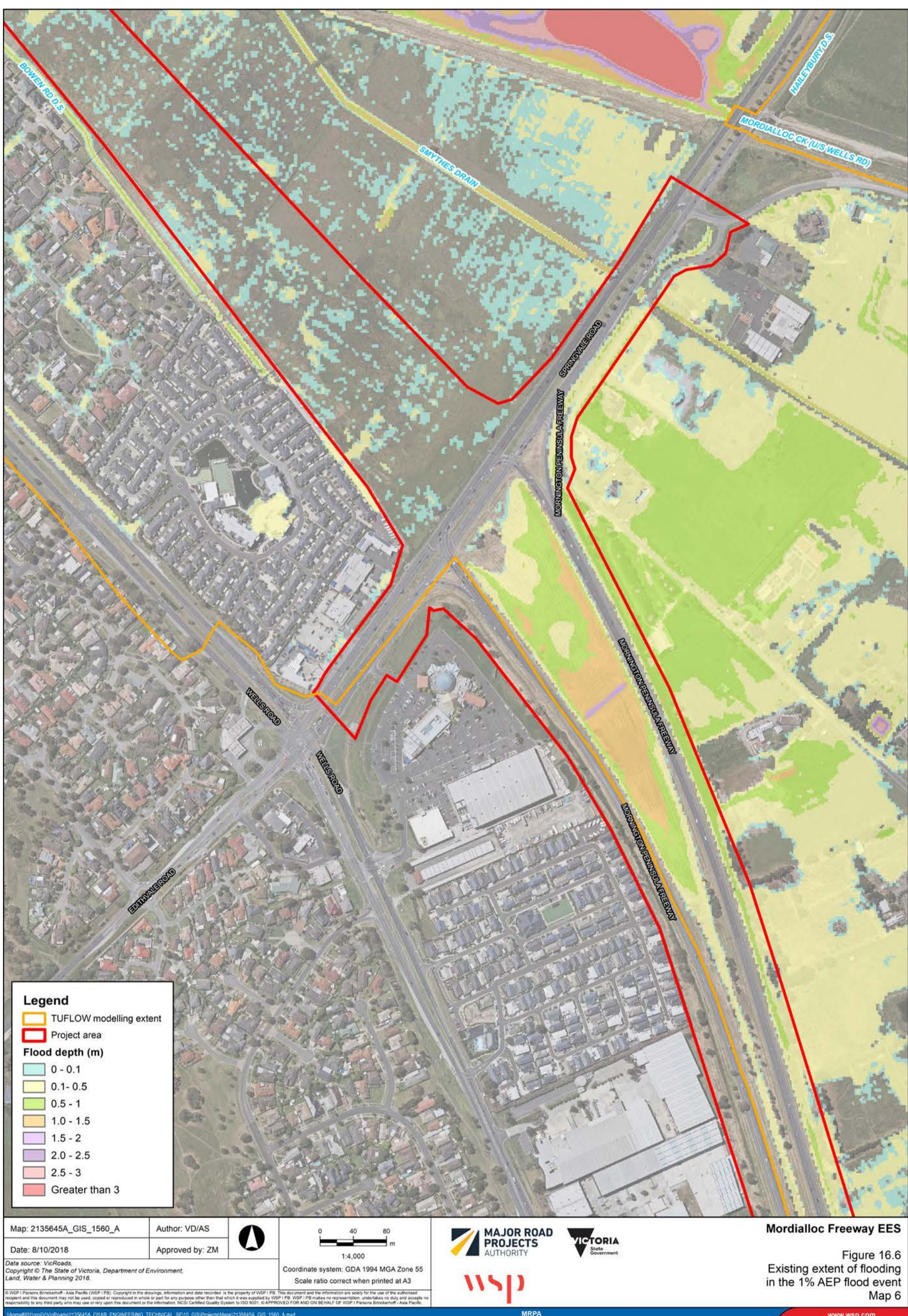
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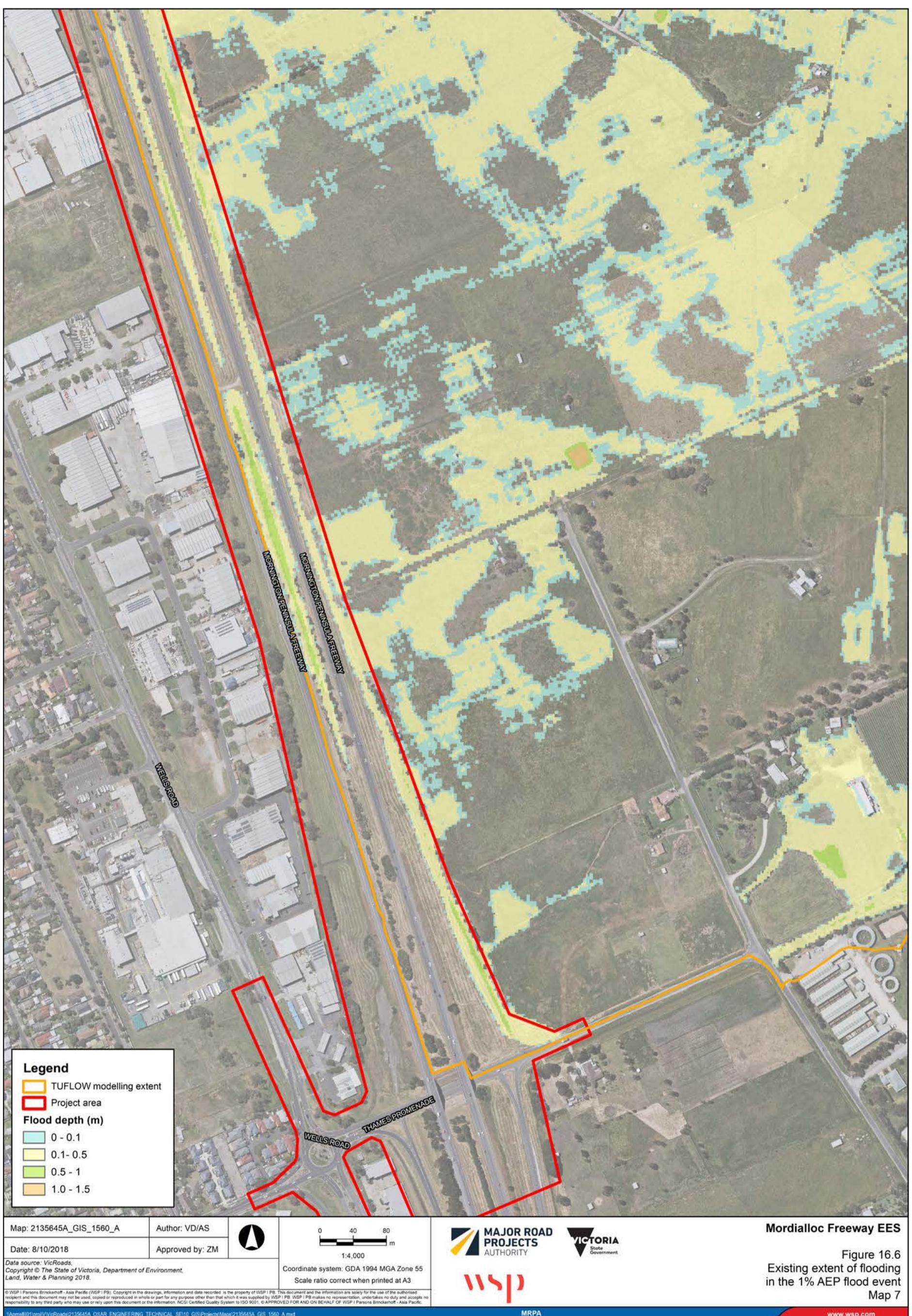
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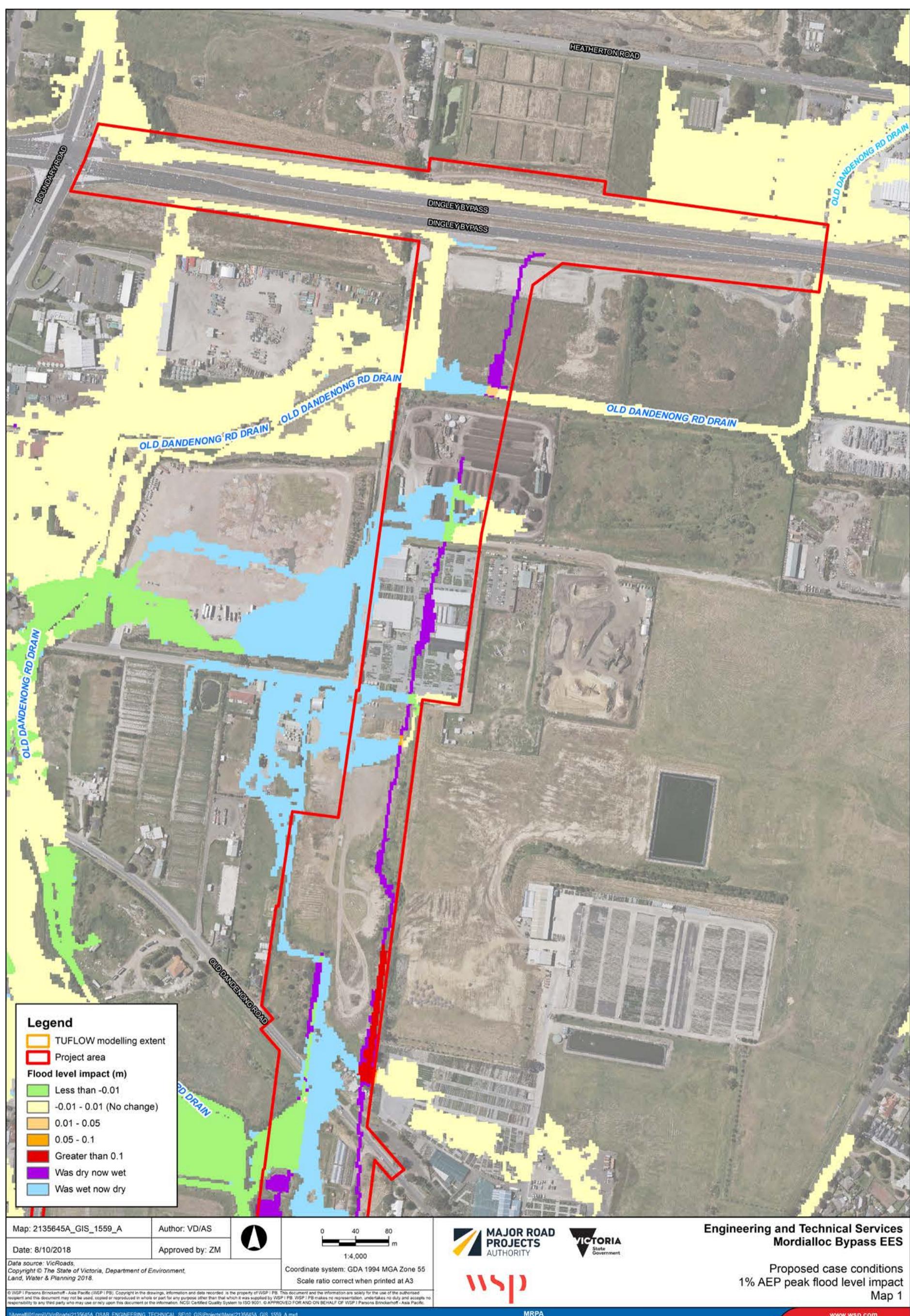
5.3 Existing extent of flooding in the 1% AEP flood event (Map 6 of 7)



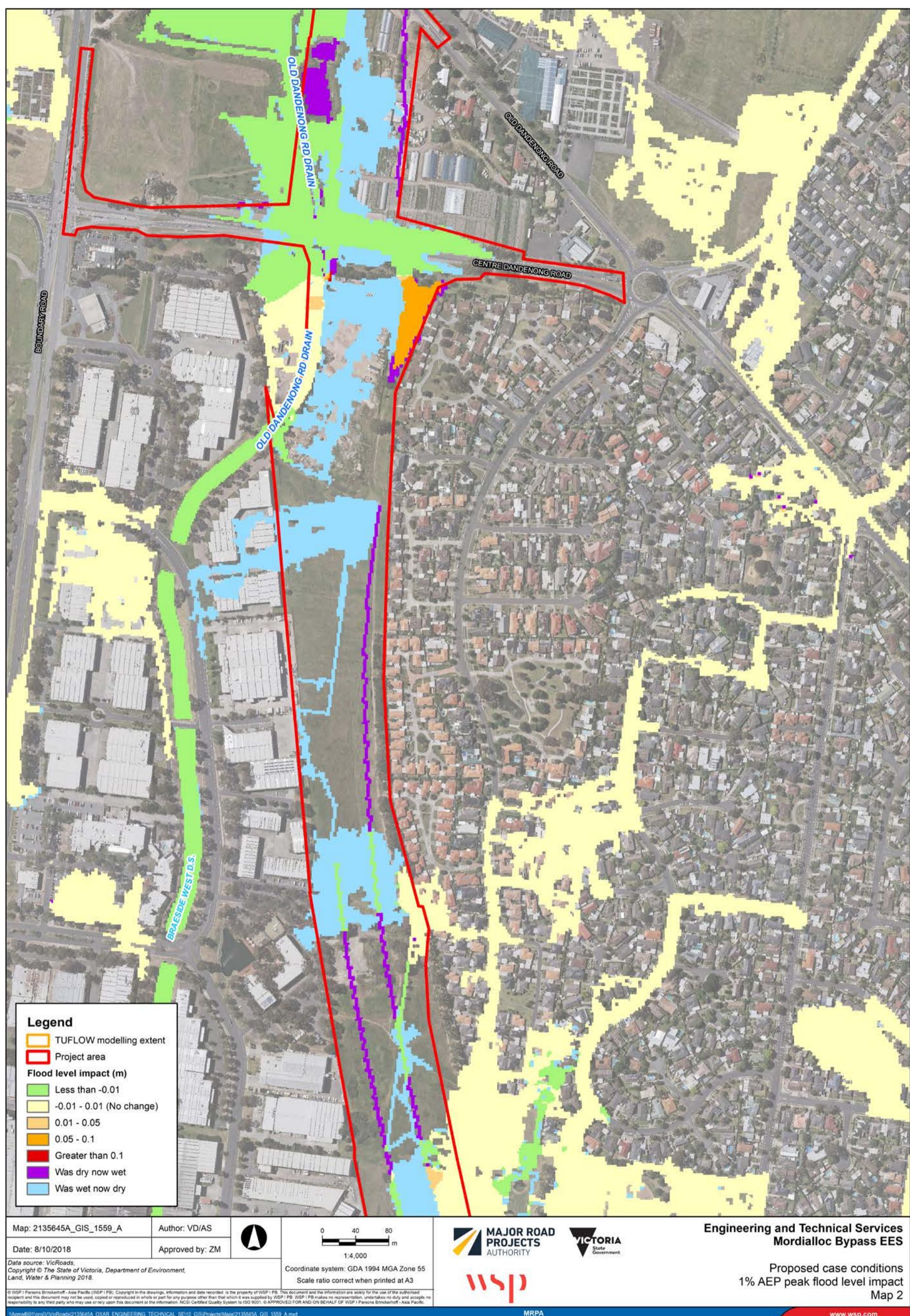
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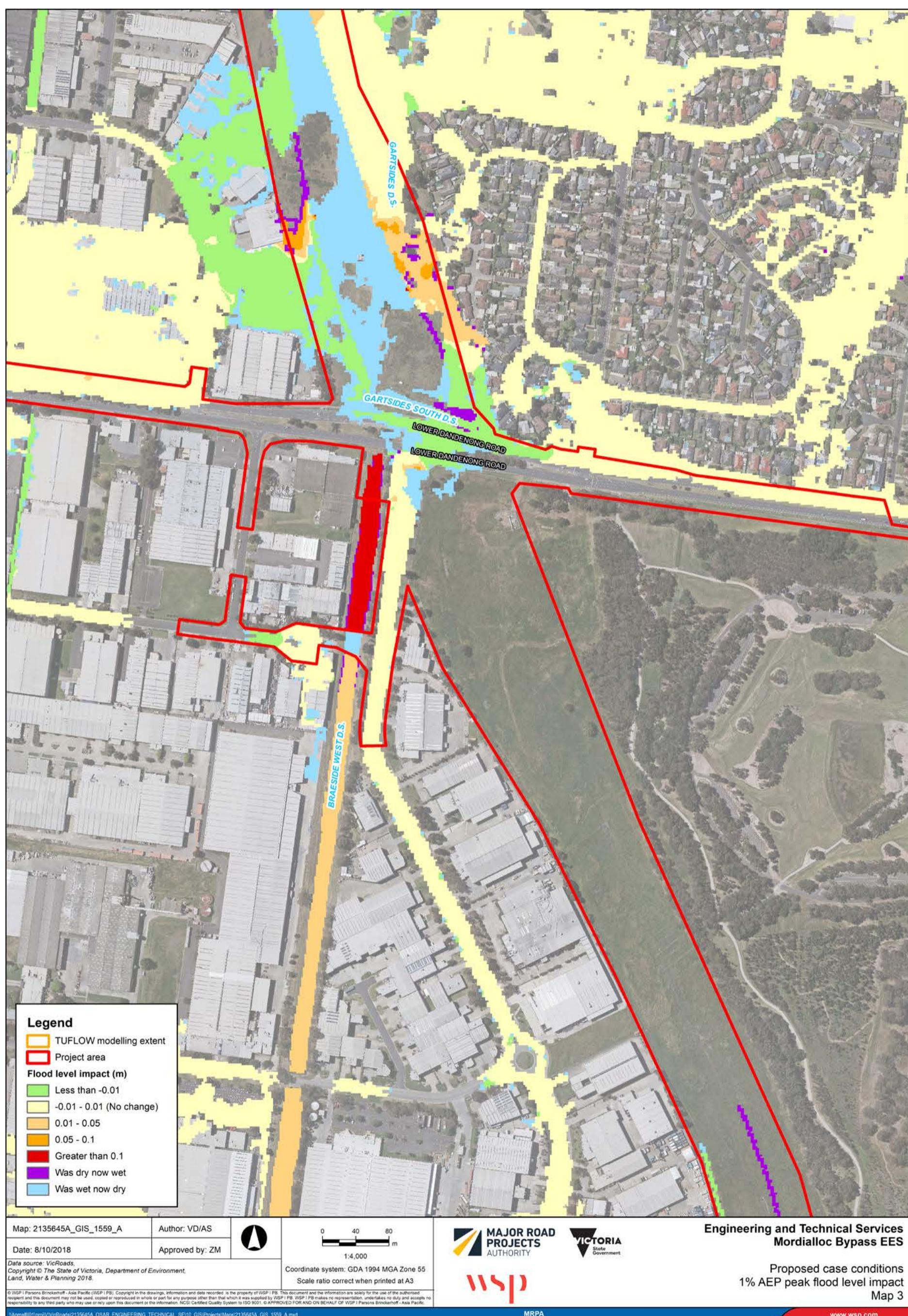
5.4 Proposed case conditions 1% AEP flood level impact (Map 1 of 7)



