Appendices

Appendix A – Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 20 Jul 2018 10:45:19

Reference: LS003864

Address: Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Table of Contents

Location Confidences 2
Dataset Listings 3
Site Location Aerial 5
Contaminated Land & Waste Management Facilities 6
EPA PFAS Investigation Program 10
EPA Other Sites with Contamination Issues 11
EPA Current Licensed Activities 12
EPA Delicensed & Former Licensed Activities 15
UPSS Sensitive Zones 17
Historical Business Activities 18
Historical Aerial Imagery & Maps 45
Topographic Features 57
Elevation Contours 62
Hydrogeology & Groundwater 63
Geology 75
Naturally Occurring Asbestos Potential 77
Soils 78
Acid Sulfate Soils 82
Dryland Salinity 86
Mining Subsidence Districts 87
State Environmental Planning 88
Local Environmental Planning 90
Heritage 93
Natural Hazards 94
Ecological Constraints 95
Terms & Conditions 106

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

Dataset Listing

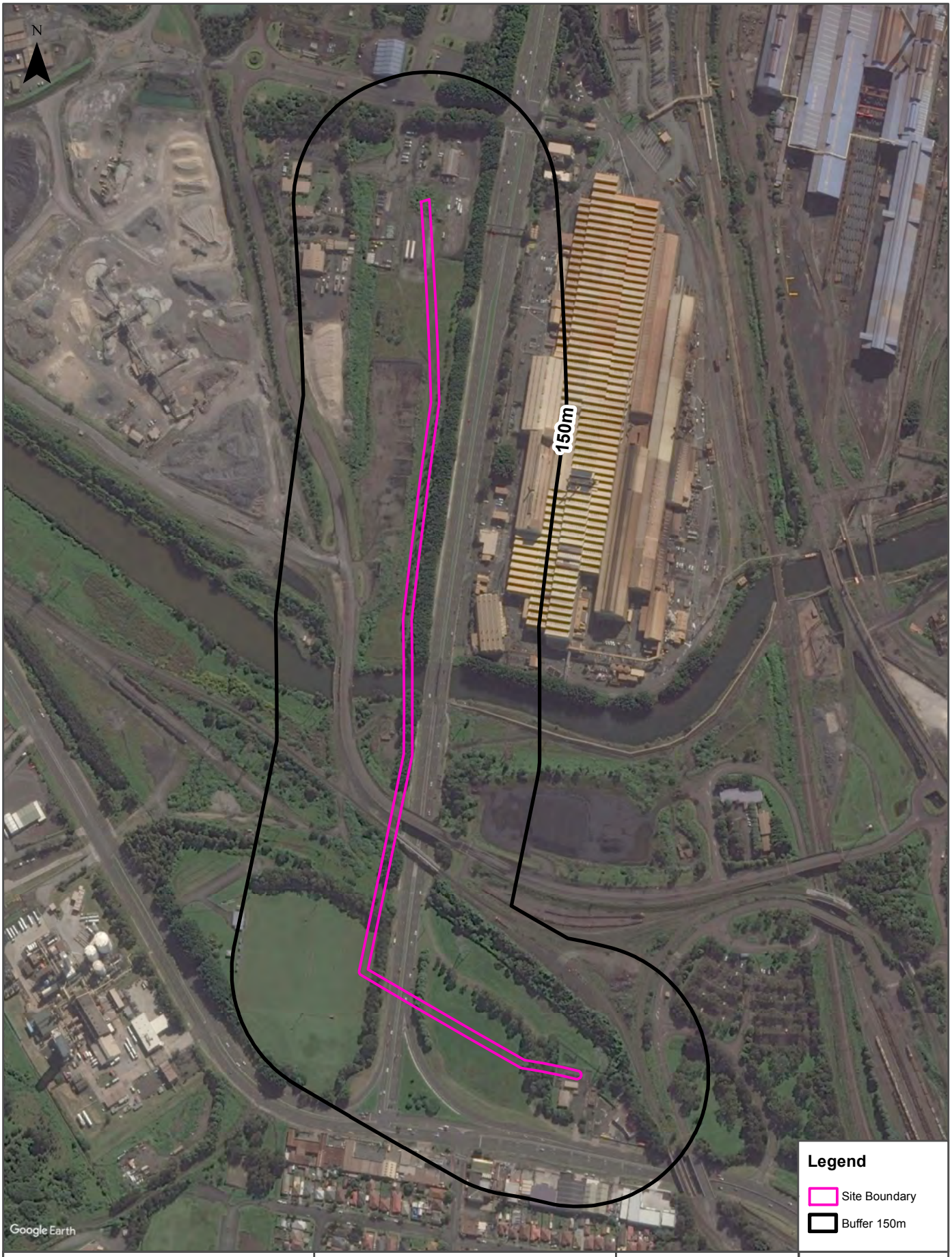
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	Dept. Finance, Services & Innovation	20/07/2018	20/07/2018	Daily	-	-	-	-
Topographic Data	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	06/07/2018	02/07/2018	Monthly	1000	3	4	8
Contaminated Land Records of Notice	Environment Protection Authority	06/07/2018	06/07/2018	Monthly	1000	1	1	2
Former Gasworks	Environment Protection Authority	04/07/2018	11/10/2017	Monthly	1000	0	0	0
National Waste Management Site Database	Geoscience Australia	04/07/2018	07/03/2017	Quarterly	1000	0	0	1
EPA PFAS Investigation Program	Environment Protection Authority	04/07/2018	04/07/2018	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	11/01/2018	11/01/2018	Quarterly	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	20	26	34
Delicensed POEO Activities still Regulated by the EPA	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	1	1	3
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	3	3	5
UPSS Environmentally Sensitive Zones	Environment Protection Authority	14/04/2015	12/01/2010	As required	1000	1	1	1
UBD Business Directory 1982 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	18
UBD Business Directory 1982 (Road & Area Matches)	Hardie Grant			Not required	150	-	170	175
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	1
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	167	183
UBD Business Directory 1961 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1961 (Road & Area Matches)	Hardie Grant			Not required	150	-	129	143
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	47	53
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	17	17
Points of Interest	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	1	16
Tanks (Areas)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	4
Tanks (Points)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	3
