1 Introduction

This chapter provides a broad overview of the project and why it is required. It also identifies the purpose and structure of this Environmental Impact Statement (EIS).

1.1 The proposed project

Roads and Maritime Services NSW (RMS) is seeking approval under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to replace the existing bridge over the Hawkesbury River at Windsor (known as Windsor bridge). The existing bridge needs to be replaced as its structural integrity is deteriorating with age and it is no longer cost-effective to maintain.

RMS proposes to replace the existing Windsor bridge over the Hawkesbury River. The Windsor bridge replacement project would involve:

- Construction of a new bridge over the Hawkesbury River at Windsor, around 35 metres downstream of the existing Windsor bridge.
- Construction of new approach roads and intersections to connect the new bridge to existing road network.
- Modifications to local roads and access arrangements, including changes to the Macquarie Park access and connection of The Terrace.
- Construction of pedestrian and cycling facilities, including a shared pedestrian/cycle pathway for access to and across the new bridge.
- Removal and backfilling of the existing bridge approach roads.
- Demolition of the existing Windsor bridge.
- Urban design and landscaping works, including within the parkland area of Thompson Square and adjacent to the northern intersection of Wilberforce Road, Freemans Reach Road and the Macquarie Park access road.
- Ancillary works such as public utility adjustments, water management measures and scour protection works.

This EIS seeks approval for the project elements described above. The EIS has been prepared based on a concept design. If approved, a further detailed design process will follow which may include variations to the concept design.

Figure 1-1 provides a photo montage of the replacement bridge while key elements of the project are shown in **Figure 1-2**. A detailed description of the project is provided in Chapter 5.

1.2 Project location and context

The project is located at Windsor in the Hawkesbury local government area about 57 kilometres north west of Sydney. The township of Windsor is located on the south bank of the Hawkesbury River at the foot of the Blue Mountains. The proposed bridge works and associated road works that make up the project extend from the intersection of Freemans Reach Road and Wilberforce Road in the north to the intersection of Macquarie Street and Bridge Street in the south. The location and regional context of the project are shown in **Figure 1-3**.

The area surrounding Windsor is predominantly rural, although there is extensive and expanding urban development to the south and west of the town. Windsor is a major historic town, with European settlement dating back to the late 1700s. The town contains numerous buildings and sites of historic heritage significance, which are a key feature of its character. The existing Windsor bridge was opened in 1874 and is the oldest existing bridge across the Hawkesbury River. It provides an important local link for communities on each side of the river, as well as an important regional link between western Sydney, the Blue Mountains and the Hunter region. Around 19,000 vehicles use the bridge each day, with around seven per cent of these being heavy vehicles.