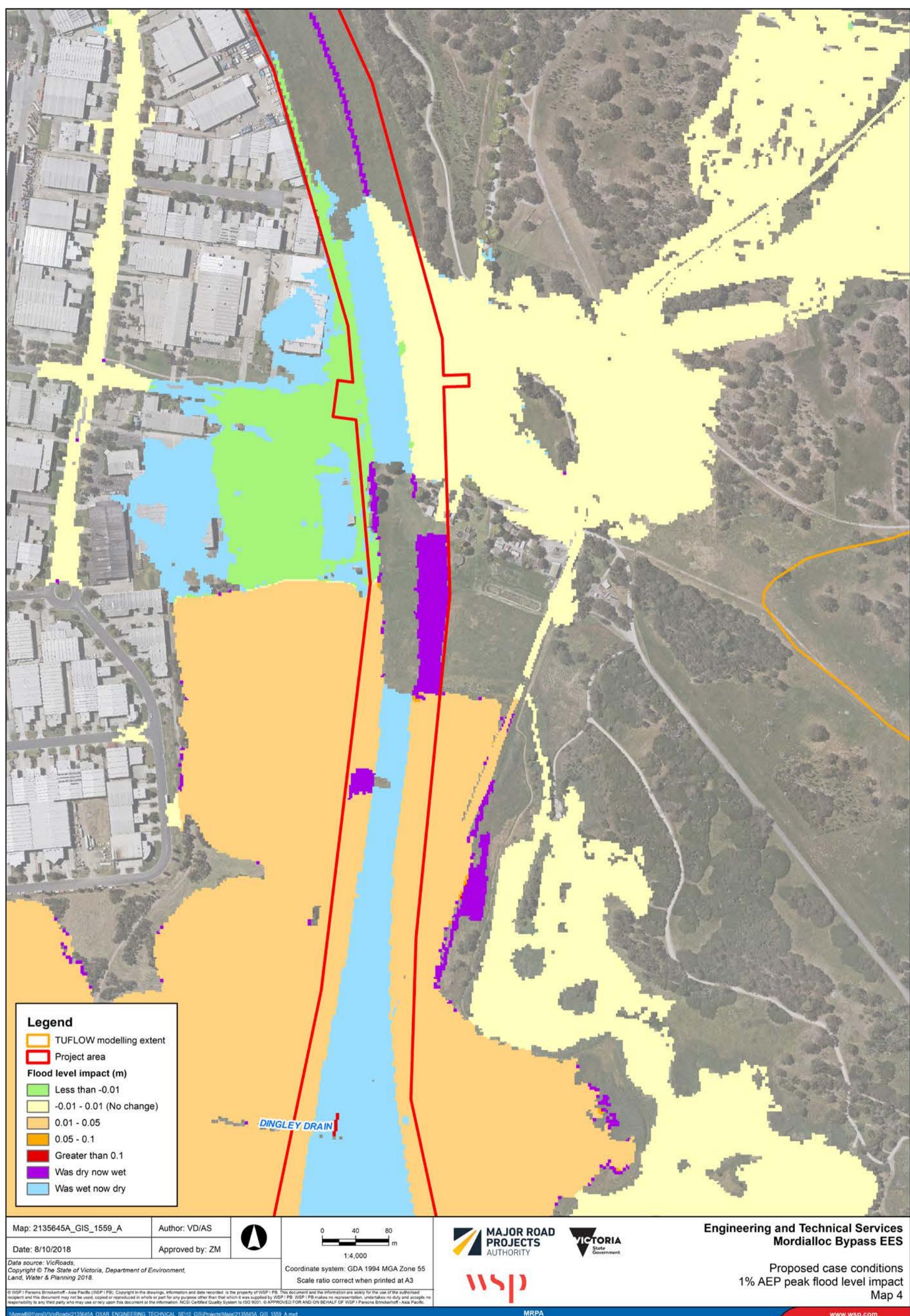
5.4 Proposed case conditions 1% AEP flood level impact (Map 2 of 7)



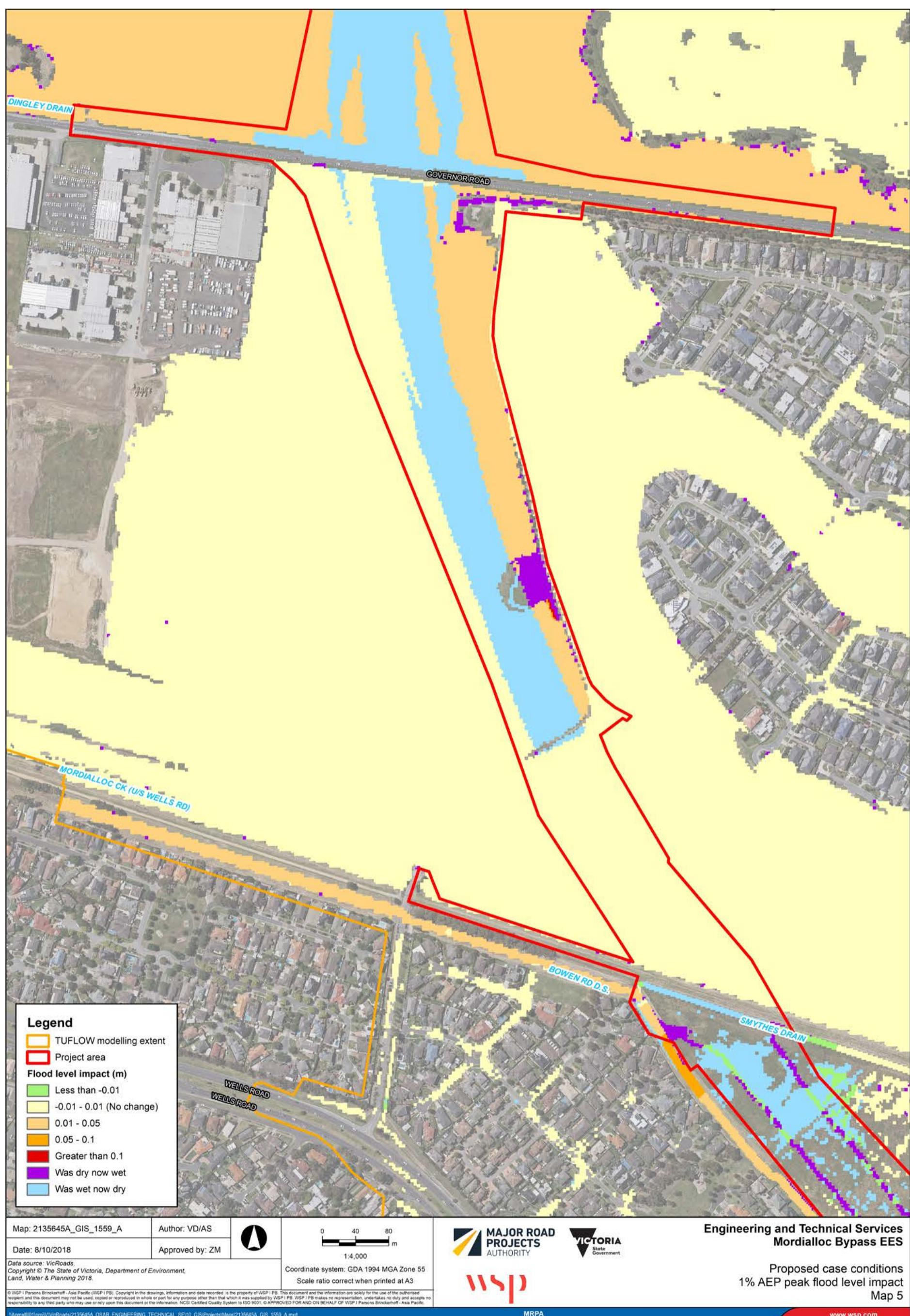
5.4 Proposed case conditions 1% AEP flood level impact (Map 3 of 7)



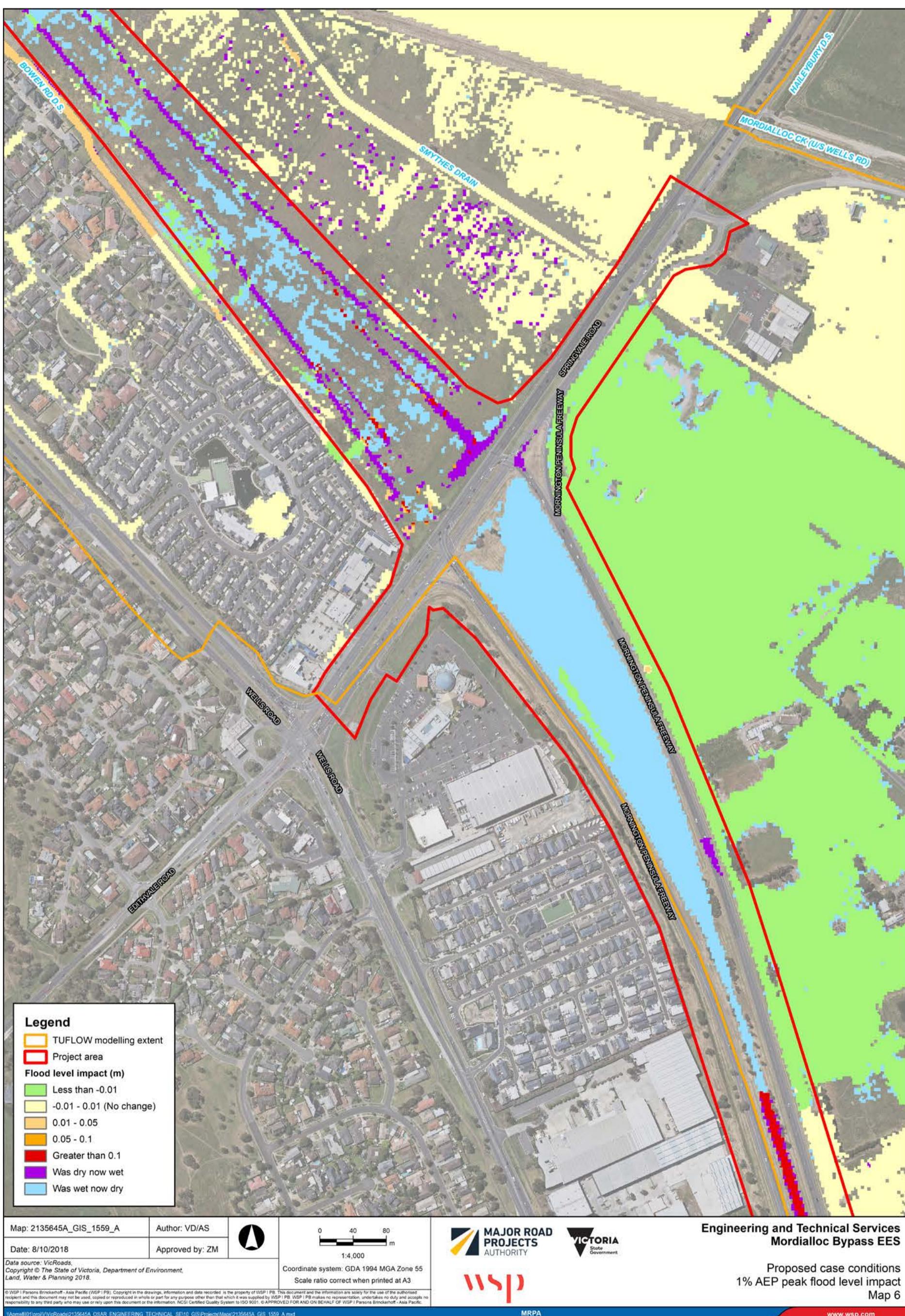
5.4 Proposed case conditions 1% AEP flood level impact (Map 4 of 7)