Major Easements	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	1000	5	5	28
State Forest	Dept. Finance, Services & Innovation	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	18/01/2018	30/09/2017	Annually	1000	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Botany Groundwater Management Zones	NSW Department of Primary Industries	15/03/2018	01/10/2005	As required	1000	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	21/03/2016	01/12/2015	Annually	2000	0	1	97
Geological Units 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	2	-	4
Geological Structures 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Soil Landscapes	NSW Office of Environment & Heritage	12/08/2014		None planned	1000	2	-	5
Atlas of Australian Soils	CSIRO	19/05/2017	17/02/2011	As required	1000	1	1	1
Standard Local Environmental Plan Acid Sulfate Soils	NSW Planning and Environment	07/10/2016	07/10/2016	As required	500	1	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	2	2	2
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Office of Environment & Heritage	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	Dept. Finance, Services & Innovation	13/07/2017	01/07/2017	As required	1000	0	0	0
SEPP 14 - Coastal Wetlands	NSW Planning and Environment	17/12/2015	24/10/2008	Annually	1000	0	0	0
SEPP 26 - Littoral Rainforest	NSW Planning and Environment	17/12/2015	05/02/1988	Annually	1000	0	0	0
SEPP 71 - Coastal Protection	NSW Planning and Environment	17/12/2015	01/08/2003	Annually	1000	0	0	1
SEPP Major Developments 2005	NSW Planning and Environment	09/03/2013	25/05/2005	Under Review	1000	1	1	1
SEPP Strategic Land Use Areas	NSW Planning and Environment	01/08/2017	28/01/2014	Annually	1000	0	0	0
LEP - Land Zoning	NSW Planning and Environment	11/04/2018	16/03/2018	Quarterly	1000	1	1	11
LEP - Minimum Subdivision Lot Size	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Height of Building	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	1	-	-
LEP - Floor Space Ratio	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Application	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	1	-	-
LEP - Land Reservation Acquisition	NSW Planning and Environment	04/04/2018	09/03/2018	Quarterly	0	0	-	-
State Heritage Items	NSW Office of Environment & Heritage	04/04/2018	30/09/2016	Quarterly	1000	0	0	0
Local Heritage Items	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	1000	0	0	0
Bush Fire Prone Land	NSW Rural Fire Service	10/05/2018	23/01/2018	Quarterly	1000	0	0	0
Native Vegetation of the Illawarra Escarpment & Coastal Plain	NSW Office of Environment & Heritage	20/05/2015	04/08/2011	Unknown	1000	2	3	13
RAMSAR Wetlands	Commonwealth of Australia Department of the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	1	1	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	1	2	7
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	19/07/2018	19/07/2018	Daily	10000	-	-	-