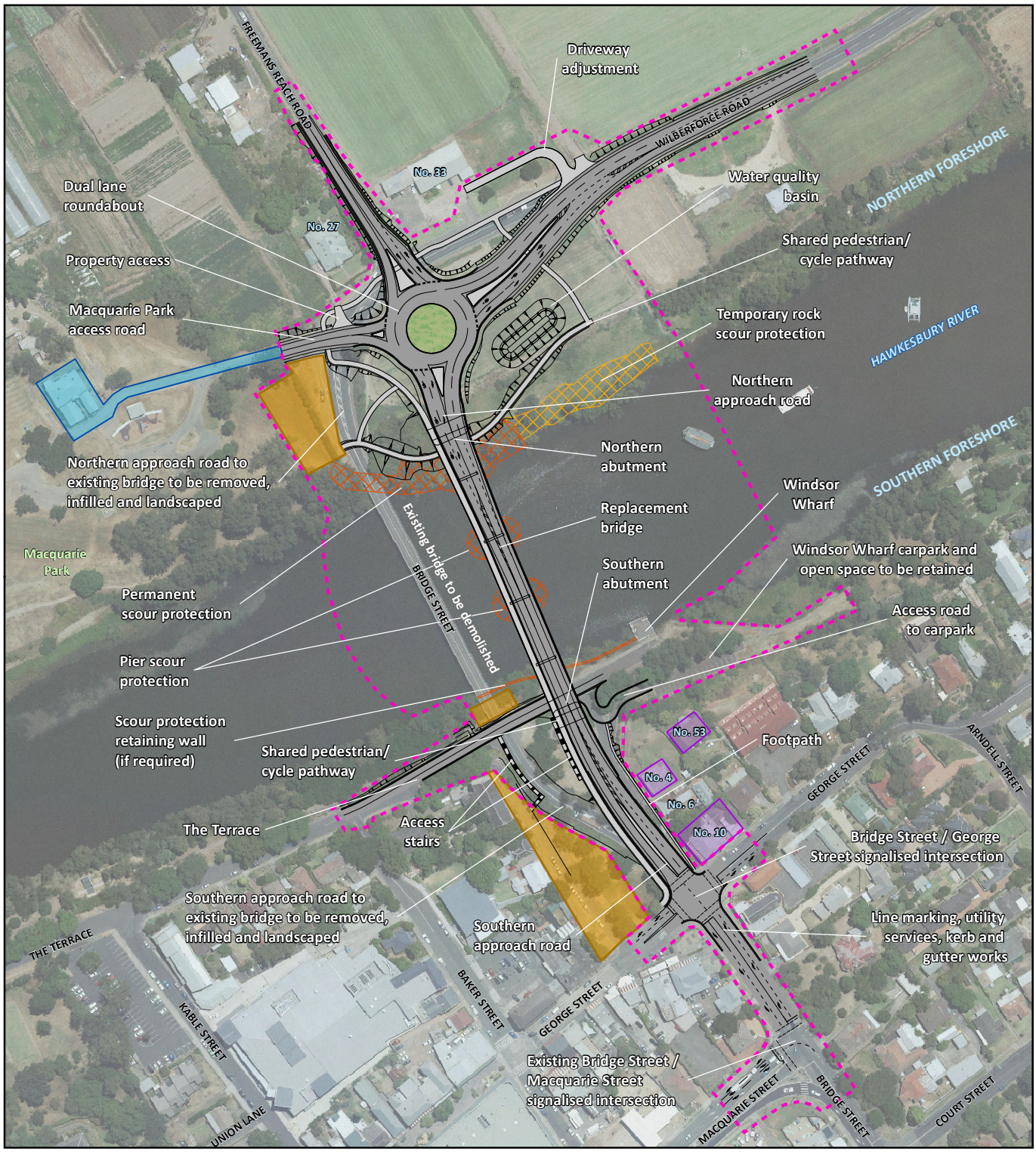
Parts of the existing bridge are 138 years old and are deteriorating as a result of age and heavy use. Elements of the bridge have deteriorated substantially and RMS has assessed that it is not practical to replace or repair these elements. The existing bridge and adjacent intersections no longer meet the demands of current peak hour traffic volumes or current road standards. The level of maintenance required to maintain adequate road safety is no longer cost effective and it is therefore regarded that the bridge has reached the end of its economic life.

In June 2008, in recognition of the condition of the existing bridge, the NSW Government announced funding for a bridge replacement project. Following this announcement, RMS began preliminary investigations to assess potential bridge replacement options in consultation with the local community and stakeholders. The options considered and the results of the options assessment process are presented in Chapter 4.

RMS recognises that the project has the potential to have a range of adverse effects on the environment and community of Windsor, including but not limited to impacts on heritage, traffic and transport, landscape character, and the socio-economic environment. Furthermore, it is considered that the impacts of the project on historic heritage are likely to be significant, with direct impacts on State Heritage Register listed Thompson Square Conservation Area and other State and local heritage items.