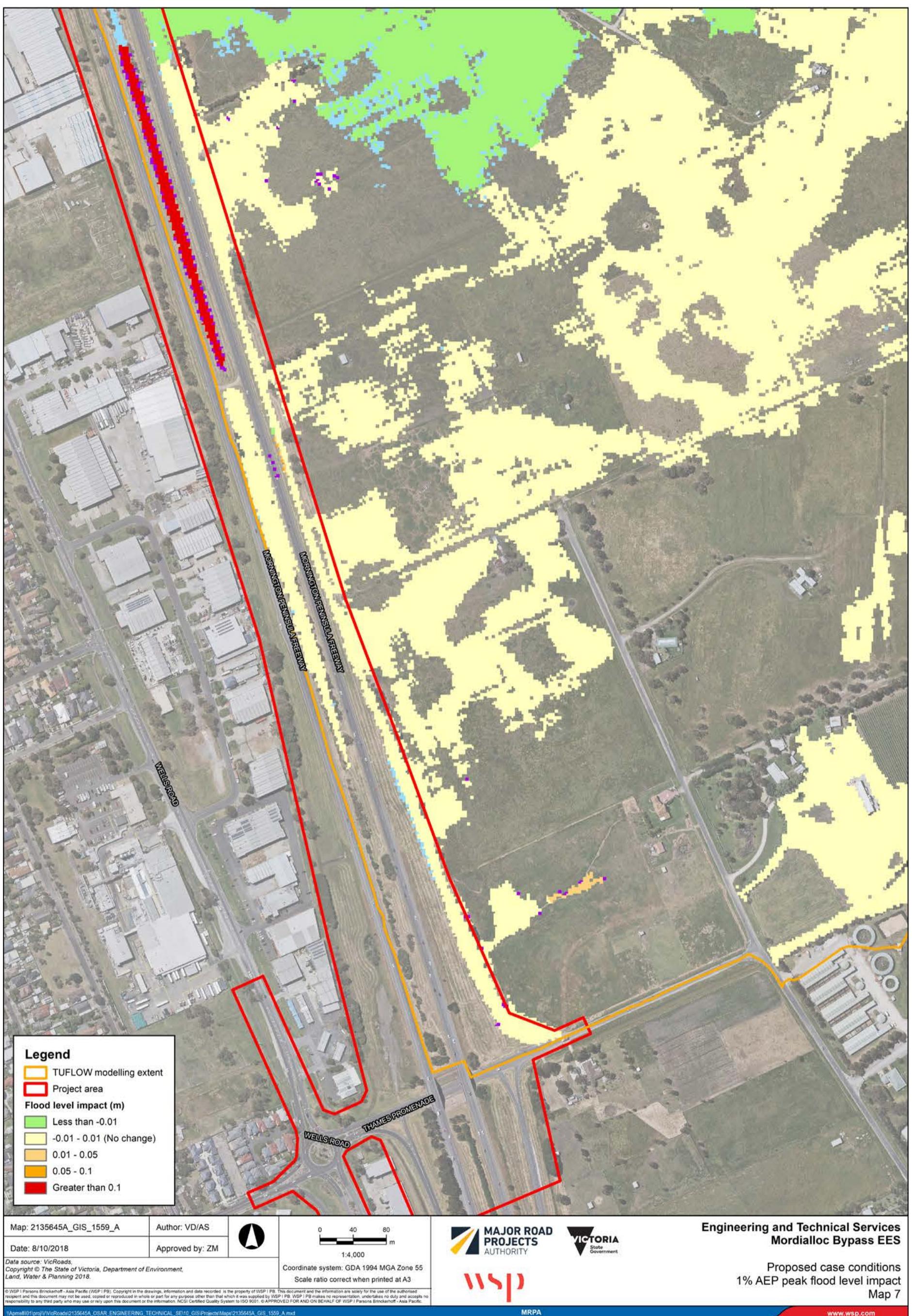
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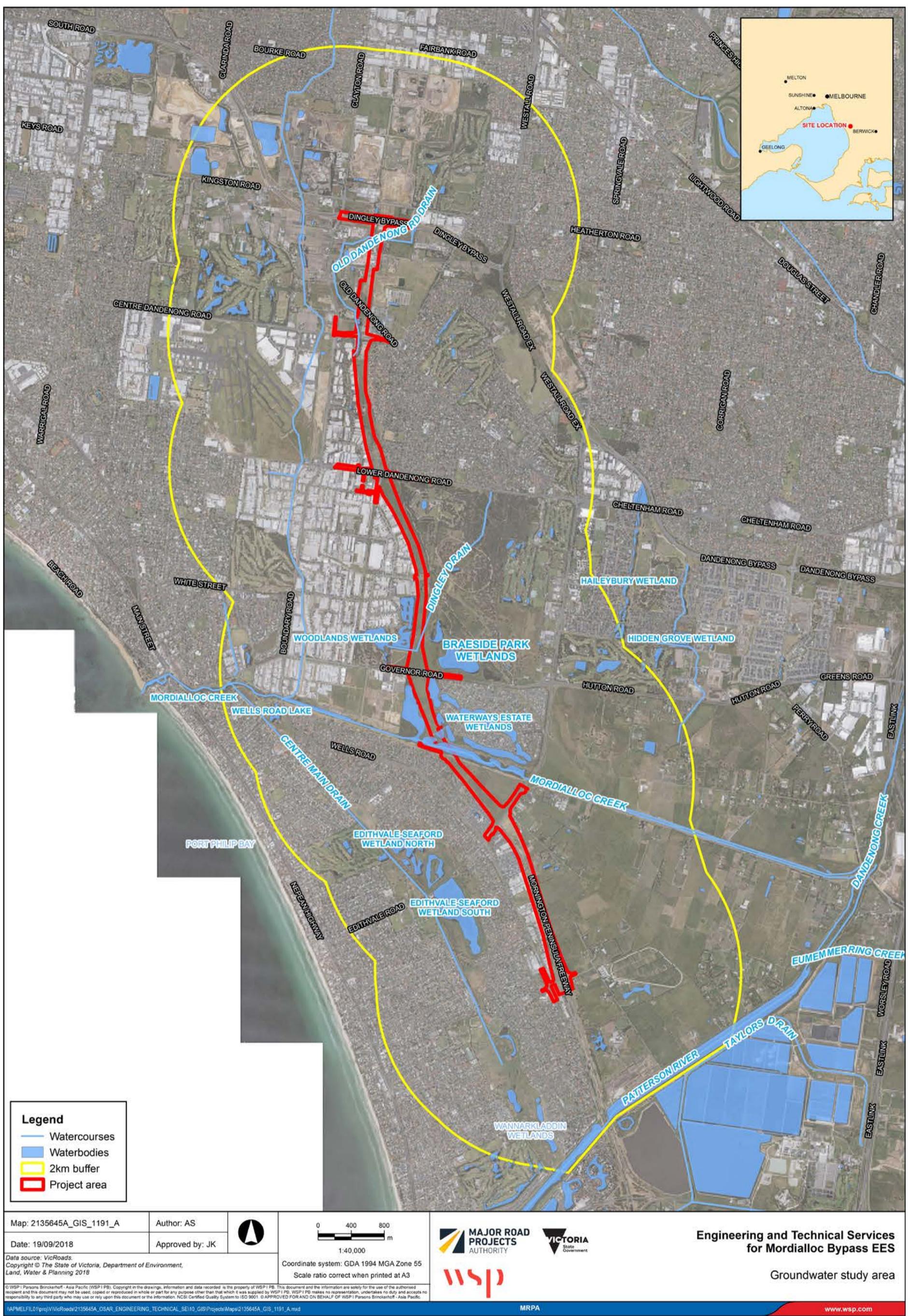
5.4 Proposed case conditions 1% AEP flood level impact (Map 7 of 7)