Aerial Imagery 2017

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



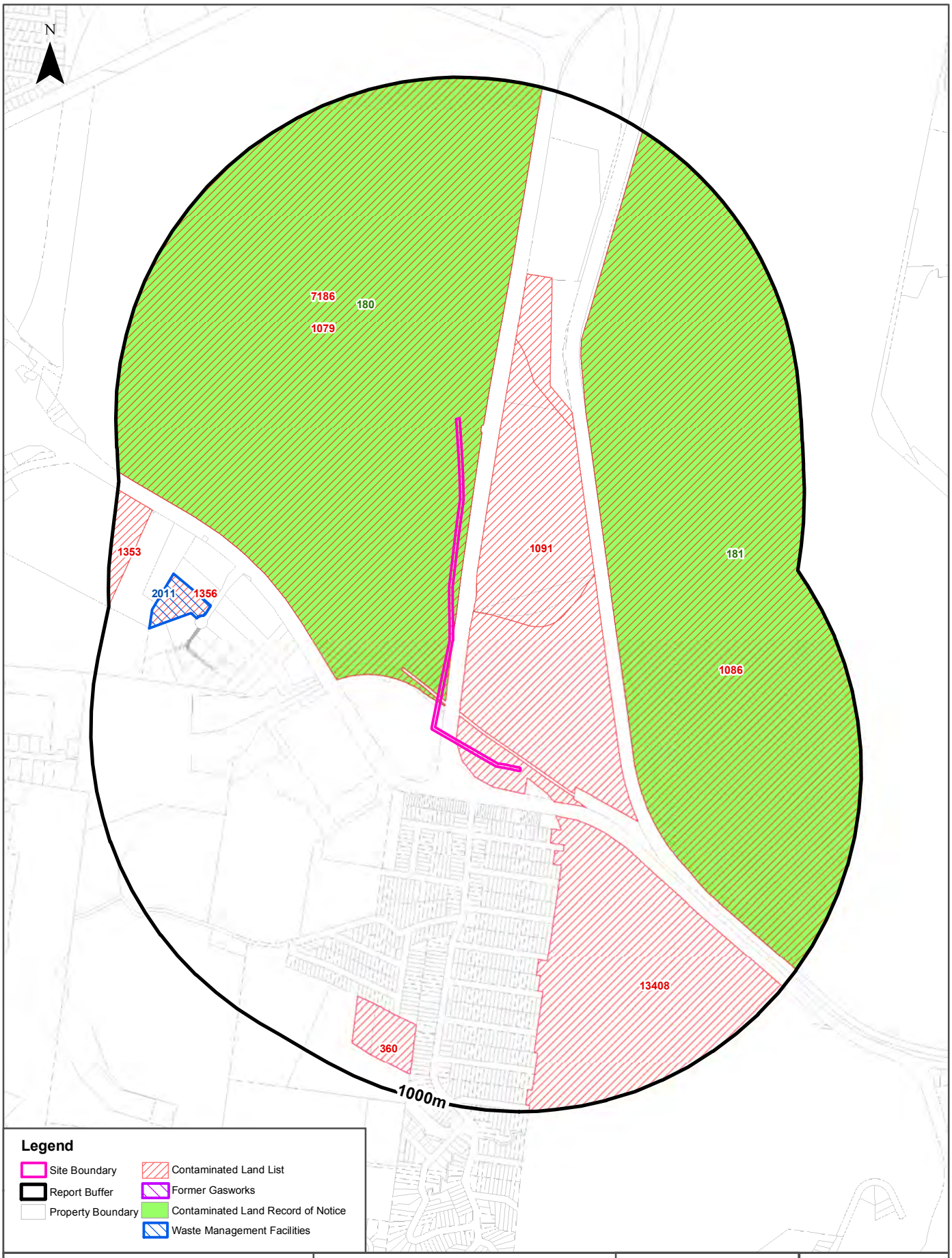
Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 17 July 2018

