



Transport for NSW

Kamay Ferry Wharves

Environmental Impact Statement

June 2021



Acknowledgement of Country

We acknowledge and pay our respects to the Bidjigal and Gweagal clans who traditionally occupied Kamay (Botany Bay). We also wish to acknowledge and pay respects to all Elders, past and present.

Approved by Chris Ingrey, CEO of the La Perouse Local Aboriginal Land Council, June 2021.

Cover artwork

Danielle Leedie-Gray is a self-taught contemporary graphic artist and a descendant of the Bidjara and Wakka Wakka people from south west and east Queensland, Australia. The illustration tells the story of people coming together to work on a project significant to the local Aboriginal groups, Arup and Transport for NSW. The three main symbols used in the illustration represent the water flow, people (shown by the U Shapes), and meeting places (shown by concentric circles) around the Kamay Ferry Wharves Project, gathering people together for discussion.

Publication number: 21.128

ISBN: 978-1-922463-87-6

© Transport for NSW

June 2021

This document is and shall remain the property of Transport for NSW. No part of this document is to be copied, reproduced or distributed in any form or by any means without the prior written permission of TfNSW.

Disclaimer

This environmental impact statement has been prepared by Arup Australia Pty Ltd on behalf of and for the exclusive use of Transport for NSW for the purposes of an environmental impact statement in relation to the Kamay Ferry Wharves Project, and is subject to and issued in accordance with the agreement between Transport for NSW and Arup Australia Pty Ltd. Arup Australia Pty Ltd accepts no liability or responsibility to any third party who may rely on this report other than in accordance with the purpose for which this environmental impact statement has been prepared.

Certification

Submission of environmental impact statement

Prepared under Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW).

Environmental impact statement prepared by:

Name: Chris Fay Bronte Linkhorn

Qualifications: CenvP(IA), MSc, BSc. (Hons), C.WEM, MPlan, BA, M.EIANZ
C.SocEnv

Address: Arup
Level 5, Barrack Place, 151 Clarence Street
Sydney 2000

Responsible person:

Name: Andrew Dooley
Project Director – Kamay Ferry Wharves
Transport for NSW

Address: Transport NSW
27-29 Argyle Street
Parramatta NSW 2150

Proposed development:

Kamay Ferry Wharves Project

Address of the land on which the infrastructure to which the statement relates:

The La Perouse headland and Kurnell peninsula within Kamay Botany Bay National Park, located within Randwick City Council and Sutherland Shire Council local government areas.

Description of the infrastructure to which the statement relates:

Kamay Ferry Wharves

Environmental impact statement:

An environmental impact statement is attached addressing all matters in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW).

Declaration: I certify that I have prepared the contents of this environmental impact statement in response to the Secretary's environmental assessment requirements dated 4 May 2021 and the relevant provisions of Schedule 2 of the Environmental Planning and Assessment Regulation 2000. To the best of my knowledge the information contained in the environmental impact statement is not false or misleading.

Signature:



Name: Chris Fay Bronte Linkhorn

Date: June 2021

BLANK PAGE

Table of Contents

Volume 1 – Environmental Impact Statement

Glossary of terms and abbreviations	i
Executive summary	vii
Chapter 1 Introduction	1-1
1.1 The proposed project	1-1
1.2 Project location and environment	1-2
1.3 Structure of this environmental impact statement	1-7
Chapter 2 Assessment process	2-1
2.1 Approval framework	2-1
2.2 Land ownership and management	2-3
2.3 Other legislation	2-6
Chapter 3 Strategic justification and project need	3-1
3.1 NSW and Australian strategic planning and policy framework	3-1
3.2 Project need	3-7
3.3 Project objectives	3-9
3.4 Project benefits	3-9
3.5 Statement of strategic need	3-12
Chapter 4 Project development and alternatives	4-1
4.1 Project development overview	4-1
4.2 Stakeholder engagement	4-1
4.3 Alternatives	4-1
4.4 Options development	4-2
4.5 Minimising environmental impacts	4-11
4.6 The project	4-11
Chapter 5 Project description	5-1
5.1 Project scope	5-1
5.2 The completed project	5-5
5.3 Design criteria	5-20
5.4 Design, place and movement principles and objectives	5-20
5.5 Construction works	5-30
Chapter 6 Consultation	6-1
6.1 Consultation objectives and strategy	6-1
6.2 Consultation undertaken	6-2
6.3 Summary of issues and views raised	6-6

6.4 Future consultation	6-17
Chapter 7 Aboriginal heritage	7-1
7.1 Assessment methodology.....	7-1
7.2 History	7-2
7.3 Existing environment.....	7-3
7.4 Assessment of potential impacts	7-6
7.5 Environmental management measures.....	7-11
Chapter 8 Non-Aboriginal heritage	8-1
8.1 Assessment methodology.....	8-1
8.2 Existing environment.....	8-2
8.3 Assessment of potential impacts	8-13
8.4 Environmental management measures.....	8-21
Chapter 9 Underwater heritage	9-1
9.1 Assessment methodology.....	9-1
9.2 Existing environment.....	9-2
9.3 Assessment of potential impacts	9-11
9.4 Environmental management measures.....	9-14
Chapter 10 Marine biodiversity	10-1
10.1 Assessment methodology.....	10-1
10.2 Existing environment.....	10-6
10.3 Assessment of potential impacts	10-17
10.4 Environmental management measures.....	10-25
Chapter 11 Terrestrial biodiversity	11-1
11.1 Assessment methodology.....	11-1
11.2 Existing environment.....	11-5
11.3 Assessment of potential impacts	11-19
11.4 Environmental management measures.....	11-25
Chapter 12 Traffic and transport.....	12-1
12.1 Assessment methodology.....	12-1
12.2 Existing environment.....	12-2
12.3 Assessment of potential impacts	12-12
12.4 Environmental management measures.....	12-17
Chapter 13 Landscape character and visual amenity	13-1
13.1 Assessment methodology.....	13-1
13.2 Existing environment.....	13-2
13.3 Assessment of potential impacts	13-14
13.4 Environmental management measures.....	13-21