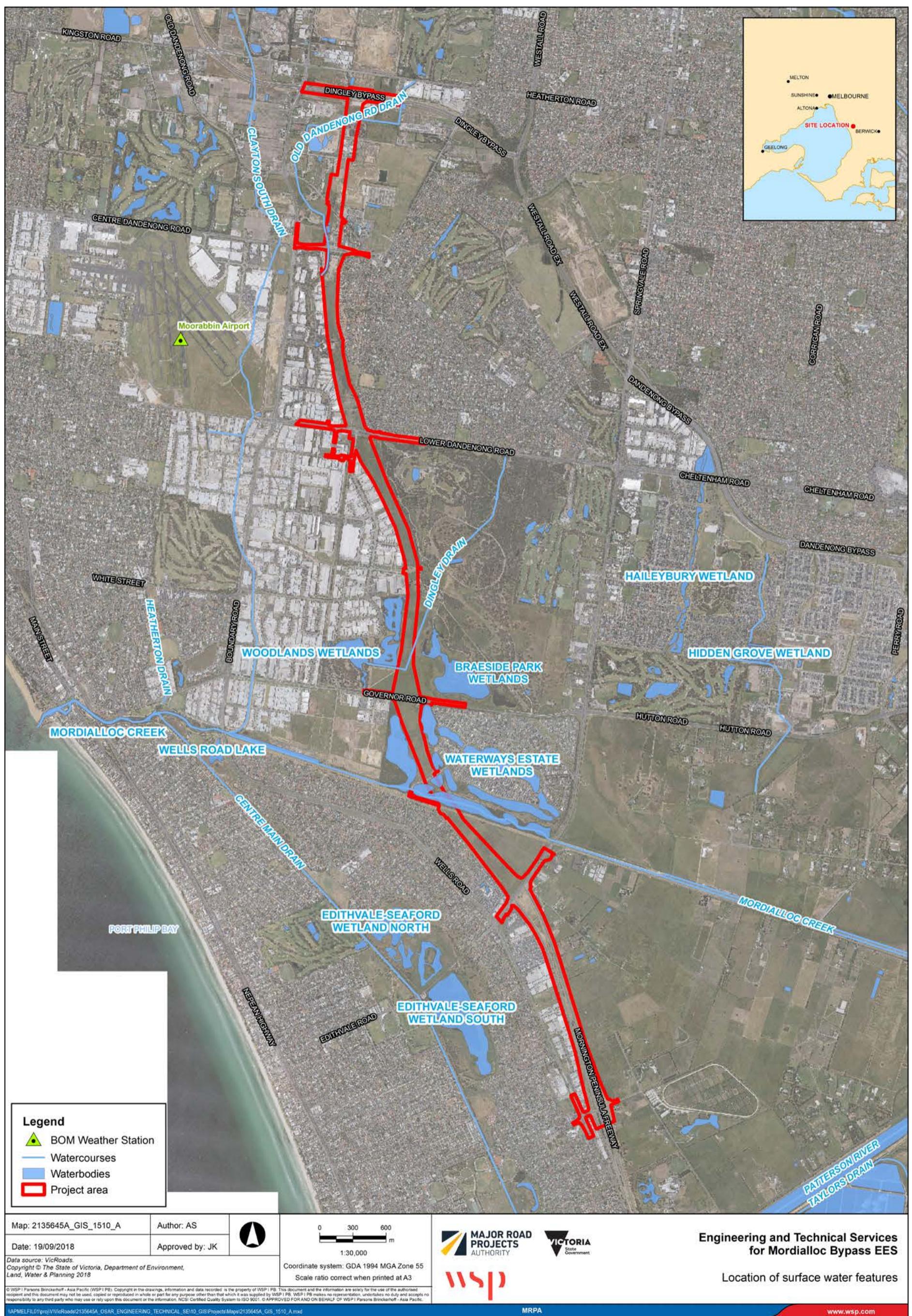


ATTACHMENT III
MAPS AND FIGURES

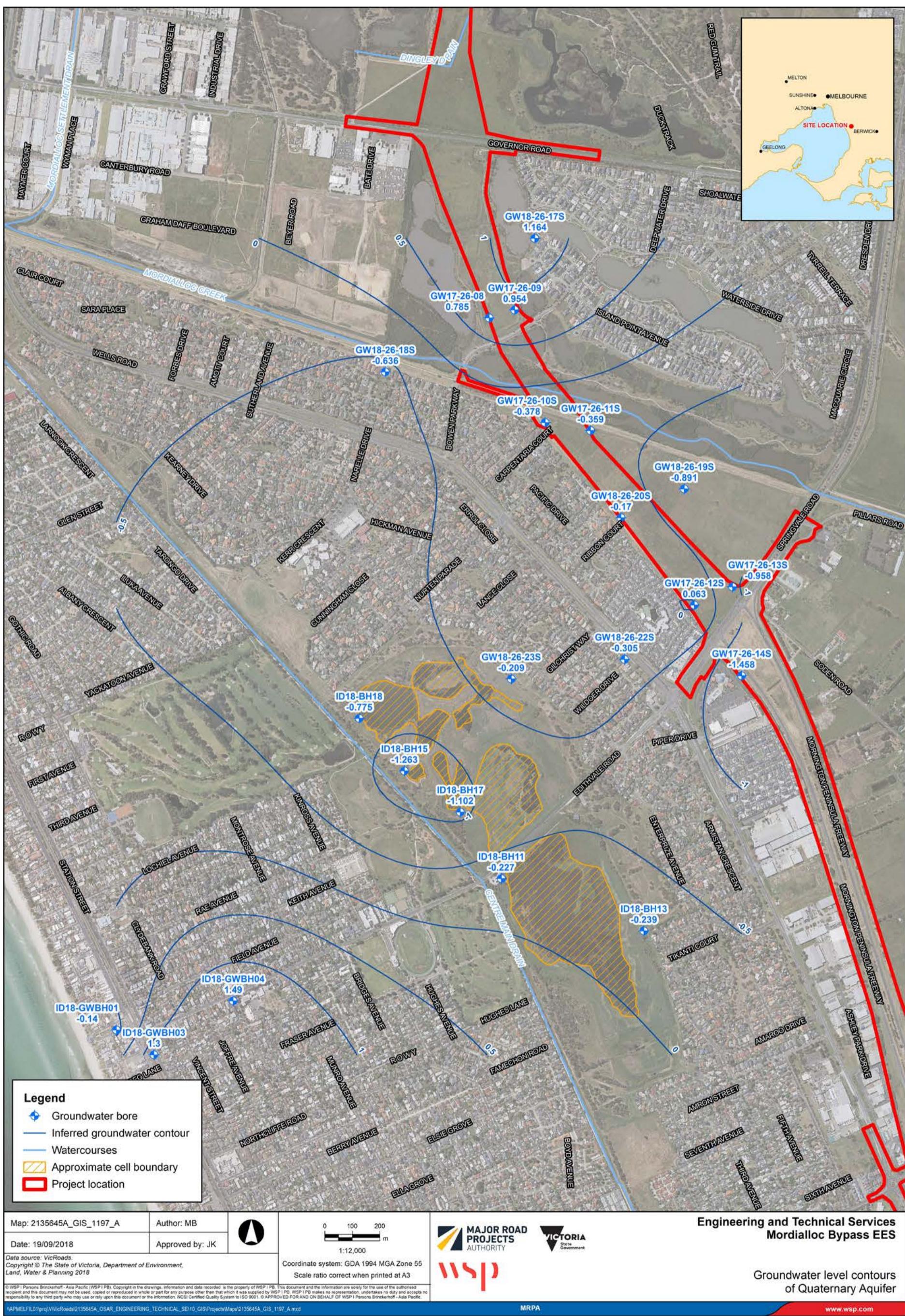
6 GROUNDWATER



6.2 Location of surface water features



6.3 Groundwater level contours of Quaternary Aquifer



6.4 Groundwater level contours of the Upper Aquifer



Map: 2135645A GIS 1199 A

Author: MB



0 200 400 m

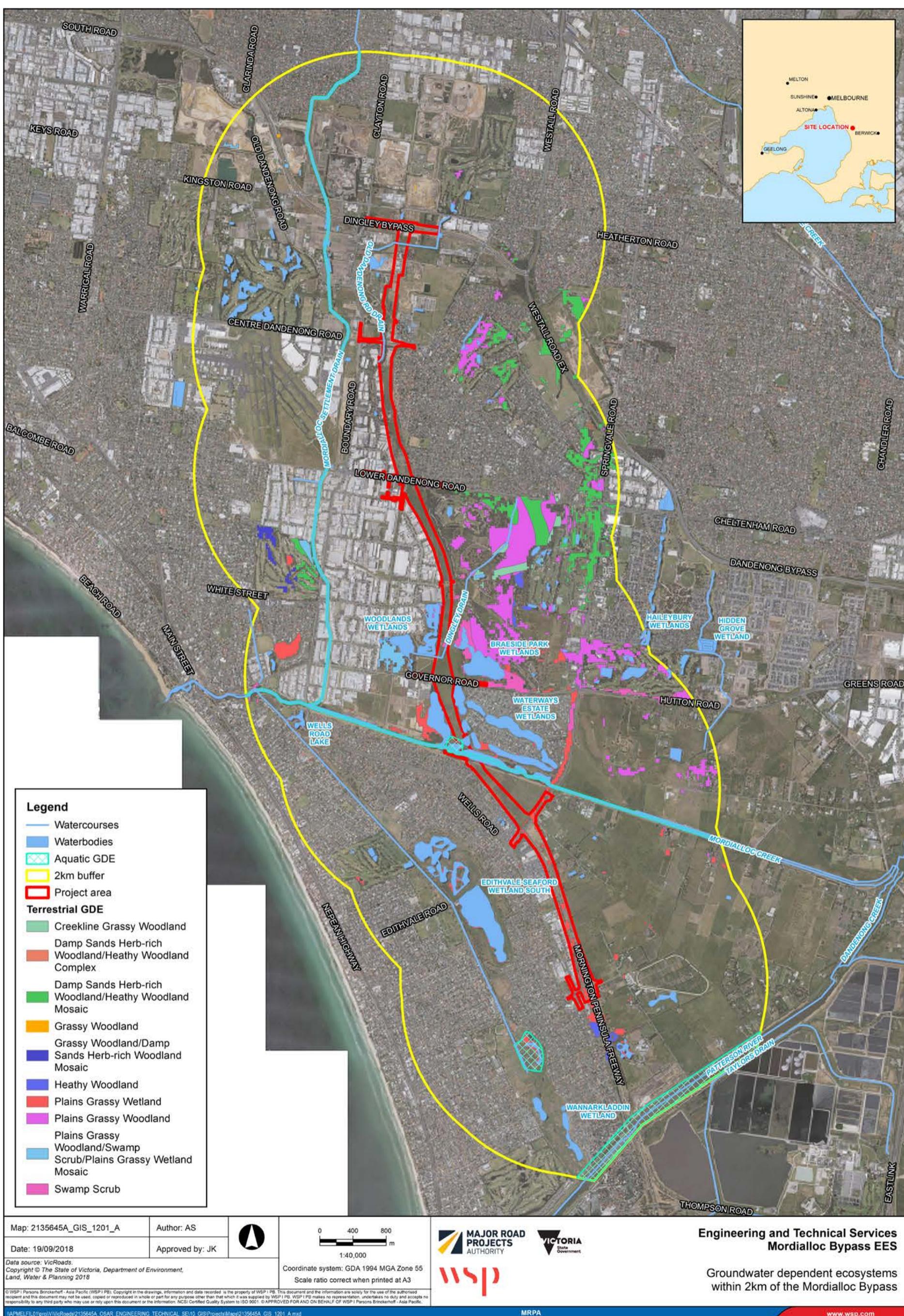
 MAJOR ROAD
PROJECTS
AUTHORITY



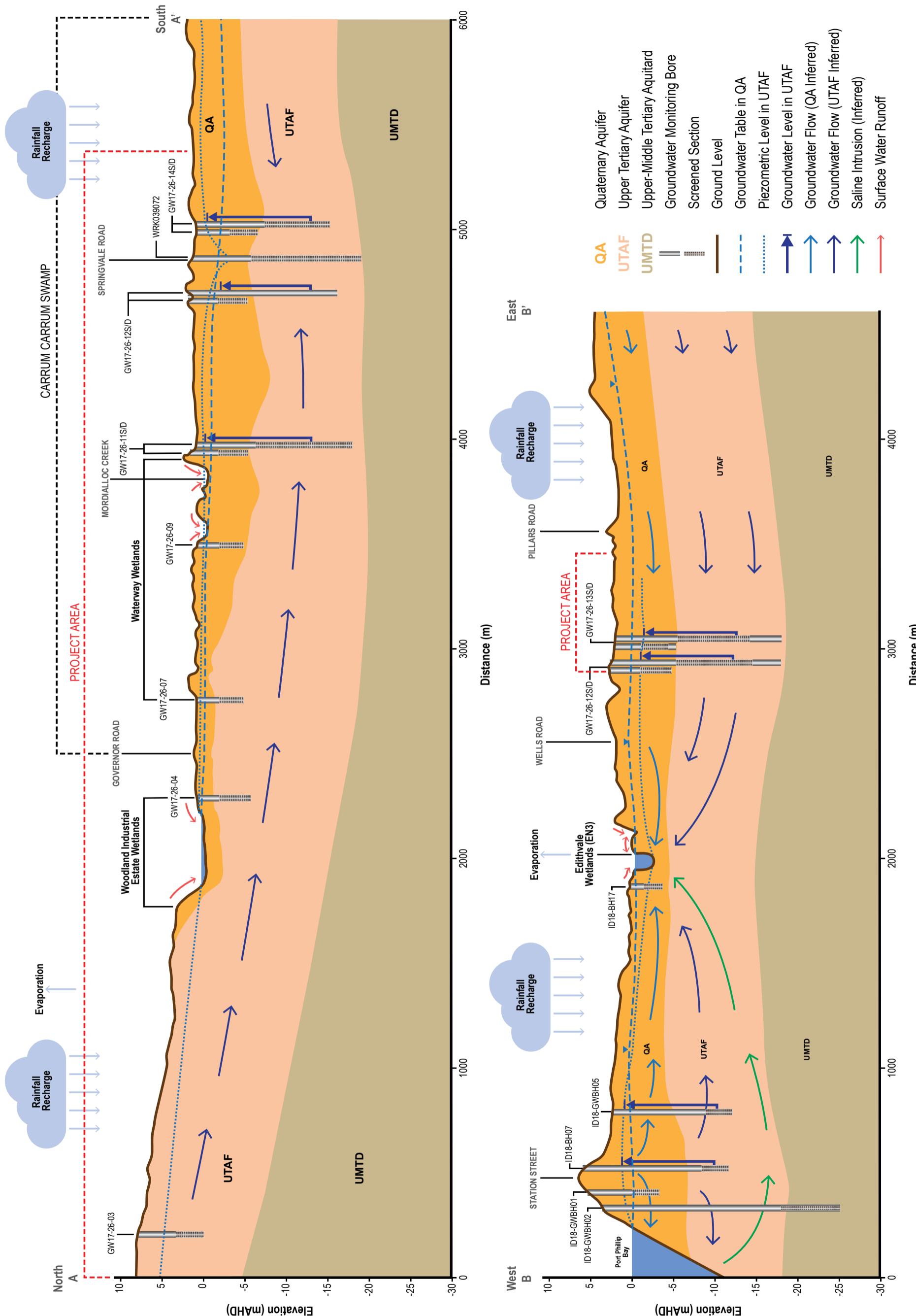
Engineering and Technical Services
Mordialloc Bypass EES

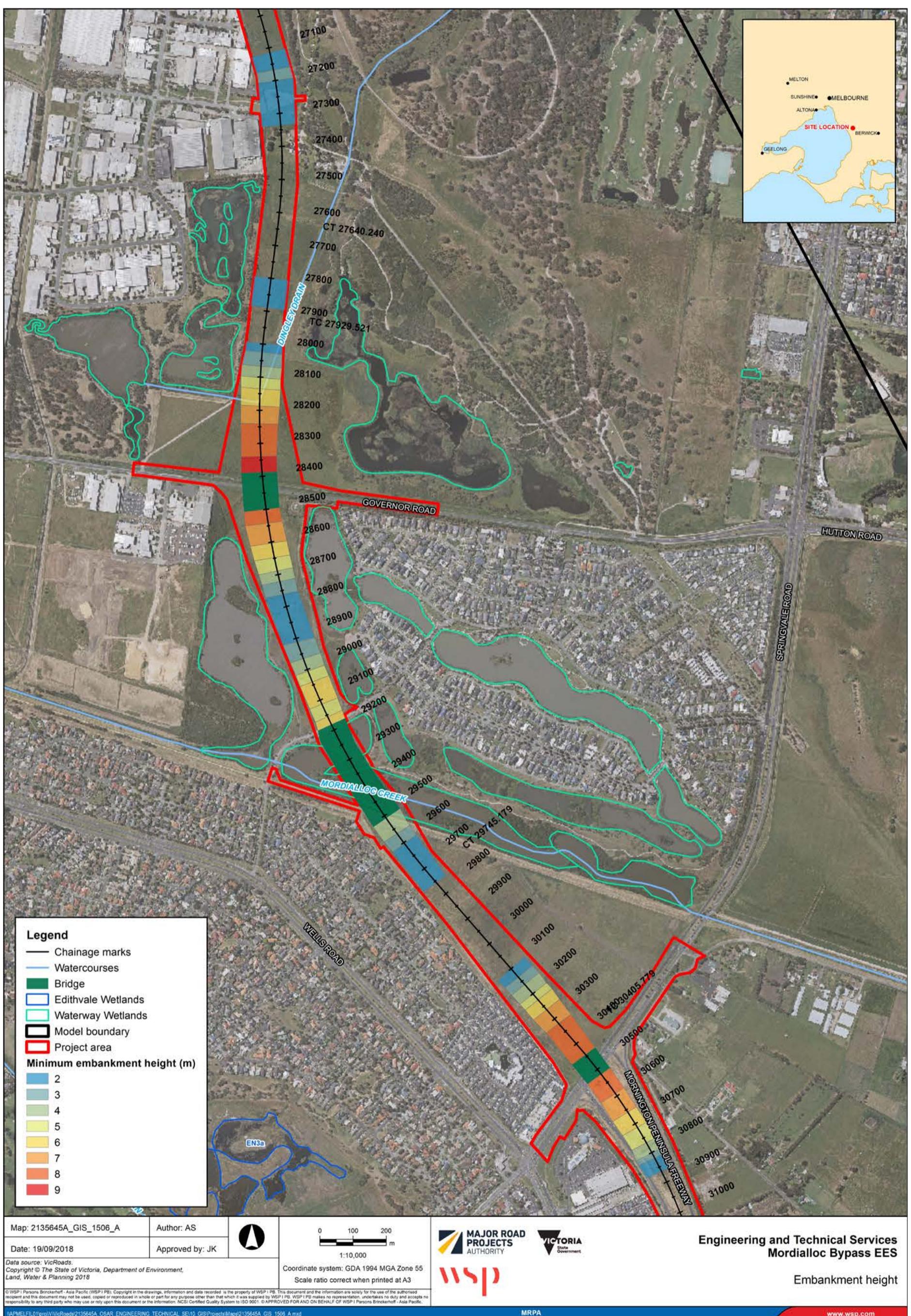
Groundwater level contours of the Upper Aquifer