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1079	BHP Area 21	Springhill Road	Port Kembla	Metal Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	0m	Onsite
7186	Port Kembla Steelworks Recycling Area	Springhill Road	Port Kembla	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1086	No 2 Steelworks	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1091	Port Kembla Springhill Works	Springhill Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	60m	North East
13408	Port Kembla Steelworks - No.1 Works Site	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	167m	South East
1356	Veolia Environmental Services	9 Waynote Place	Unanderra	Other Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	700m	West
360	Cringila Public School	Sheffield Street	Cringila	Landfill	N/A - Site no longer on EPA Contaminated Land List	Previous EPA List	Premise Match	785m	South
1353	Endeavour Energy Springhill Field Service Centre	195 Five Island Road	Unanderra	Other Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	892m	West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.

EPA site management class	Explanation
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
180	BHP Area 21	Springhill Road	Port Kembla	1 former	3121	Premise Match	0m	Onsite
181	No 2 Steelworks	Five Islands Road	Port Kembla	4 former	3337	Premise Match	332m	East

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
2011	Transpacific Industries / Cleanaway	Transpacific Industries	10-12 Waynote Place	Unanderra	Multi-Purpose		Operational	Operational		Premise Match	700 m	West

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

EPA PFAS Investigation Program

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

EPA Other Sites with Contamination Issues

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

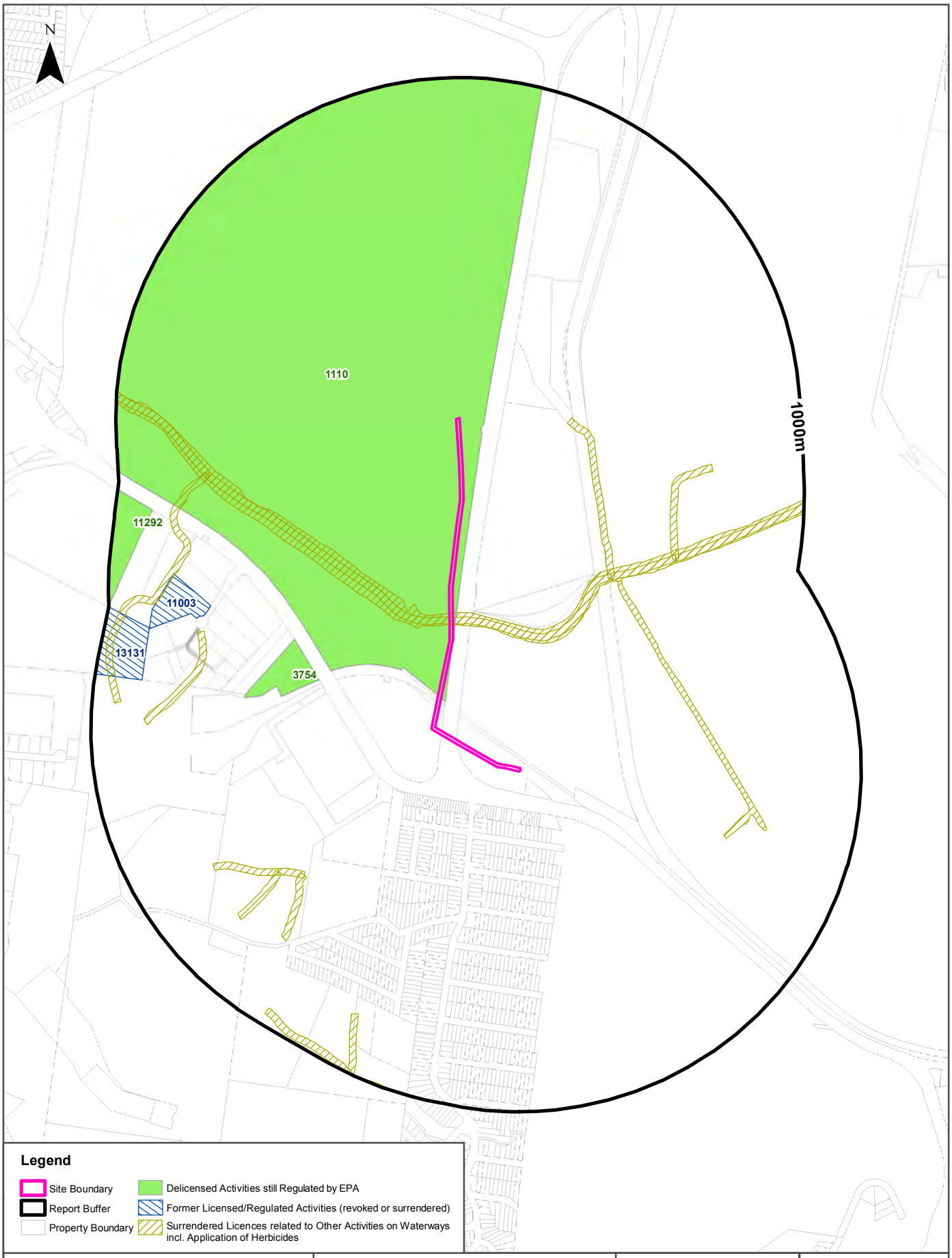
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Agricultural fertiliser (inorganic) production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime handling	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coal works	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coke production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Crushing, grinding or separating	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Dangerous goods production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	General chemicals storage	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Generation of electrical power from gas	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Iron or steel production (iron ore)	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Mineral processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Railway systems activities	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of general waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of waste tyres	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Scrap metal processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - other types of waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - waste tyres	Premise Match	0m	Onsite
3142	AUSTRALIAN RAIL TRACK CORPORATION LIMITED		GPO BOX 14, SYDNEY, NSW 2001		Railway systems activities	Network of Features	0m	Onsite

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
13421	JOHN HOLLAND RAIL PTY LTD		PO Box 215 , PARRAMATTA, NSW 2124		Railway systems activities	Road Match	0m	Onsite
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Chemical storage waste generation	Premise Match	60m	North East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal coating	Premise Match	60m	North East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal processing	Premise Match	60m	North East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Non-thermal treatment of hazardous and other waste	Premise Match	60m	North East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Recovery of waste oil	Premise Match	60m	North East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	60m	North East
10095	BOC LIMITED		147 FIVE ISLANDS ROAD	CRINGILA	Dangerous goods production	Premise Match	208m	South West
10095	BOC LIMITED		147 FIVE ISLANDS ROAD	CRINGILA	General chemicals storage	Premise Match	208m	South West
20870	BENEDICT RECYCLING PTY LIMITED		171-173 Five Islands Road, UNANDERRA, NSW 2526		Recovery of general waste	Premise Match	446m	West
20870	BENEDICT RECYCLING PTY LIMITED		171-173 Five Islands Road, UNANDERRA, NSW 2526		Waste storage - other types of waste	Premise Match	446m	West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Contaminated soil treatment	Premise Match	700m	West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Non-thermal treatment of hazardous and other waste	Premise Match	700m	West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Recovery of general waste	Premise Match	700m	West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	700m	West

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
1110	BITUPAVE LTD	BORAL ASPHALT	SPRINGHILL ROAD	PORT KEMBLA	Bitumen mixing	Premise Match	0m	Onsite
3754	BORAL RESOURCES (COUNTRY) PTY. LIMITED	BORAL COUNTRY - CONCRETE & QUARRIES	PRT LOTS 1 & 19 FIVE ISLANDS ROAD	PORT KEMBLA	Concrete works	Premise Match	351m	West
11292	ENDEAVOUR ENERGY	INTEGRAL ENERGY SPRINGHILL TRANSMISSION SUBSTATION	GLASTONBURY AVENUE	UNANDERRA	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	892m	West

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
11003	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	10-16 WAYNOTE PLACE, UNANDERRA, NSW 2526	Surrendered	03/10/2000	Non-thermal treatment of hazardous and other waste	Premise Match	700m	West
13131	SHINAGAWA REFRACTORIES AUSTRALASIA PTY LTD	23 Glastonbury Avenue, UNANDERRA, NSW 2526	Surrendered	11/09/2009	Ceramics production	Premise Match	861m	West