Figure 1-1 Photomontage of the project from the southern bank

Figure 1-2 | Key project elements



LEGEND

- Concept design
- Construction work zone
- Permanent rock scour protection (if required)
- Temporary rock scour protection (if required)
- Properties requiring flood mitigation works. Works subject to further consultation with and agreement from affected property owners.
- Properties requiring noise mitigation works. Works that are feasible and reasonable would be subject to further consultation with and agreement from affected property owners.
- Works subject to further council and stakeholder consultation

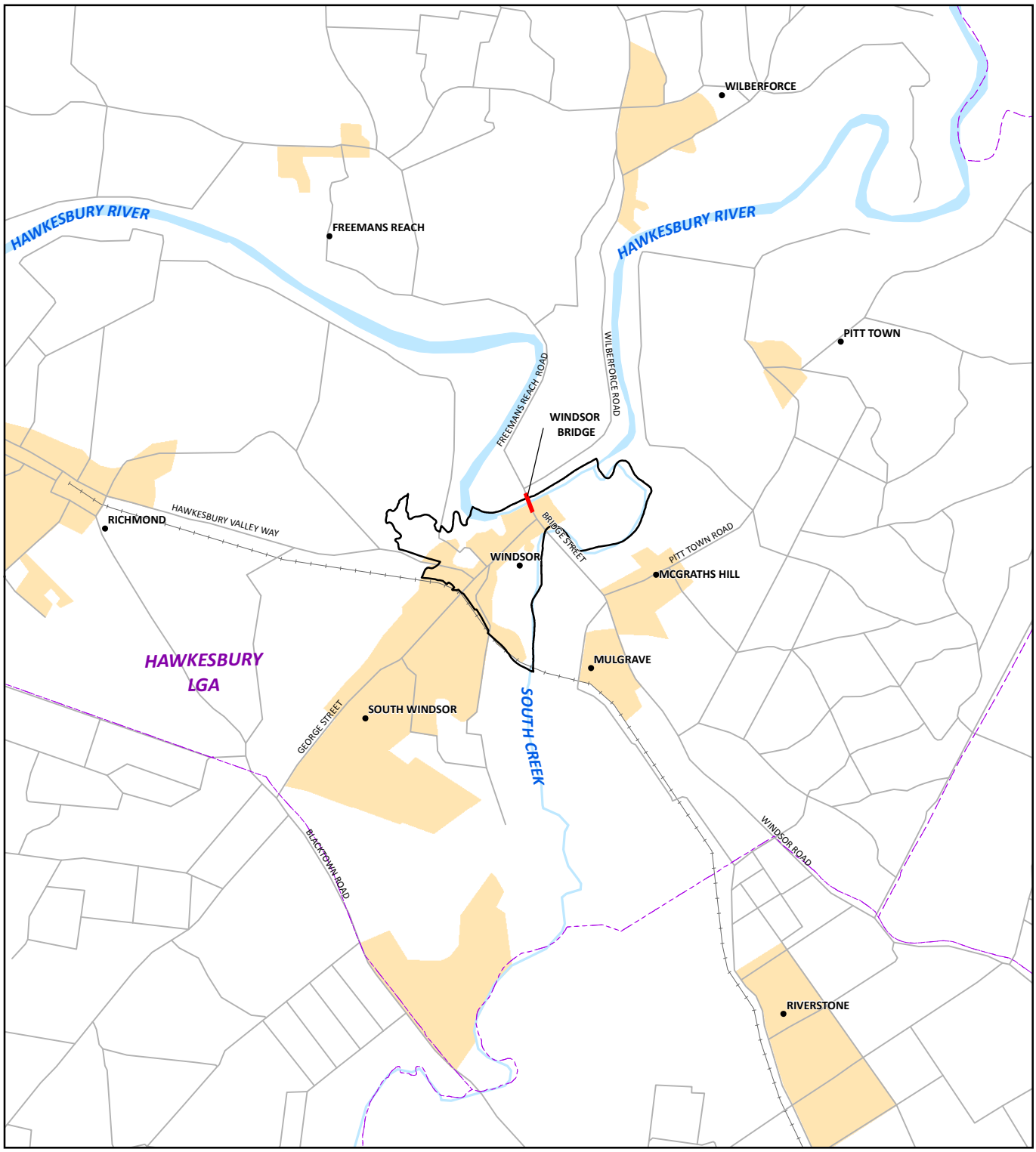
Indicative only – subject to detailed design