6.5 Groundwater dependent ecosystems within 2km of the project

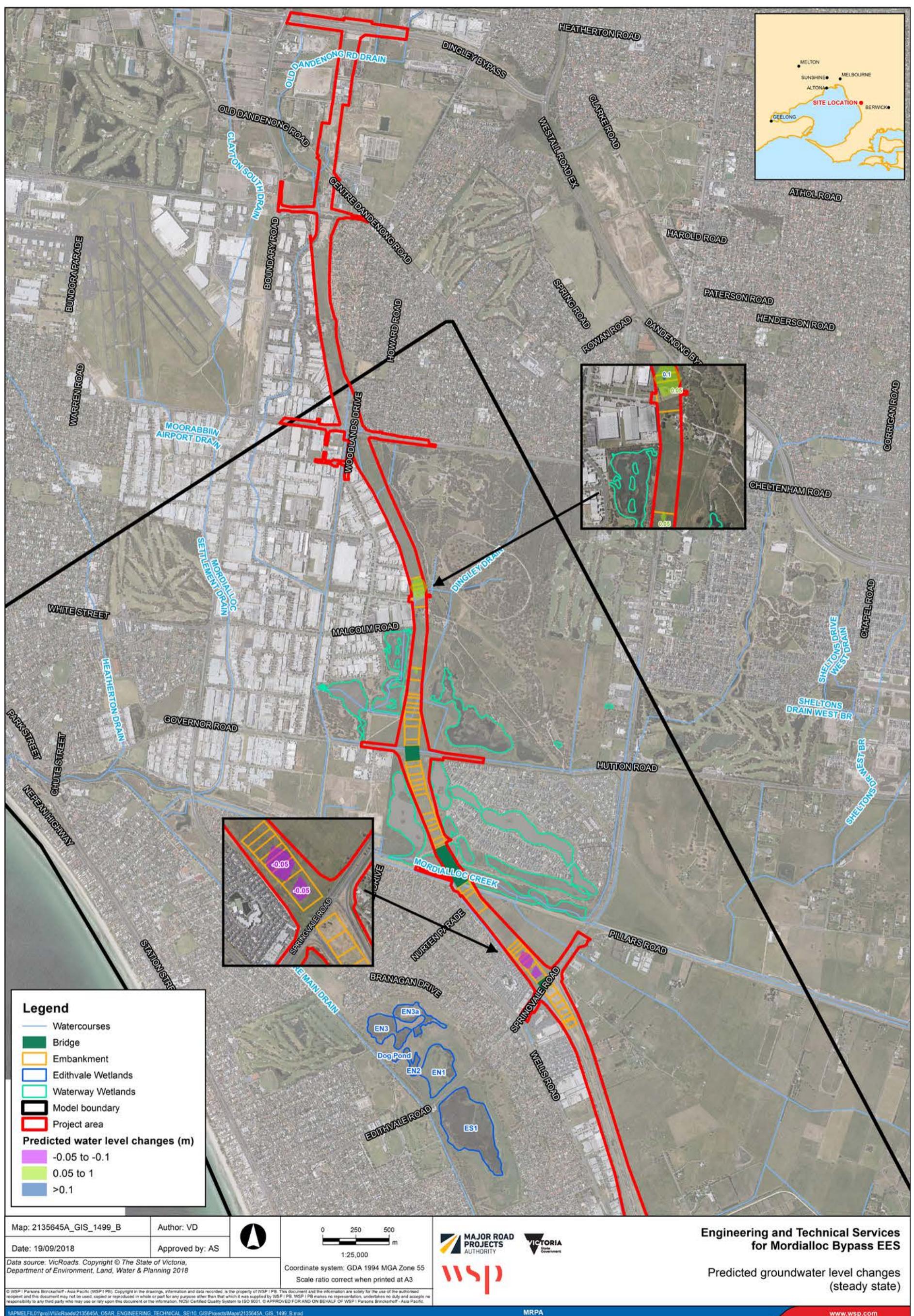


6.6 Conceptual model of regional groundwater flow setting between the project alignment and Edithvale Wetlands

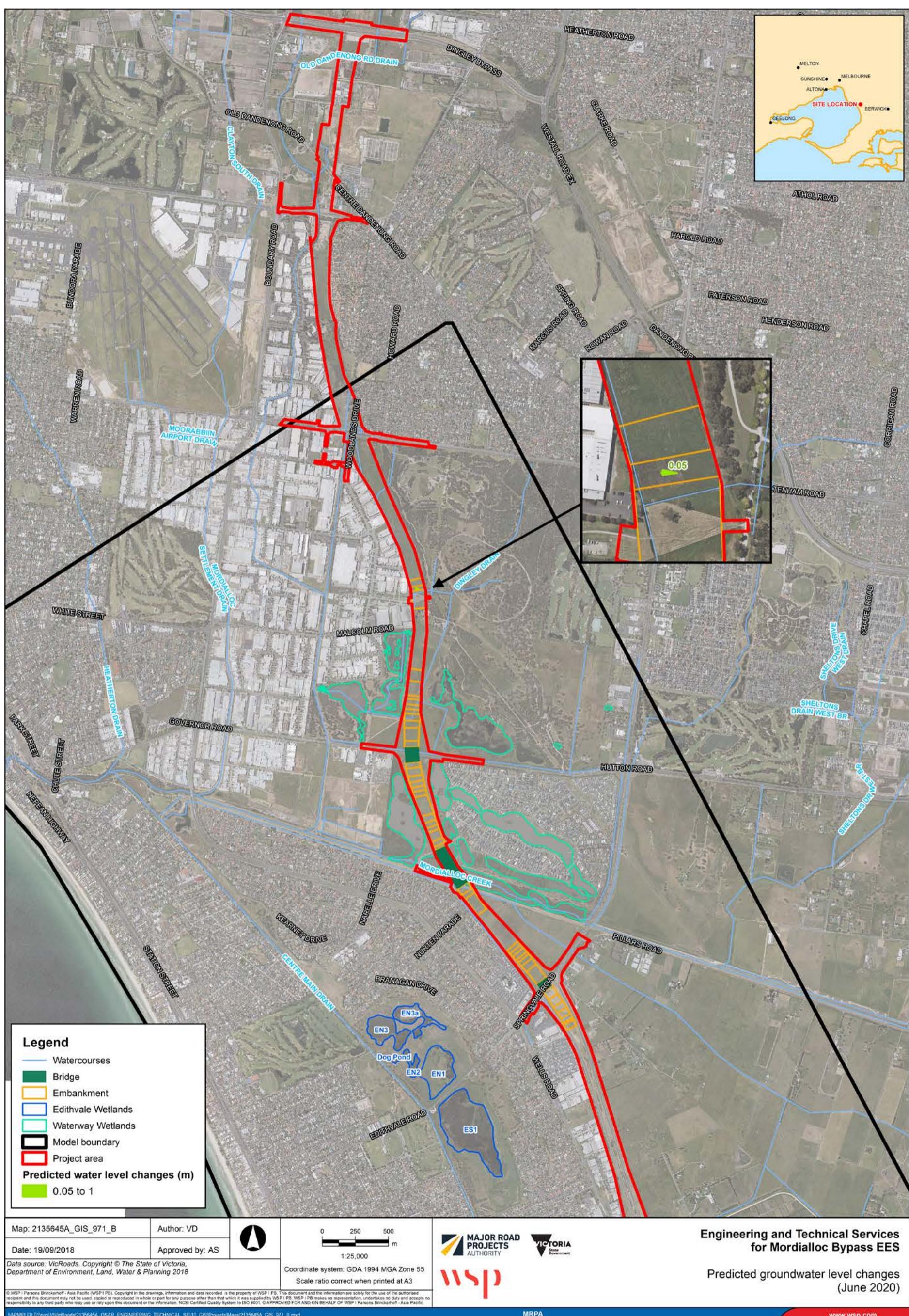




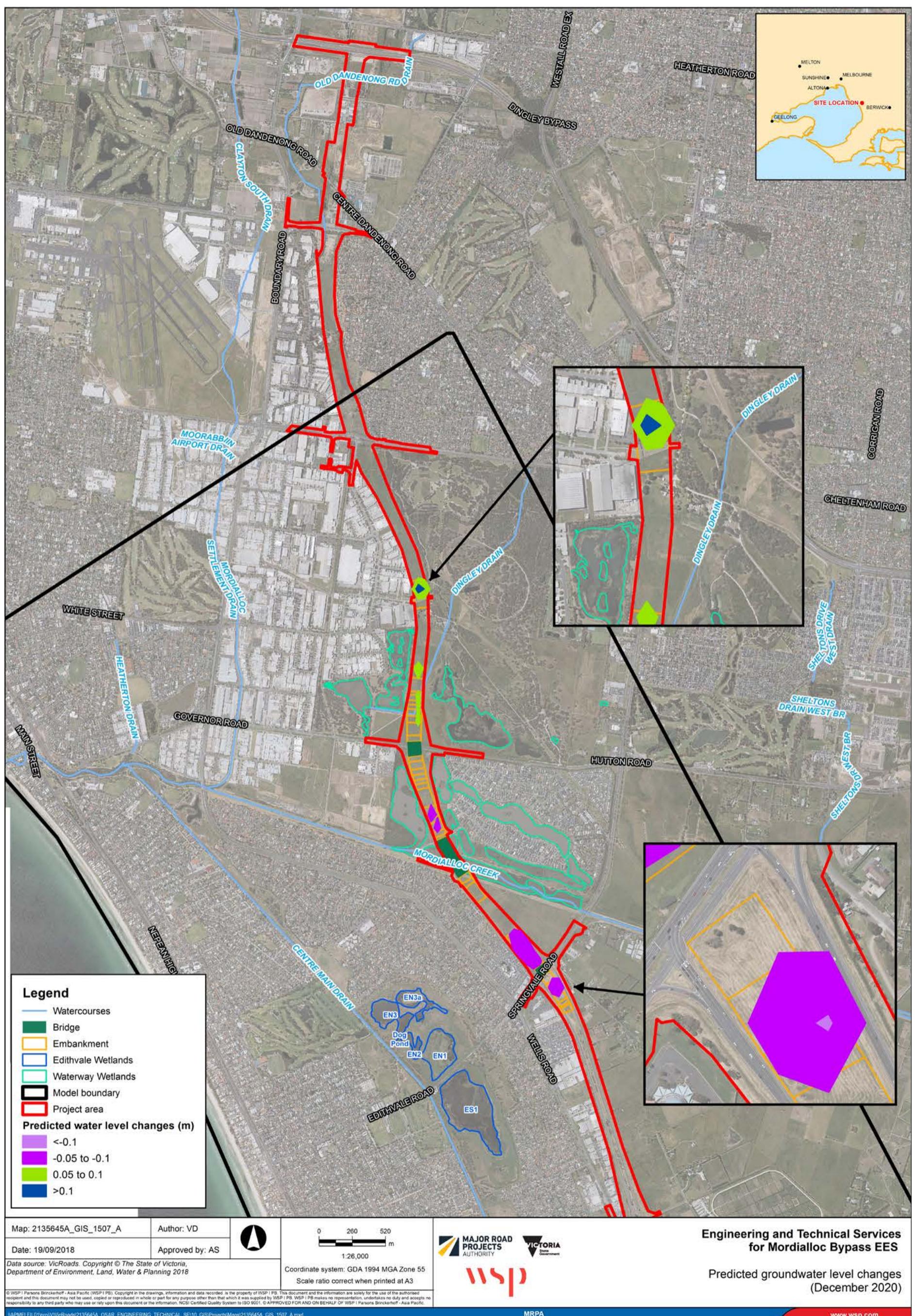
6.8 Predicted groundwater level changes (steady state)



6.9 Predicted groundwater table changes (June 2020)



6.10 Predicted groundwater table changes (December 2020)

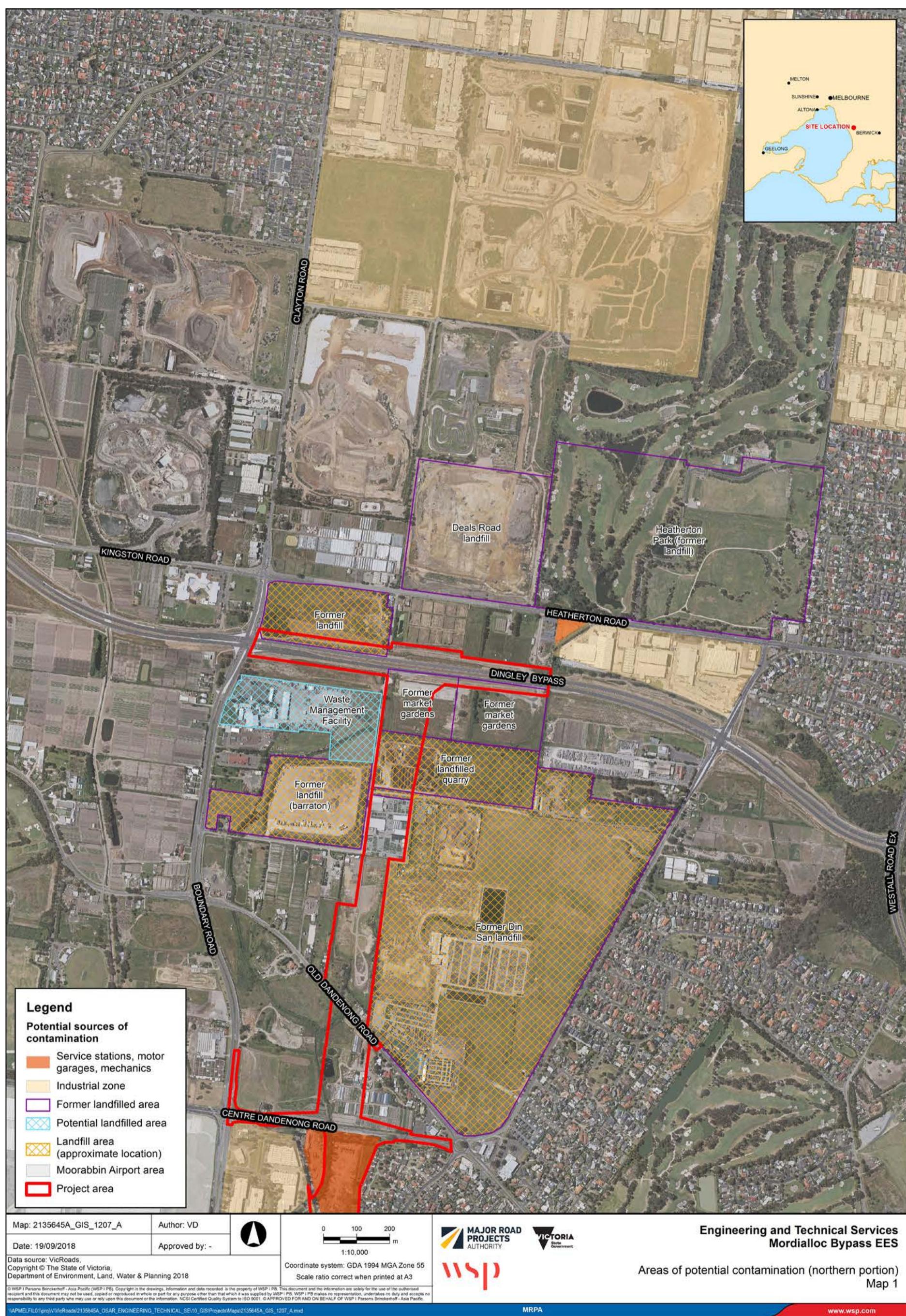




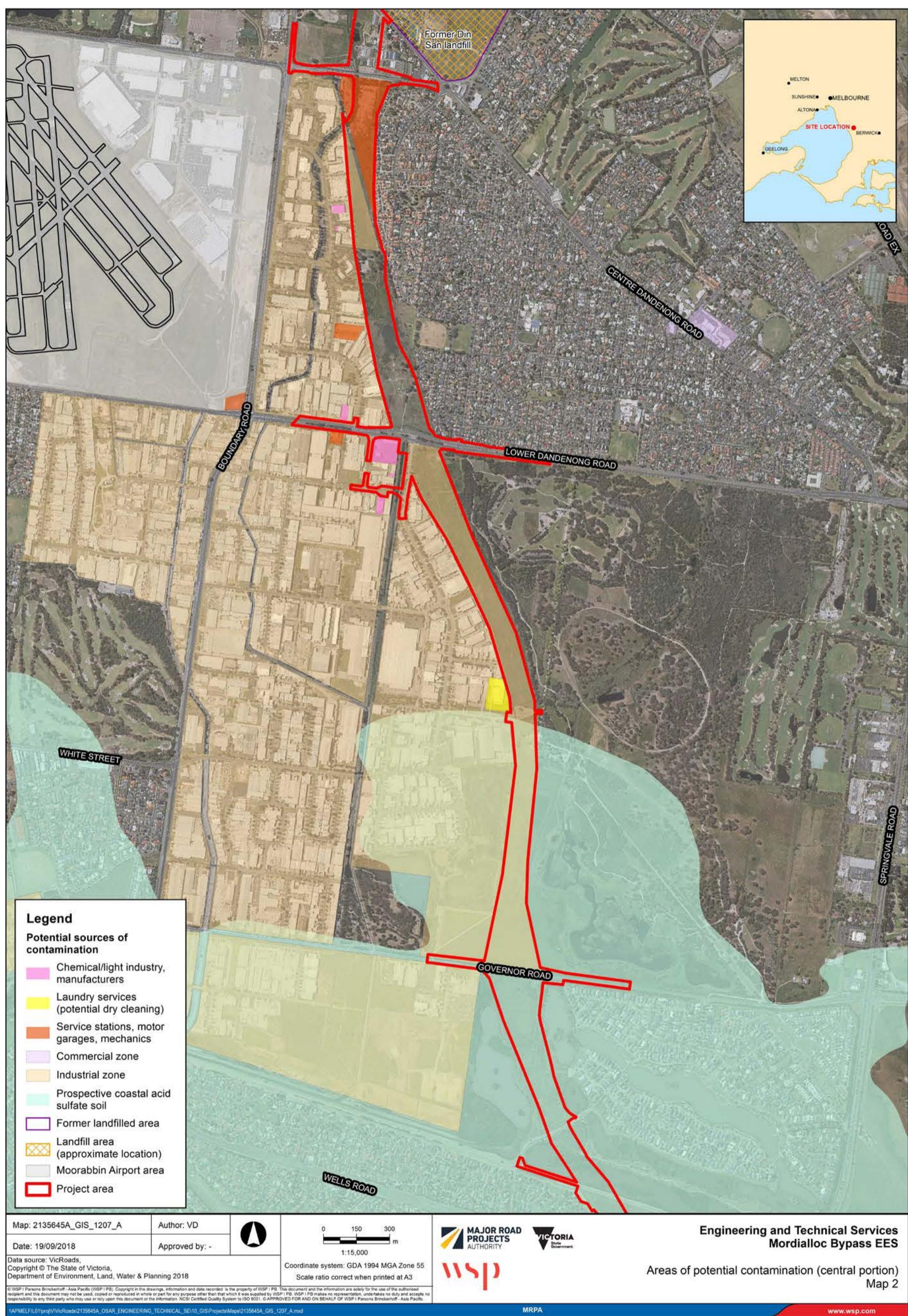
ATTACHMENT III
MAPS AND FIGURES

7 SOILS AND CONTAMINATED LAND

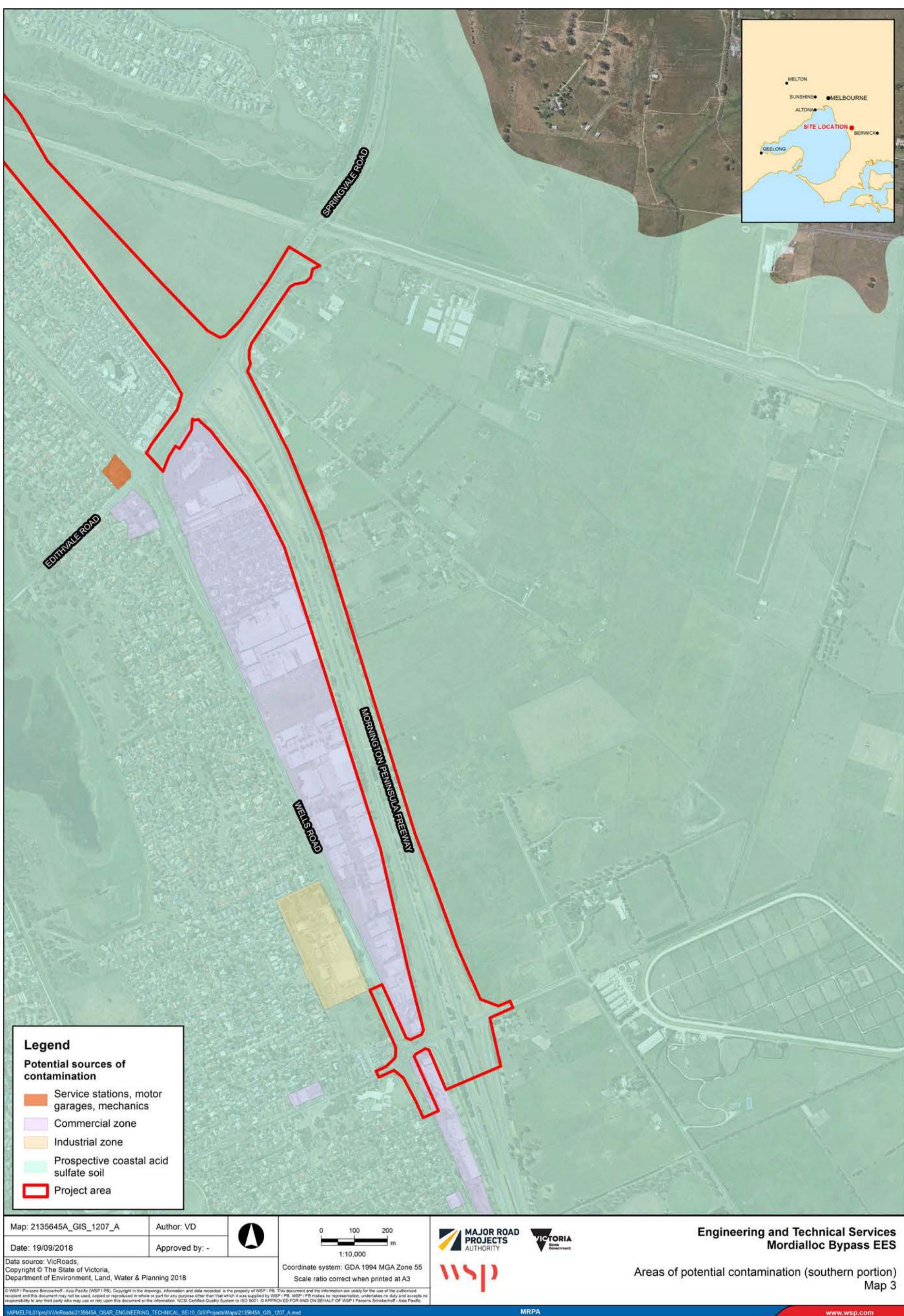
7.1 Areas of potential contamination (Map 1 of 3 – Northern portion)