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

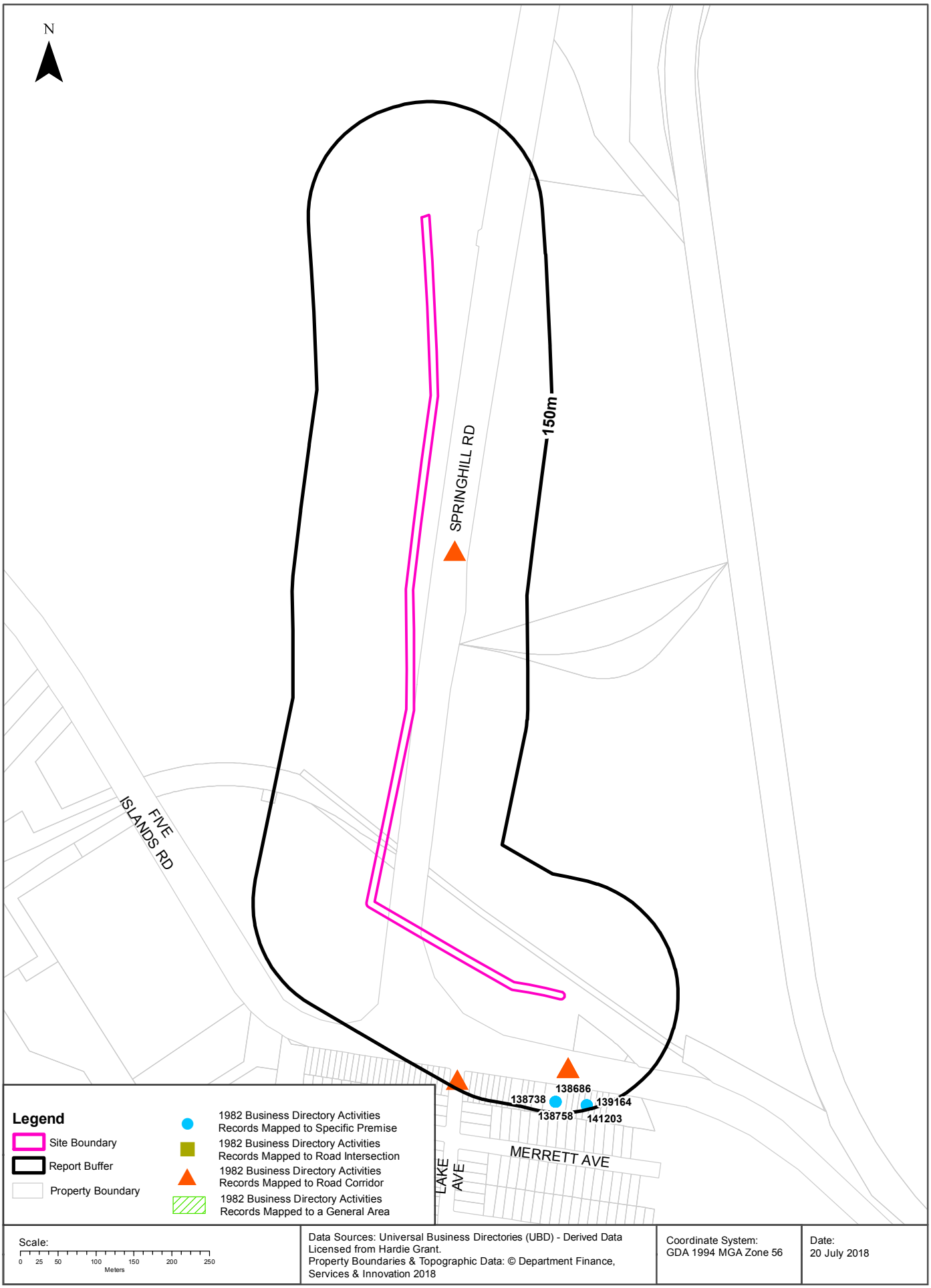
UPSS Sensitive Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



1982 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
CHEMICAL MFRS. &/OR IMPS. &/OR DISTS	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	139799	Premise Match	136m	South
PAINT - INDUSTRIAL PROTECTIVE COATING	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	143791	Premise Match	136m	South
PAINTERS SUPPLIES &/OR REQUISITES	K.W. industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	143851	Premise Match	136m	South
ADHESIVES - TAPE MFRS. &/OR DISTS	KW. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	138738	Premise Match	136m	South
ADHESIVES MFRS. &/OR DISTS	KW. Industries Pty. Ltd., 59 Frye Islands Rd., Cringila., Wollongong	138736	Premise Match	136m	South
AIR COMPRESSORS &/OR EQUIPMENT MFRS. &/OR DISTS	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	138758	Premise Match	136m	South
CLEANSER &/OR CLEANING PREPARATIONS MFRS. &/OR DISTS	K.W. Industries Pty. Ltd., 59 Five islands Rd., Cringila., Wollongong	139898	Premise Match	136m	South
MOTOR ACCESSORIES &/OR SPARE PARTS - WHOLESALE	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	142973	Premise Match	136m	South
MOTOR PANEL BEATERS &/OR PAINTERS SUPPLIES	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	143516	Premise Match	136m	South
SPRAYING EQUIPMENT MFRS. &/OR DISTS	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	145011	Premise Match	136m	South
ABRASIVE DISTS. &/OR MERCHANTS	KW. Industries Pty. Ltd., 59 Five Islands Rd., Cringila., Wollongong	138686	Premise Match	136m	South
MOTOR BODY BUILDERS SUPPLIES.	K.W. Industries Pty. Ltd., 59 Five Islands Rd., Cringila. , Wollongong	142996	Premise Match	136m	South
BOILERMAKERS	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	139164	Premise Match	143m	South
STEEL FABRICATORS.	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	145102	Premise Match	143m	South
WELDERS - ELECTRIC &/OR OXY	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	145704	Premise Match	143m	South
ENGINEERS - GENERAL &/OR MANUFACTURING &/OR MECHANICAL	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	140872	Premise Match	143m	South
FITTERS &/OR TURNERS	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	141203	Premise Match	143m	South
STEEL ERECTORS	Eglo Engineering Pty. Ltd., 45 Five Islands Rd., Cringila., Wollongong	145074	Premise Match	143m	South