Chapter 14 Socioeconomic	14-1
14.1 Assessment methodology.....	14-1
14.2 Existing environment.....	14-3
14.3 Assessment of potential impacts	14-10
14.4 Environmental management measures.....	14-16
Chapter 15 Surface noise and vibration	15-1
15.1 Assessment methodology.....	15-1
15.2 Existing environment.....	15-1
15.3 Criteria.....	15-6
15.4 Assessment of potential impacts	15-6
15.5 Environmental management measures.....	15-11
Chapter 16 Underwater noise and vibration.....	16-1
16.1 Assessment methodology.....	16-1
16.2 Existing environment.....	16-2
16.3 Noise sources and criteria	16-3
16.4 Assessment of potential impacts	16-5
16.5 Environmental management measures.....	16-8
Chapter 17 Soil, water and contamination.....	17-1
17.1 Assessment methodology.....	17-1
17.2 Existing environment.....	17-2
17.3 Assessment of potential impacts	17-19
17.4 Environmental management measures.....	17-25
Chapter 18 Coastal processes	18-1
18.1 Assessment methodology.....	18-1
18.2 Existing environment.....	18-2
18.3 Assessment of potential impacts	18-9
18.4 Environmental management measures.....	18-13
Chapter 19 Climate change	19-1
19.1 Assessment methodology.....	19-1
19.2 Existing environment.....	19-4
19.3 Assessment of potential impacts	19-5
19.4 Environmental management measures.....	19-7
Chapter 20 Air quality.....	20-1
20.1 Assessment methodology.....	20-1
20.2 Existing environment.....	20-2
20.3 Assessment of potential impacts	20-6
20.4 Environmental management measures.....	20-10

Chapter 21 Greenhouse gas.....	21-1
21.1 Assessment methodology.....	21-1
21.2 Greenhouse gas emissions	21-2
21.3 Assessment of potential impacts	21-4
21.4 Environmental management measures.....	21-8
Chapter 22 Sustainability.....	22-1
22.1 Assessment methodology.....	22-1
22.2 Sustainability implementation	22-1
Chapter 23 Waste.....	23-1
23.1 Assessment methodology.....	23-1
23.2 Existing environment.....	23-1
23.3 Assessment of potential impacts	23-3
23.4 Environmental management measures.....	23-5
Chapter 24 Hazard and risk	24-1
24.1 Assessment methodology.....	24-1
24.2 Airspace	24-1
24.3 Navigational safety.....	24-2
24.4 Utilities.....	24-5
24.5 Spills.....	24-5
24.6 Environmental management measures.....	24-6
Chapter 25 Cumulative impacts.....	25-1
25.1 Assessment methodology.....	25-1
25.2 Identified projects.....	25-1
25.3 Assessment of potential cumulative impacts	25-2
25.4 Environmental management measures.....	25-3
Chapter 26 Environmental risk analysis	26-1
26.1 Overview	26-1
26.2 Risk analysis summary	26-1
Chapter 27 Project justification and conclusion.....	27-1
27.1 Justification	27-1
27.2 Conclusion	27-10
Chapter 28 References.....	28-1

Volume 2 – Appendices

- Appendix A Project synthesis and summary of environmental management measures
- Appendix B Secretary's environmental assessment requirements and checklist
- Appendix C Environmental Planning and Assessment Regulation 2000 checklist
- Appendix D Consultation Process and Outcomes Report
- Appendix E Aboriginal Cultural Heritage Assessment Report
- Appendix F Statement of Heritage Impact
- Appendix G Underwater Cultural Heritage Assessment Report
- Appendix H Marine Biodiversity Assessment Report
- Appendix I Biodiversity Development Assessment Report
- Appendix J Arboricultural Impact Assessment
- Appendix K Landside Traffic and Transport Assessment Report
- Appendix L Navigational Safety Assessment
- Appendix M Landscape Character and Visual Impact Assessment Report
- Appendix N Socioeconomic Impact Assessment Report
- Appendix O Surface Noise and Vibration Impact Assessment Report
- Appendix P Underwater Noise Assessment
- Appendix Q Targeted Site Investigation
- Appendix Q1 Preliminary Site Investigation – La Perouse
- Appendix Q2 Preliminary Site Investigation – Kurnell
- Appendix R Groundwater Assessment Report
- Appendix S Surface Water Assessment Report
- Appendix T Coastal Processes Memorandum
- Appendix U Climate Change Assessment
- Appendix V Air Quality Assessment Report
- Appendix W Greenhouse Gas Calculations
- Appendix X Transport for NSW Environmental Record
- Appendix Y Transport for NSW Transport Environment and Sustainability Policy