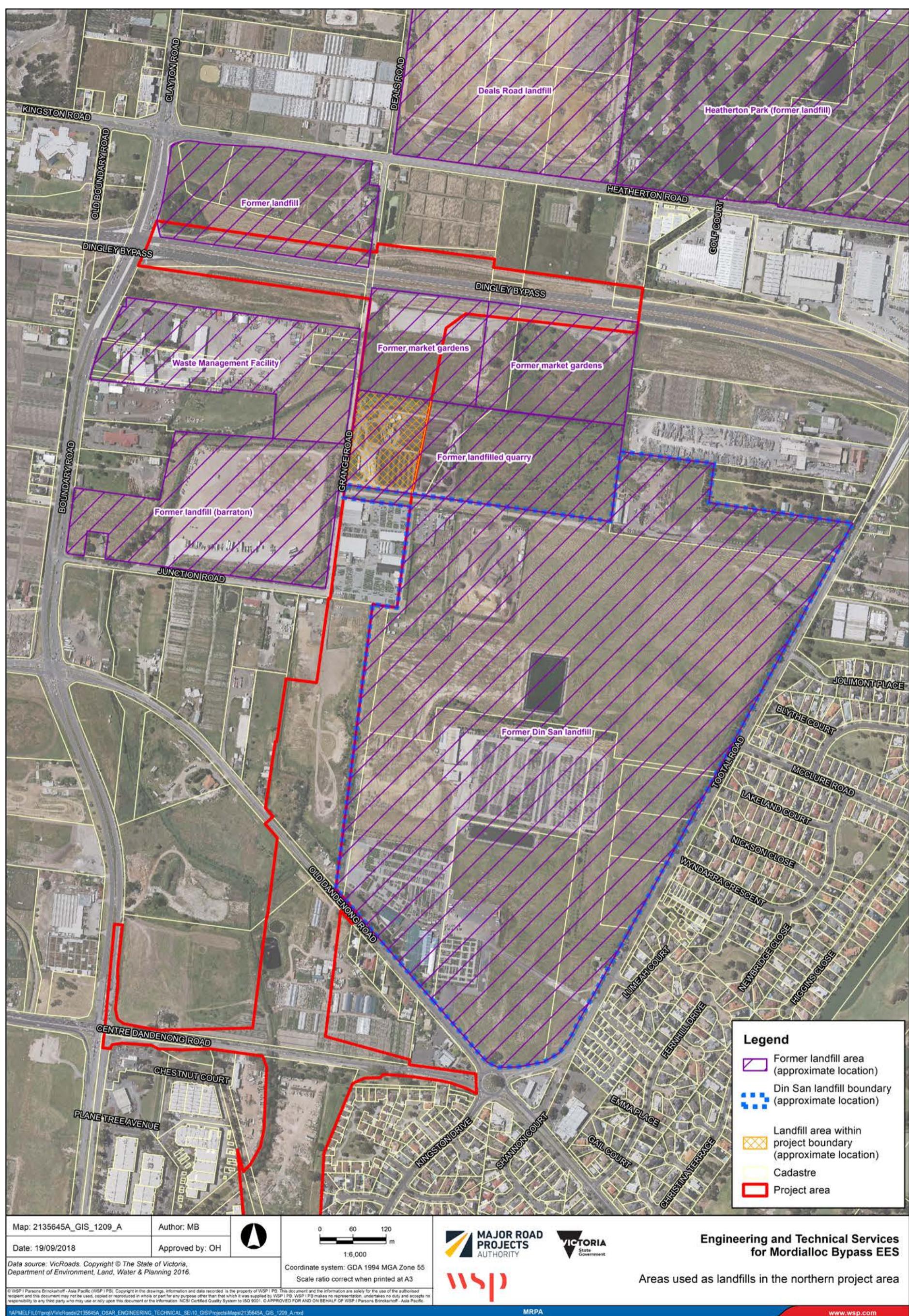
7.1 Areas of potential contamination (Map 2 of 3 – Central portion)



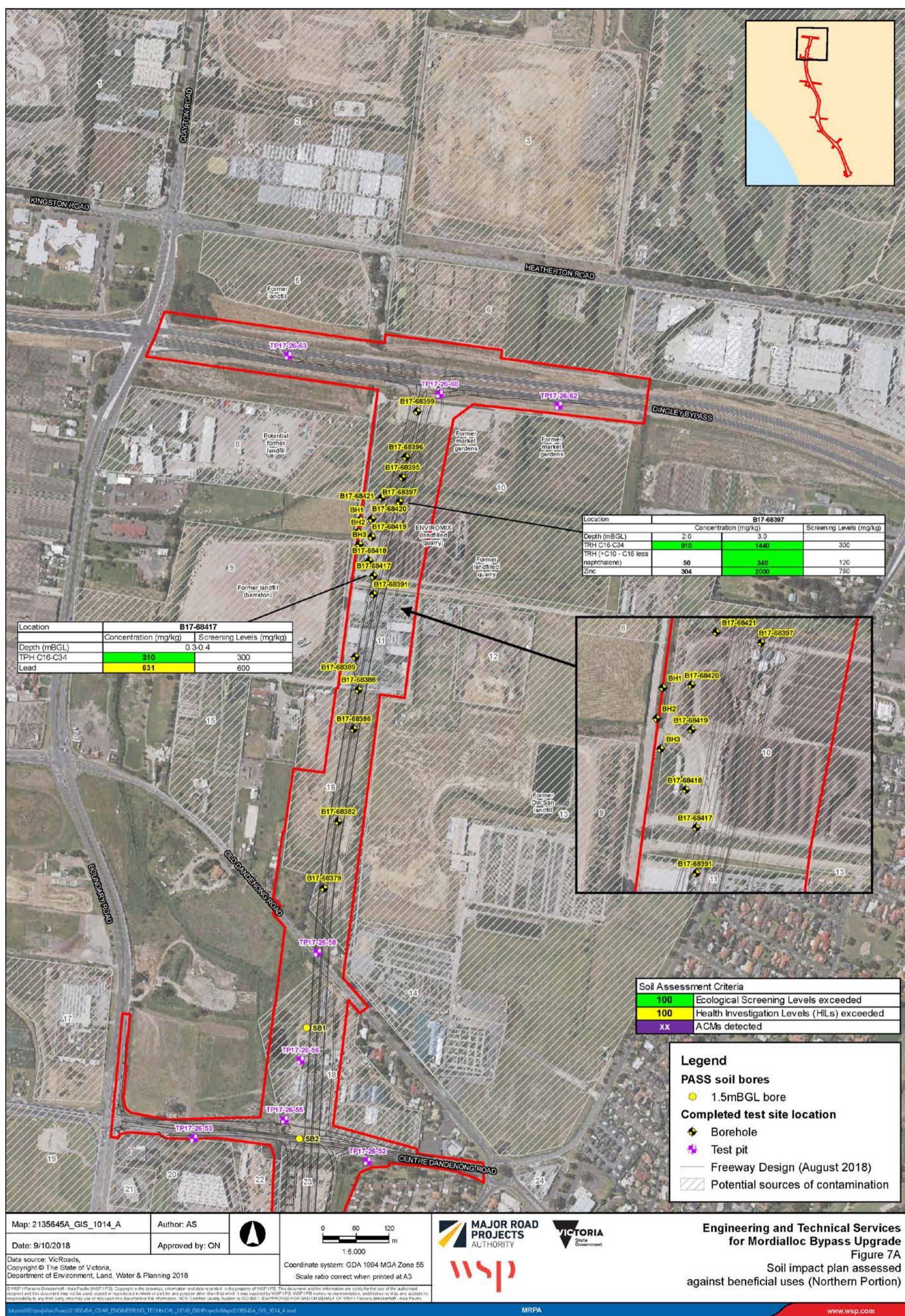
7.1 Areas of potential contamination (Map 3 of 3 – Southern portion)



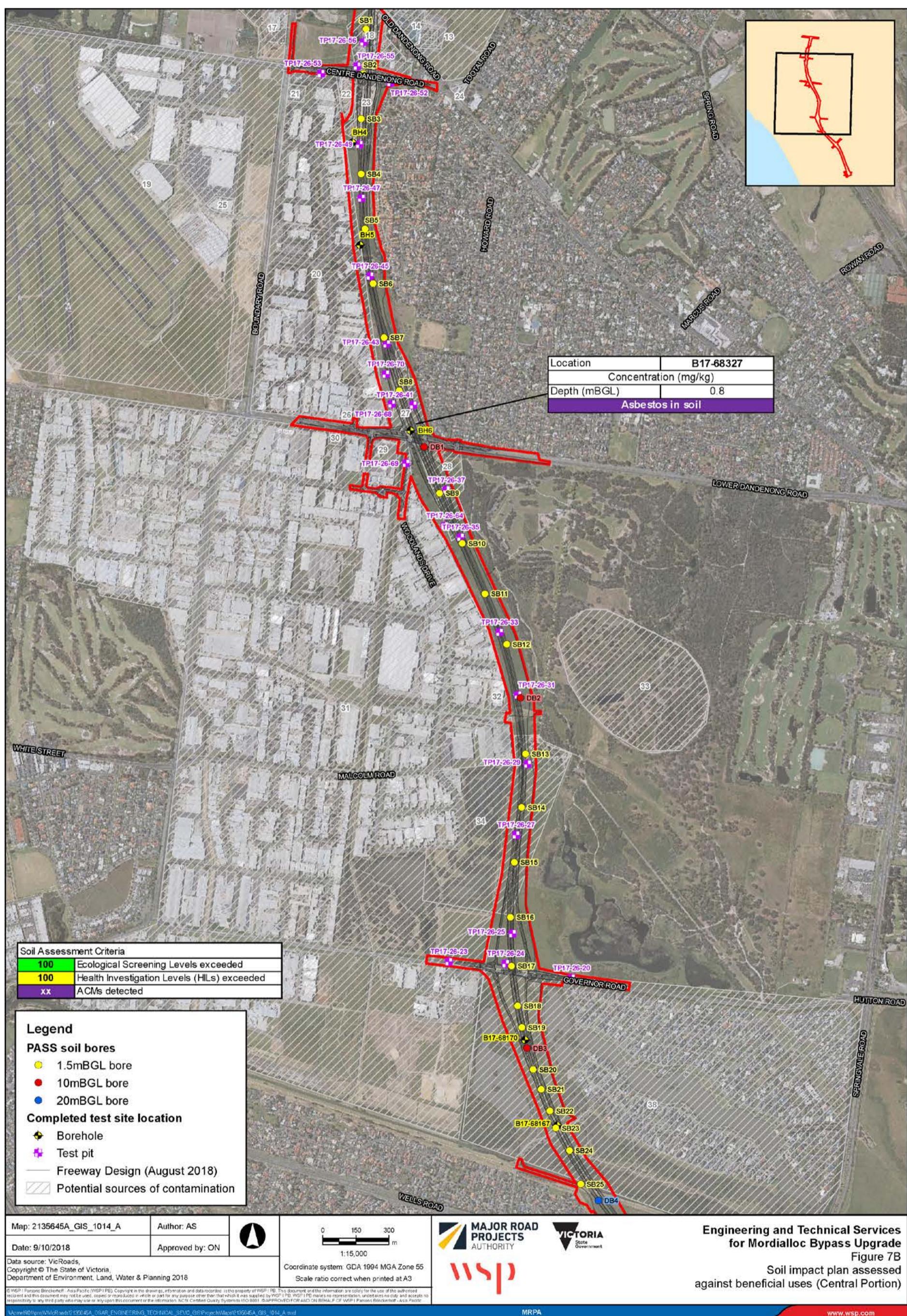
7.2 Areas used as landfills in the northern project area



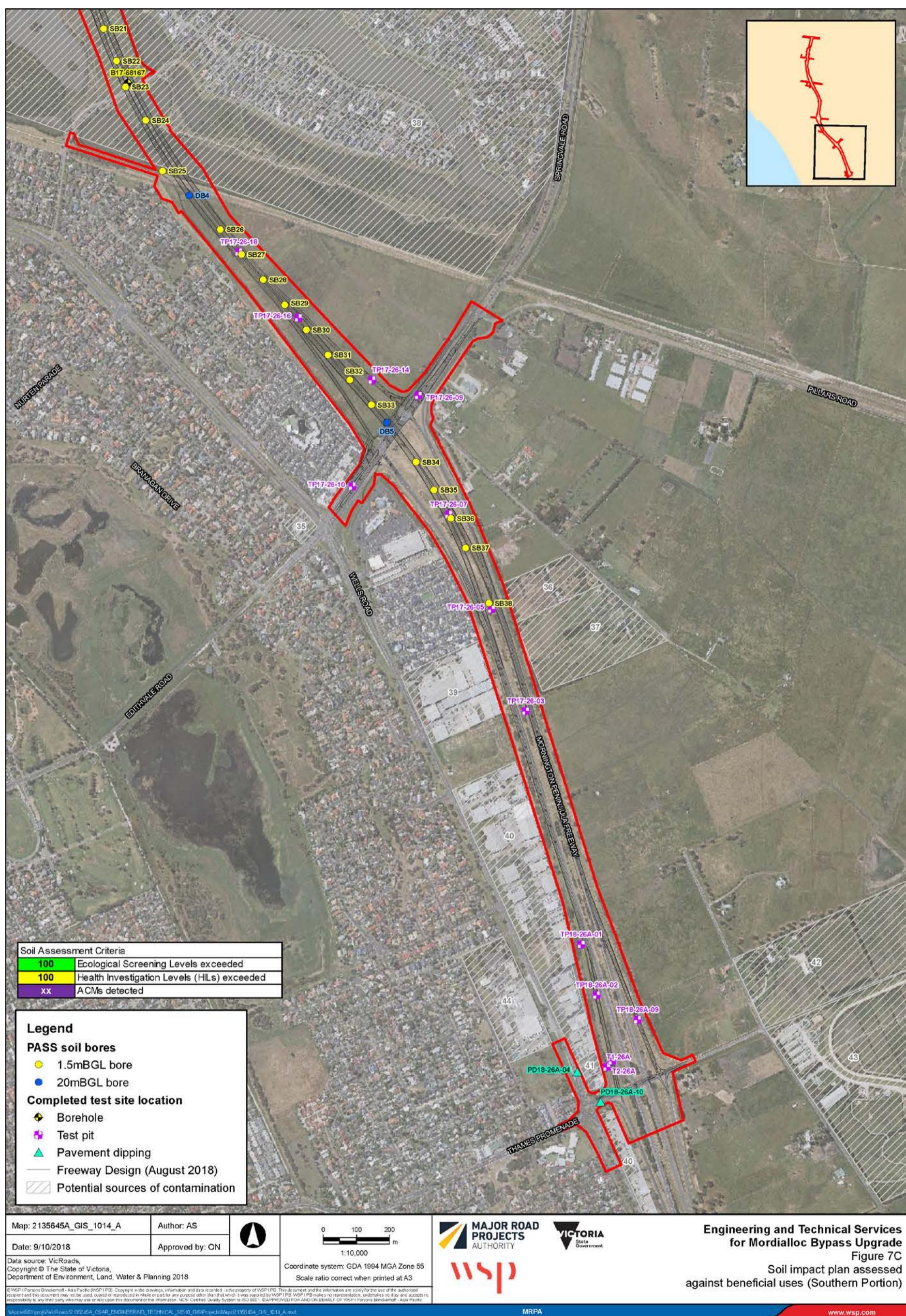
7.3 Soil impact plan assessed against beneficial uses (Map 1 of 3 – Northern portion)