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Business Directory Records
Road or Area Matches

Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS - PRE-FABRICATED MFRS. &/OR DISTS	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	139433	Road Match	0m
STEEL FABRICATORS.	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	145118	Road Match	0m
CARRIERS &/OR CARTAGE CONTRACTORS	Tex Liquid Transport Pty. Ltd., Springhill Rd., Coniston., Wollongong	139761	Road Match	0m
ELECTRICAL CONTRACTORS -LICENSED	Allmen Industrial Corporation Pty. Ltd. Five Islands Rd., Port Kembla., Wollongong	140603	Road Match	62m
HIRING SERVICES	Allmen Industrial Corporation Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	142022	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Ampol Cringila, Five Islands Rd.: Cringila., Wollongong	143215	Road Match	62m
STEEL FABRICATORS.	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145093	Road Match	62m
STEEL MERCHANTS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145139	Road Match	62m
STEEL MERCHANTS - STRUCTURAL.	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145151	Road Match	62m
STEEL MFRS. &/OR DISTS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145136	Road Match	62m
TINPLATE IMPS. &/OR MERCHANTS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145438	Road Match	62m
PIPE BENDERS &/OR FABRICATORS	Australian Iron & Steel Pty. Ltd.. Five Islands Rd.. Port Kembla., Wollongong	144048	Road Match	62m
CARRIERS &/OR CARTAGE CONTRACTORS	Aztec Transport, Five Islands Rd., Port Kembla., Wollongong	139714	Road Match	62m
CARRIERS &/OR CARTAGE CONTRACTORS	Aztec Transport, Five Islands Rd., Unanderra., Wollongong	139713	Road Match	62m
BLUE METAL SUPPLIES	Blue Metal Industries, Five Islands Rd., Cringila., Wollongong	139140	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	BP South Pacific, 65 Five Islands Rd., Cringila,., Wollongong	143244	Road Match	62m
ELECTRIC SWITCH &/OR CONTROL GEAR - MFRS. &/OR DISTS	Cable Makers Aust Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140577	Road Match	62m
ELECTRODES - WELDER MFRS. &/OR DISTS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila., Wollongong	140709	Road Match	62m
GASES - INDUSTRIAL MFRS. &/OR DISTS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila., Wollongong	141508	Road Match	62m
SAFETY EQUIPMENT MFRS. &/OR DISTS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila., Wollongong	144593	Road Match	62m
SPRAYING EQUIPMENT MFRS. &/OR DISTS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila., Wollongong	145009	Road Match	62m
WELDING EQUIPMENT &/OR SUPPLIES MFRS. &/OR DISTS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila., Wollongong	145743	Road Match	62m
MEDICAL SUPPLIES	Commonwealth Industrial Gases Ltd., Five Islands Rd.. Cringila., Wollongong	142662	Road Match	62m
STAINLESS STEEL MFRS. &/OR SUPPLIERS	Commonwealth Steel Co. Ltd., Five Islands Rd., Unanderra., Wollongong	145024	Road Match	62m
SPRING MFRS. &/OR DISTS	Commonwealth Steel Company Limited Five Islands Rd.. Unanderra., Wollongong	145014	Road Match	62m
EARTH MOVING &/OR ROADMAKING CONTRACTORS	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla. , Wollongong	140513	Road Match	62m
CARRIERS &/OR CARTAGE CONTRACTORS	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	139727	Road Match	62m
CONTRACTORS GENERAL	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140210	Road Match	62m
CRANES - MOBILE & TRAVEL TOWER - PROPRIETORS &/OR HIRERS	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140253	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
EARTH MOVING MACHINERY HIRERS	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140503	Road Match	62m
HAULAGE CONTRACTORS	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	141983	Road Match	62m
ROAD TRANSPORT SERVICES INTRASTATE	Darby, V. S. & Sons Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	144514	Road Match	62m
MOTOR CAR &/OR TRUCK DEALERS - NEW &/OR USED	Dunnell, A. G. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	143061	Road Match	62m
MOTOR ACCESSORIES &/OR SPARE PARTS - RETAIL	Dunnell, A. G. Pty. Ltd., Five Islands Rd.. Cringila., Wollongong	142912	Road Match	62m
CONTRACTORS GENERAL	Electric Power Transmission Pty. Ltd., Five Islands Rd., Unanderra., Wollongong	140213	Road Match	62m
ENGINEERS - STRUCTURAL	Electric Power Transmission Pty. Ltd., Five Islands Rd., Unanderra., Wollongong	141021	Road Match	62m
ENGINEERS - CONSTRUCTIONAL	Electric Power Transmission Pty. Ltd.. Five Islands Rd., Unanderra., Wollongong	140763	Road Match	62m
GOVERNMENT DEPARTMENTS	Electricity Commission of N.S.W., Five Islands Rd., Unanderra., Wollongong	141613	Road Match	62m
ELECTRIC POWER SUPPLIES	Electricity Commission of N.S.W., Five Islands Rd.. Unanderra,., Wollongong	140567	Road Match	62m
ENGINEERS - STRUCTURAL	Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	141028	Road Match	62m