GDA 1994 | MGA Zone 56
A4 1:3,000

0 100
Metres

AUSIMAGE SKM

Figure 1-3 | Location and regional context of the project

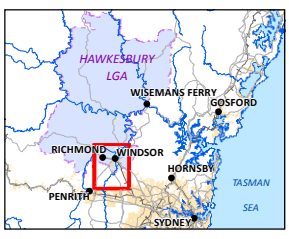


LEGEND

- Windsor State Suburb Boundary
- Urban area
- LGA boundary
- River
- Major road
- Railway

GDA 1994 | MGA Zone 56
A4 1:80,000

0 3
Kilometres



1.3 Structure of this Environmental Impact Statement

This EIS has been prepared to support RMS' application for approval of the project under Part 5.1 of the EP&A Act. It has been prepared in accordance with Part 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and the Environmental Assessment Requirements issued by the Director General of the Department of Planning and Infrastructure. The Director General's requirements and other requirements under the regulation including where they are addressed in the EIS are presented in Appendix A and Appendix B, respectively.

This EIS is divided into four volumes:

- Volume 1 – this report.
- Volume 2 – Historic and Aboriginal heritage working papers.
- Volume 3 – Visual Amenity, Urban Design and Landscape working paper.
- Volume 4 – all other working papers.

The working papers in Volumes 2, 3 and 4 document the methods and results of the specialist environmental studies that have been undertaken for the EIS. The key findings from the working papers are incorporated into the relevant chapters of this volume. Further detail on the contents of each volume is provided below.

1.3.1 Volume 1

This volume of the EIS is structured as follows:

- Introduction (this chapter).
- Assessment process (Chapter 2) – outlines the statutory requirements for the project and explains the steps in the assessment and approval process.
- Strategic justification and project need (Chapter 3) – provides the strategic context and outlines the need for and objectives of the project.
- Project development and alternatives (Chapter 4) – reviews the alternatives considered in developing the project.
- Description of the project (Chapter 5) – describes the scope of the project, the project elements, the design standards and criteria, the proposed construction process, and the likely staging of project delivery.
- Consultation (Chapter 6) – describes the community and stakeholder consultation undertaken and identifies the corresponding issues raised.
- Assessment of key issues (Chapter 7) – identifies the key environmental issues for the project, the potential environmental impacts in relation to these issues, and the proposed impact mitigation and management measures.
- Assessment of other issues (Chapter 8) – identifies the other environmental issues associated with the project, the associated potential environmental impacts, and the proposed impact mitigation and management measures.
- Environmental risk analysis (Chapter 9) – describes the environmental risk assessment applied to the project to identify and confirm the key issues.
- Summary of impact mitigation and management measures (Chapter 10) – collates the impact mitigation and management measures identified in Chapters 7 and 8.

- Justification and conclusion (Chapter 11) – provides a justification to the carrying out of the project and a summary of the main findings with respect to the potential environmental impacts and benefits.
- References (Chapter 12) – provides details of all documents and other information sources cited within the document.
- Appendix A - Director General's Requirements and checklist.
- Appendix B - Regulation checklist.
- Appendix C - Existing bridge technical investigation reports.

1.3.2 Appendices - Volume 2 to 4

The appendices containing the working papers have been divided into three separate volumes:

Volume 2

- Working paper 1 - State and local historic (terrestrial) heritage.
- Working paper 2 - Maritime heritage.
- Working paper 3 - Aboriginal heritage.

Volume 3

- Working paper 5 - Urban design and landscape concept.

Volume 4

- Working paper 4 - Traffic and transport.
- Working paper 6 - Noise and vibration.
- Working paper 7 - Soil, sediment, water and waste.
- Working paper 8 - Hydrology.
- Working paper 9 - Landuse, property and socio-economic.
- Working paper 10 - Flora and fauna.
- Working paper 11 - Air quality.