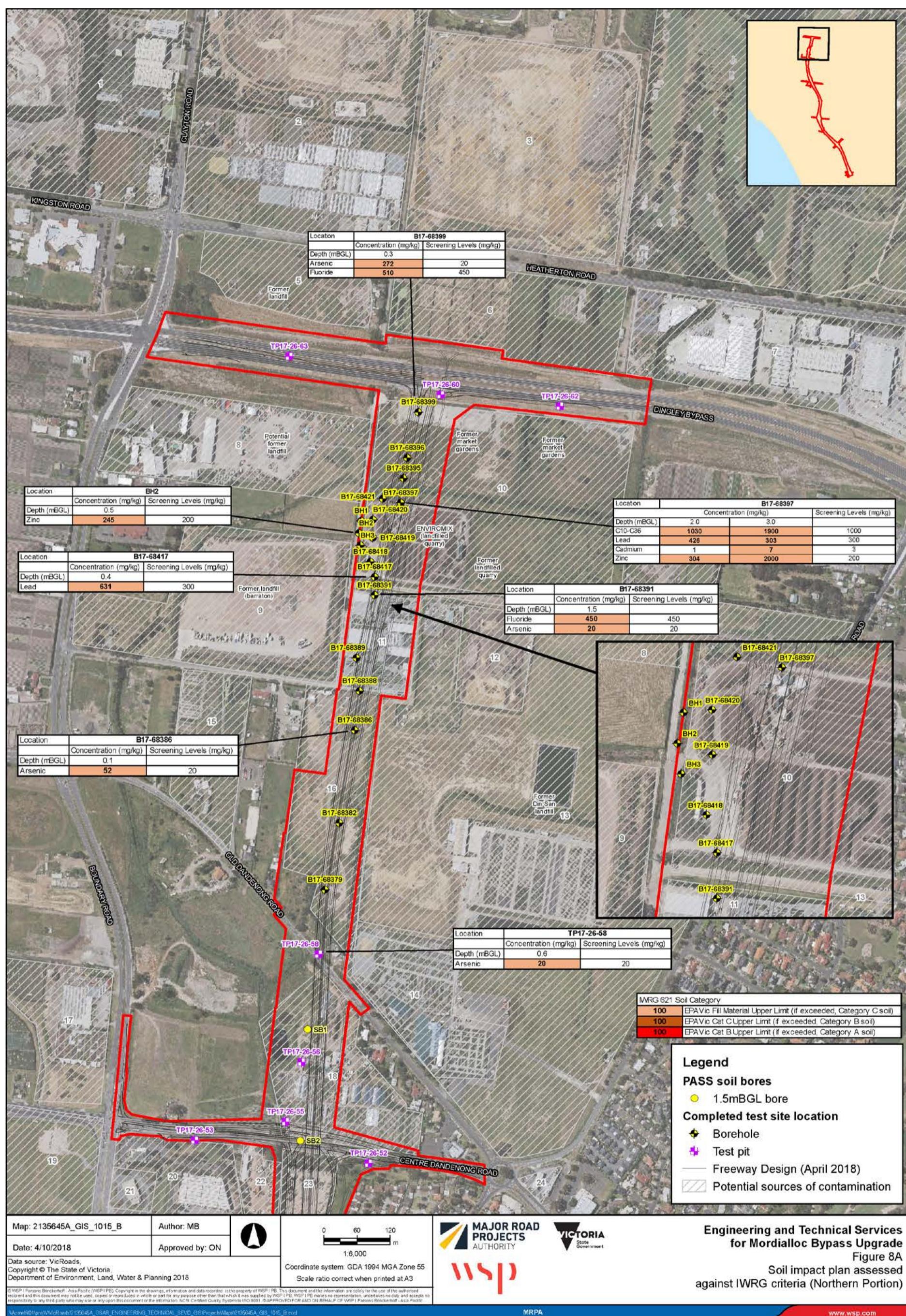
7.3 Soil impact plan assessed against beneficial uses (Map 2 of 3 – Central portion)



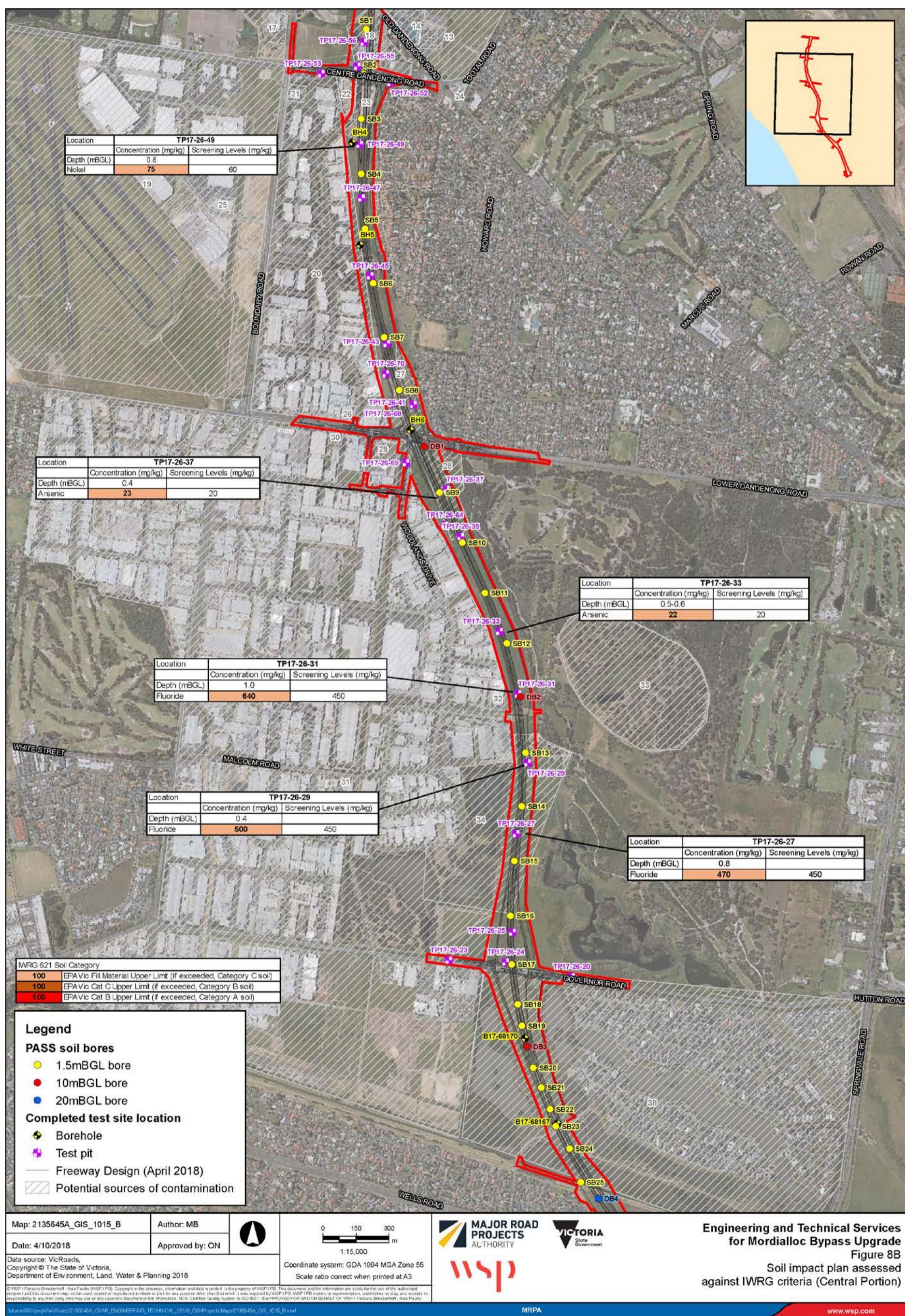
7.3 Soil impact plan assessed against beneficial uses (Map 3 of 3 – Southern portion)



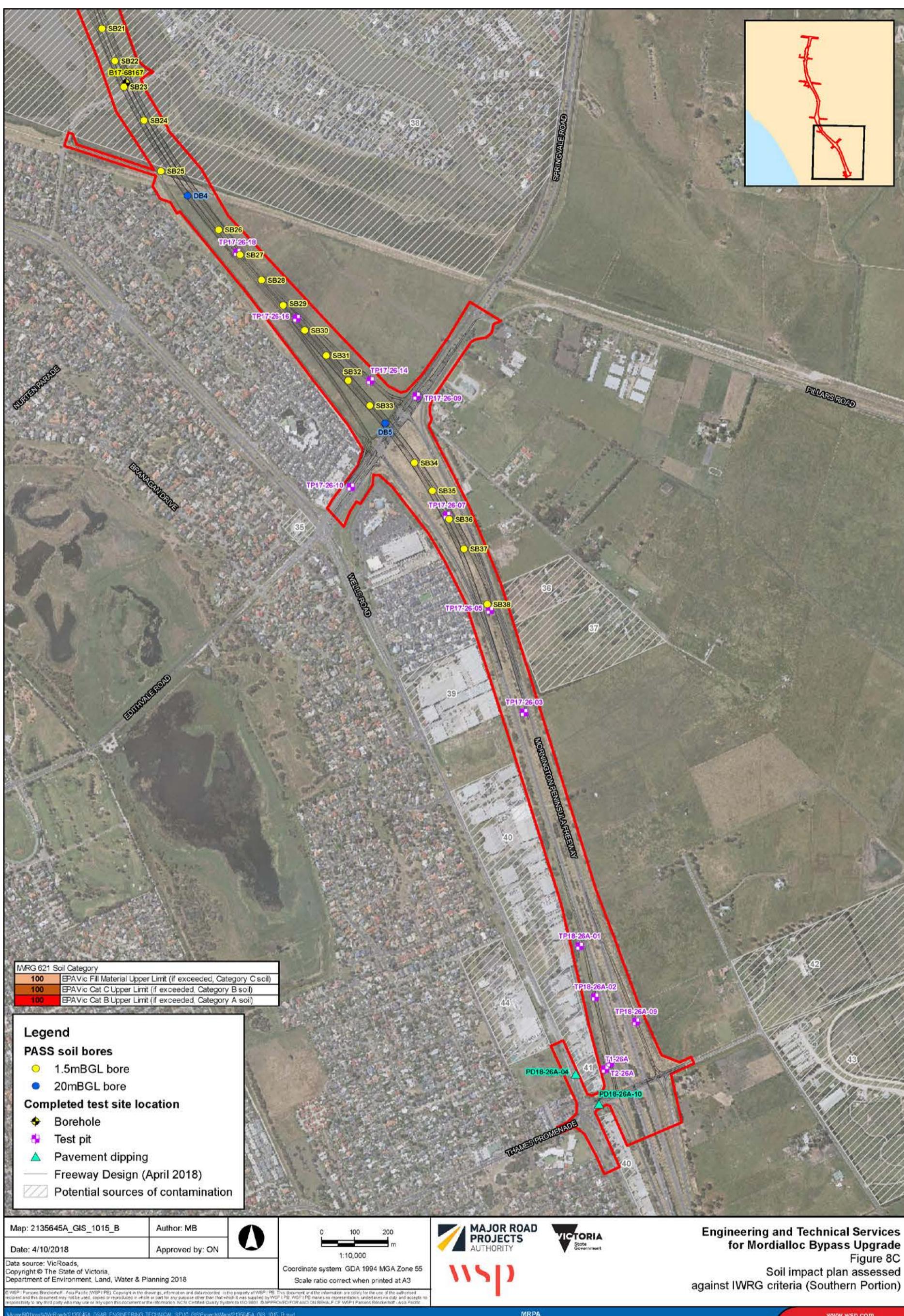
7.4 Soil impact plan assessed against IWRG criteria (Map 1 of 3 – Northern portion)



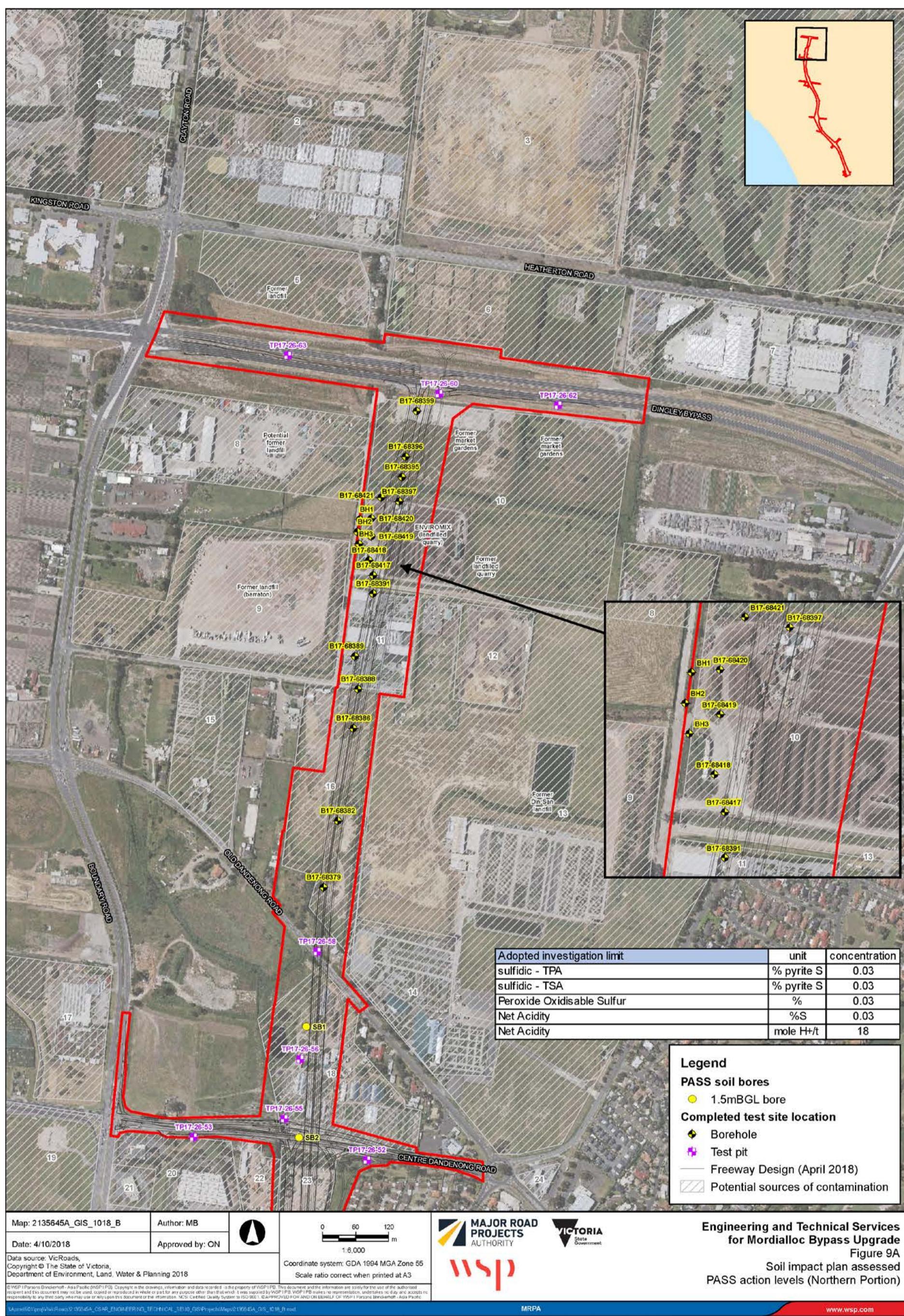
7.4 Soil impact plan assessed against IWRG criteria (Map 2 of 3 – Central portion)