MOTOR ACCESSORIES &/OR SPARE PARTS - RETAIL	F.M. Discount Spares, 303 Five Islands Rd., Cringila., Wollongong	142920	Road Match	62m
MARBLE &/OR GRANITE MERCHANTS	Forsyth, J. J., Five Islands Rd., Unanderra., Wollongong	142495	Road Match	62m
TERRAZZO SPECIALISTS	Forsyth, J. J., Five Islands Rd., Unanderra., Wollongong	145381	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS. &/OR W/SALERS	Forsyth. J. J., Five Islands Rd., Unanderra., Wollongong	140182	Road Match	62m
WELDERS - ELECTRIC &/OR OXY	Garnock Engineering Co. Fly. Ltd. Five Islands Rd., Port Kembla., Wollongong	145708	Road Match	62m
ENGINEERS - STRUCTURAL	Garnock Engineering Co. Pty, Ltd., Five Islands Rd., Port Kembla., Wollongong	141023	Road Match	62m
ENGINEERS - MINING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembia., Wollongong	140969	Road Match	62m
BLACKSMITHS &/OR FARRIERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	139105	Road Match	62m
ENGINEERS - DESIGNING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140785	Road Match	62m
ENGINEERS - HEAVY'	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140920	Road Match	62m
ENGINEERS - LIFTING &/OR HANDLING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140951	Road Match	62m
ENGINEERS - MARINE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140956	Road Match	62m
ENGINEERS - REFRIGERATION	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	141000	Road Match	62m
ENGINEERS - STEAM	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	141012	Road Match	62m
IMPORTERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	142165	Road Match	62m
JOINERY MANUFACTURERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	142306	Road Match	62m
STEEL FLOORING - INDUSTRIAL -SUPPLIERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145134	Road Match	62m
ELECTRICAL CONTRACTORS -LICENSED	Garnock Engineering Co. Pty. Ltd., Five Islands Rd.. Port Kembla., Wollongong	140615	Road Match	62m
ENGINEERS - GENERAL & MARINE	Garnock Engineering . Co. Pty. Ltd. Five Islands Rd., Port Kembla., Wollongong	140918	Road Match	62m
DIVING EQUIPMENT MFRS. &/OR DISTS.	Garnock Engineering Co. Pty. Ltd. Five Islands Rd., Port Kembla., Eden	155199	Road Match	62m
ENGINEERS - GENERAL & MARINE.	Garnock Engineering Co. Pty. Ltd. Five Islands Road, Port Kembla., Eden	155212	Road Match	62m
AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	138752	Road Match	62m
BOILERMAKERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	139165	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
CRANES - MOBILE & TRAVEL TOWER - PROPRIETORS &/OR HIRERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140256	Road Match	62m
ENGINEERS - FABRICATING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140816	Road Match	62m
ENGINEERS DIESEL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140791	Road Match	62m
MANUFACTURERS AGENTS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	142491	Road Match	62m
SHIP BUILDERS &/OR REPAIRERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	144813	Road Match	62m
ENGINEERS - GENERAL &/OR MANUFACTURING &/OR MECHANICAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd.. Port Kembla., Wollongong	140876	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Golden Fleece Service Station. Five Islands Rd., Port Kembla., Wollongong	143279	Road Match	62m
ENGINEERS - FABRICATING	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140819	Road Match	62m
ENGINEERS - LIFTING &/OR HANDLING	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140952	Road Match	62m
SHIP BUILDERS &/OR REPAIRERS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	144814	Road Match	62m
STEEL ERECTORS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145076	Road Match	62m
STEEL FABRICATORS.	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145108	Road Match	62m
WELDERS - ELECTRIC &/OR OXY	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145711	Road Match	62m
BOILERMAKERS	Harbour Engineering Pty. Ltd., Five Islands Rd.. Port Kembla-., Wollongong	139166	Road Match	62m
ENGINEERS - CONSTRUCTIONAL	Harbour Engineering Pty. Ltd.. Five Islands Rd., Port Kembla., Wollongong	140765	Road Match	62m
BOILERMAKERS	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	139167	Road Match	62m
ENGINEERS - FABRICATING	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	140820	Road Match	62m
ENGINEERS - GENERAL &/OR MANUFACTURING &/OR MECHANICAL	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	140881	Road Match	62m
ENGINEERS - HEAVY'	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	140921	Road Match	62m
ENGINEERS - STRUCTURAL	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	141029	Road Match	62m
PRESSURE VESSEL MFRS	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	144200	Road Match	62m
STEEL FABRICATORS.	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	145109	Road Match	62m
WELDERS - ELECTRIC &/OR OXY	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila., Wollongong	145713	Road Match	62m