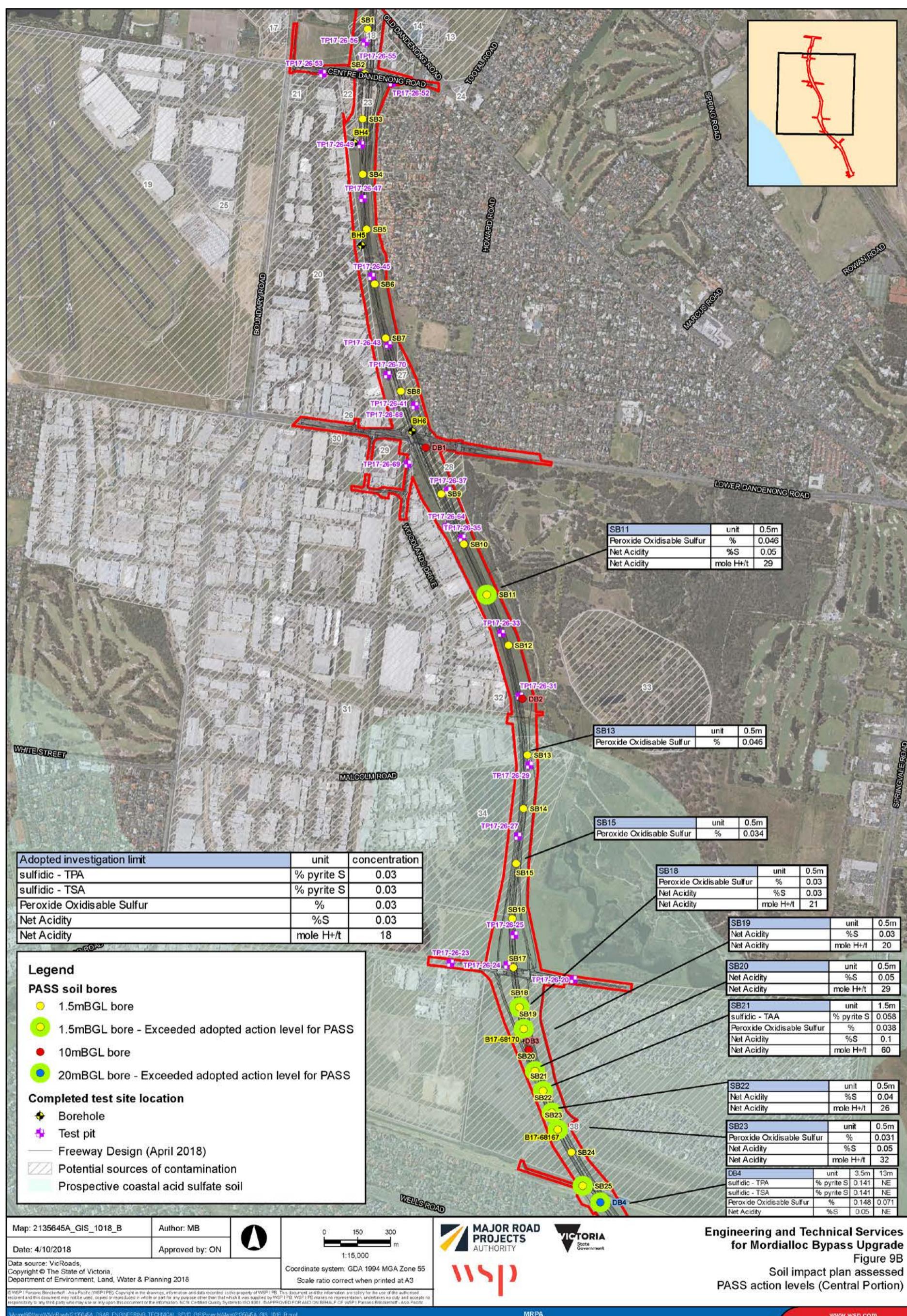
7.4 Soil impact plan assessed against IWRG criteria (Map 3 of 3 – Southern portion)



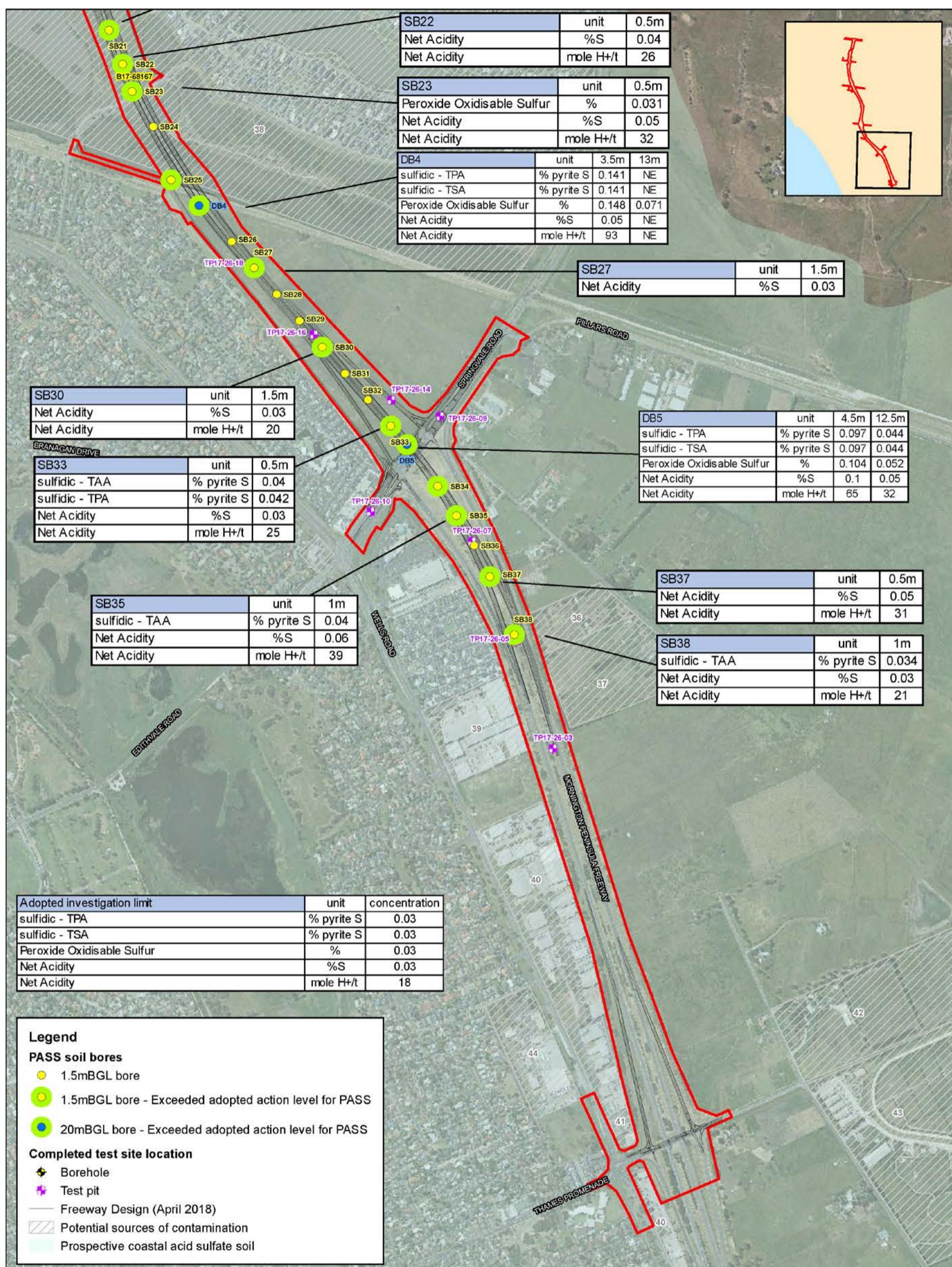
7.5 Soil impact plan assessed PASS action levels (Map 1 of 3 – Northern portion)



7.5 Soil impact plan assessed PASS action levels (Map 2 of 3 – Central portion)



7.5 Soil impact plan assessed PASS action levels (Map 3 of 3 – Southern portion)



Map: 2135645A_GIS_1018_B Author: MB
Date: 4/10/2018 Approved by: ON

Data source: VicRoads,
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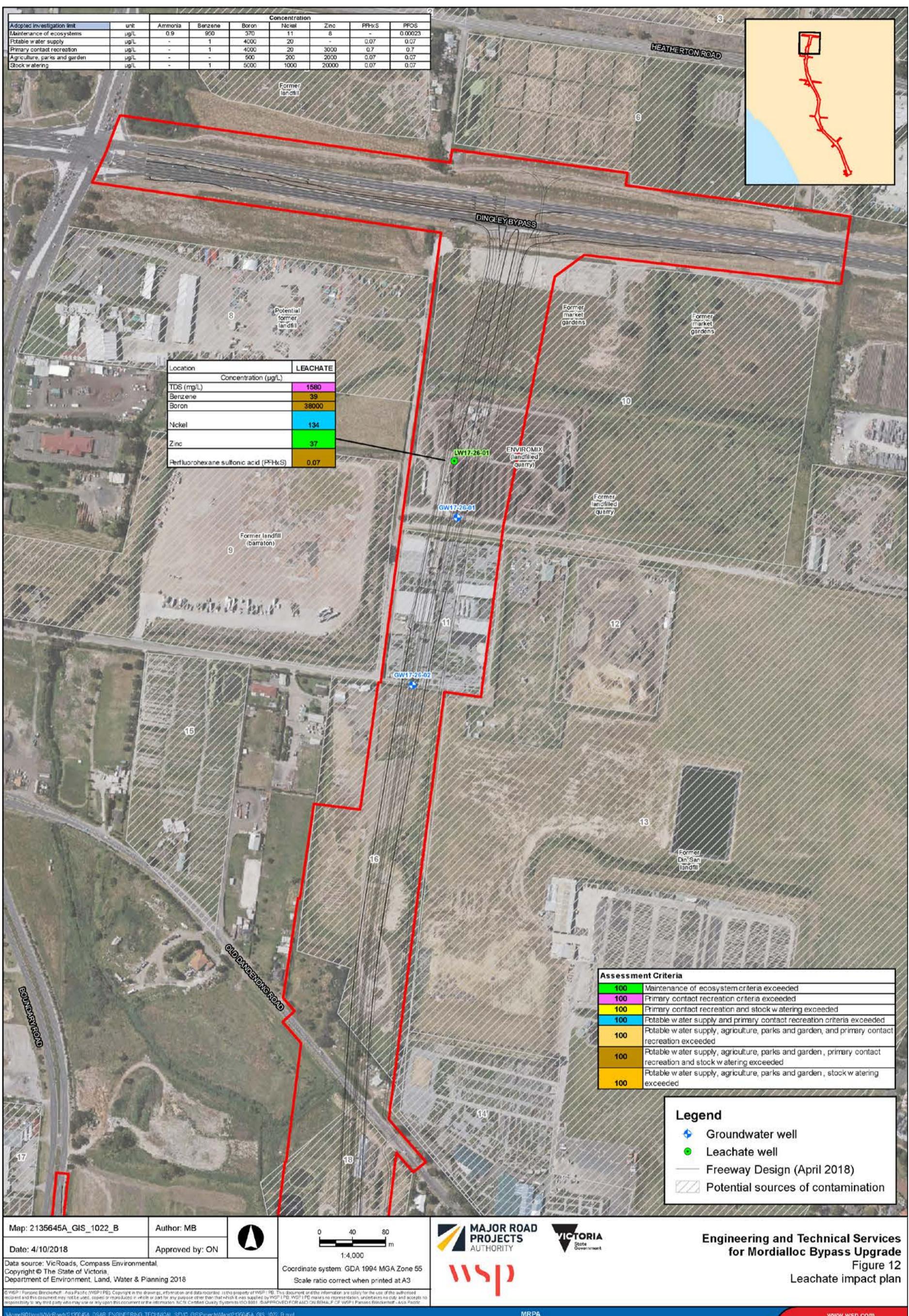
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1:10,000
Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3

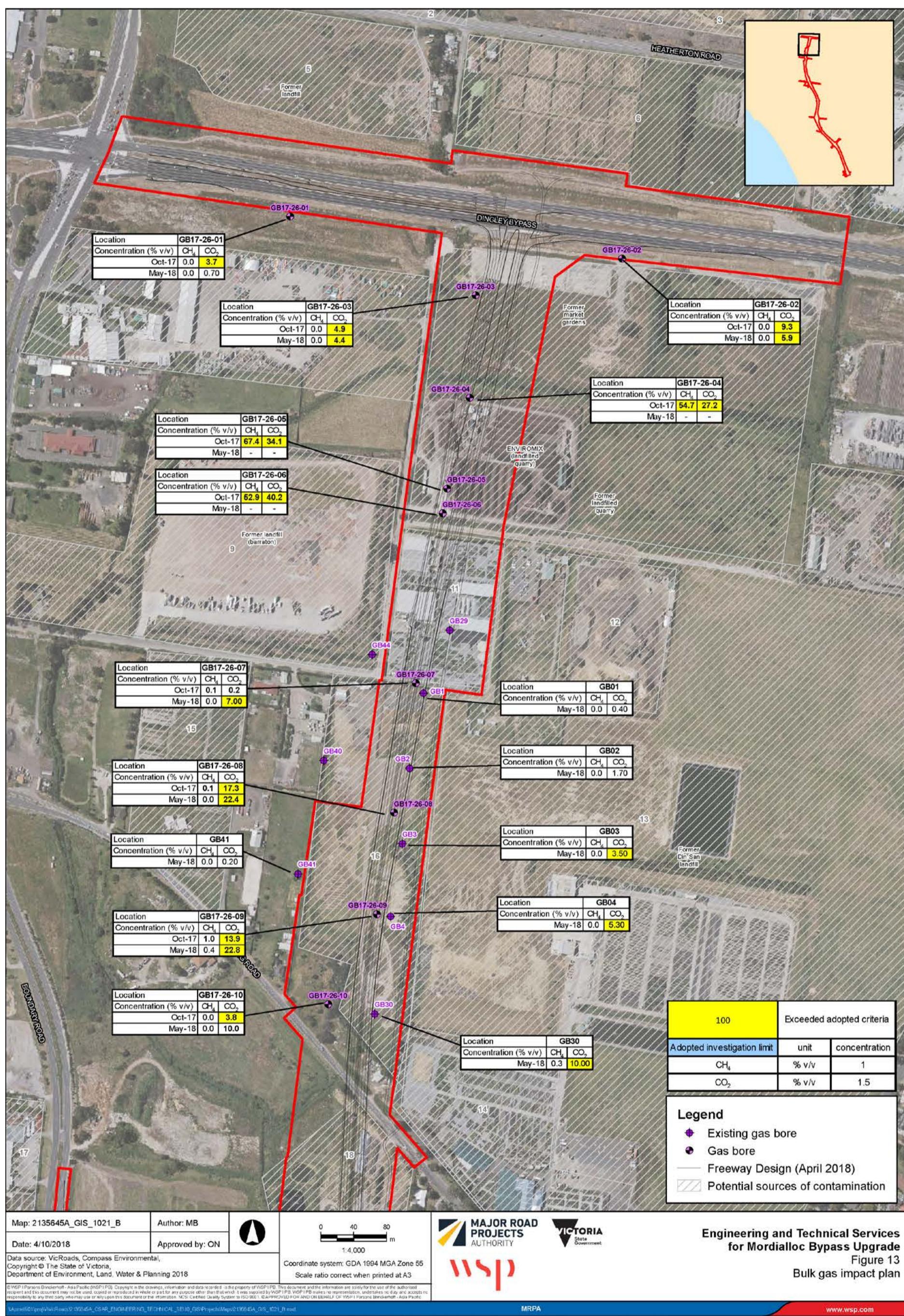
MAJOR ROAD PROJECTS AUTHORITY

VICTORIA
State Government

WSP

Engineering and Technical Services for Mordialloc Bypass Upgrade
Figure 9C
Soil impact plan assessed PASS action levels (Southern Portion)





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