ENGINEERS - FABRICATING	Hayco D. Hay And Co. Ltd. Five Islands Road, Cringila., Wollongong	140834	Road Match	62m
CARRIERS &/OR CARTAGE CONTRACTORS	Heggies Transport Pty. Ltd.. Five Islands Rd., Port Kembla., Wollongong	139731	Road Match	62m
SAFE MAKERS &/OR - MERCHANTS.	Illawarra Fire Extinguisher Service Pty. Ltd., 379 Five Islands Rd., Unanderra., Wollongong	144590	Road Match	62m
ROPE, CORDAGE &/OR TWINE MFRS. &/OR DISTS	Illawarra Wire Ropes, Five Islands Rd., Port Kembla., Wollongong	144557	Road Match	62m
WIRE &/OR ROPE SPLICERS	Illawarra Wire Ropes, Five Islands Rd., Port Kembla., Wollongong	145802	Road Match	62m
WIRE ROPE MERCHANTS	Illawarra Wire Ropes, Five Islands Rd., Port Kembla., Wollongong	145799	Road Match	62m
WIRE ROPE MFRS/DISTS'	Illawarra Wire Ropes, Five Islands Rd., Port Kembla., Wollongong	139788	Road Match	62m
CONCRETE - READY MIXED - SUPPLIERS	Kembla Ready Mixed Concrete, Five Islands Rd., Unanderra., Wollongong	140195	Road Match	62m
SCRAP METAL MERCHANTS	Kembla Scrap Metals, Five Islands Rd., Port Kembla., Wollongong	144756	Road Match	62m
ABRASIVE BLASTING	Krop Industries, Five Islands Rd., Cringila., Wollongong	138679	Road Match	62m
SPRAYERS - INDUSTRIAL	Krop Industries. Five Islands Rd., Cringila., Wollongong	145005	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
TYRE DEALERS, RETREADERS &/OR VULCANIZERS	McLeod, M. S. Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	145575	Road Match	62m
BATTERY SALES &/OR SERVICE	McLeod, M. S. Pty. Ltd., Five Islands Rd.. Port Kembla., Wollongong	139077	Road Match	62m
BRICK MFRS. &/OR DISTS:	Monier Masonry, Five Islands Rd., Unanderra., Wollongong	139233	Road Match	62m
CONCRETE BLOCK &/OR BRICK MFRS. &/OR DISTS	Monier Masonry, Five Islands Rd., Unanderra., Wollongong	140152	Road Match	62m
PAVING SLAB MFRS. &/OR DISTS	Monier Masonry, Five Islands Rd., Unanderra., Wollongong	143904	Road Match	62m
ROOFING MATERIAL MFRS. &/OR DISTS	Monier Masonry, Five Islands Rd., Unanderra., Wollongong	144549	Road Match	62m
TILE MFRS. &/OR DISTS. - ROOFING	Monier Masonry, Five Islands Rd., Unanderra., Wollongong	145411	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS. &/OR W/SALERS	Monier Masonry. Five Islands Rd.. Unanderra., Wollongong	140183	Road Match	62m
PIPE MFRS. - CONCRETE.	Monier Pipe Co., Five Islands Rd., Unanderra., Wollongong	144062	Road Match	62m
SEPTIC TANK MFRS. &/OR INSTALLERS &/OR SPECIALISTS	Monier Pipe Co., Five Islands Rd., Unanderra., Wollongong	144791	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS. &/OR W/SALERS	Monier Pipe Co., Five Islands Rd.. Unanderra., Wollongong	140184	Road Match	62m
ENGINEERS - CONSTRUCTIONAL	Nestra Engineering Pty. Ltd., Five Islands Rd., Cringila., Wollongong	140769	Road Match	62m
STEEL FABRICATORS.	Nestra Engineering Pty. Ltd., Five Islands Rd., Cringila., Wollongong	145120	Road Match	62m
ELECTRICAL CONTRACTORS -LICENSED	Peckman, L. F. & Melton, F. G., Five Islands Rd., Port Kembla., Wollongong	140634	Road Match	62m
ENGINEERS DIESEL	Peckman, L. F. & Melton, F. G.. Five Islands Rd., Port Kembla., Wollongong	140798	Road Match	62m
BOND &/OR FREE STORES	Port Kembla Bond Stores, Five Islands Rd., Unanderra., Wollongong	139174	Road Match	62m
CARRIERS &/OR CARTAGE CONTRACTORS	Port Kembla Bond Stores, Five Islands Rd., Unanderra., Wollongong	139752	Road Match	62m
HAULAGE CONTRACTORS	Port Kembla Bond Stores, Five Islands Rd., Unanderra., Wollongong	141993	Road Match	62m
ROAD TRANSPORT SERVICES INTRASTATE	Port Kembla Bond Stores, Five Islands Rd., Unanderra., Wollongong	144519	Road Match	62m
CRANES - MOBILE & TRAVEL TOWER - PROPRIETORS &/OR HIRERS	Port Kembla Bond Stores. Five Islands Rd.. Unanderra., Wollongong	140260	Road Match	62m
GOVERNMENT DEPARTMENTS	Public Works N.S.W., Department of. Five Islands Rd., Port Kembla., Wollongong	141665	Road Match	62m
ROAD TRANSPORT SERVICES -INTERSTATE	South Coast Transport Management, Five Islands Rd., Port Kembla., Wollongong	144507	Road Match	62m
ROAD TRANSPORT SERVICES INTRASTATE	South Coast Transport Management, Five Islands Rd., Port Kembla., Wollongong	144520	Road Match	62m
HOTELS - LICENSED	South Pacific Hotel, Five Islands Rd., Cringila., Wollongong	142148	Road Match	62m
ELECTRIC CABLE - FLEXIBLE &/OR WIRE - MFRS. &/OR DISTS	Telcon . Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	140531	Road Match	62m
ELECTRICAL SUPPLIES &/OR APPLIANCES - MFRS. &/OR W/SALERS	Telcon . Pty. Ltd.. Five Islands Rd.. Port Kembla., Wollongong	140667	Road Match	62m
ENGINEERS - FABRICATING	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	140838	Road Match	62m
ENGINEERS - HYDRAULIC	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	140943	Road Match	62m
ENGINEERS - MINING	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	140976	Road Match	62m
ENGINEERS SUPPLIES	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	141072	Road Match	62m
MINING MACHINERY &/OR EQUIPMENT IMPS. &/OR DISTS. &/OR MFRS	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	142734	Road Match	62m

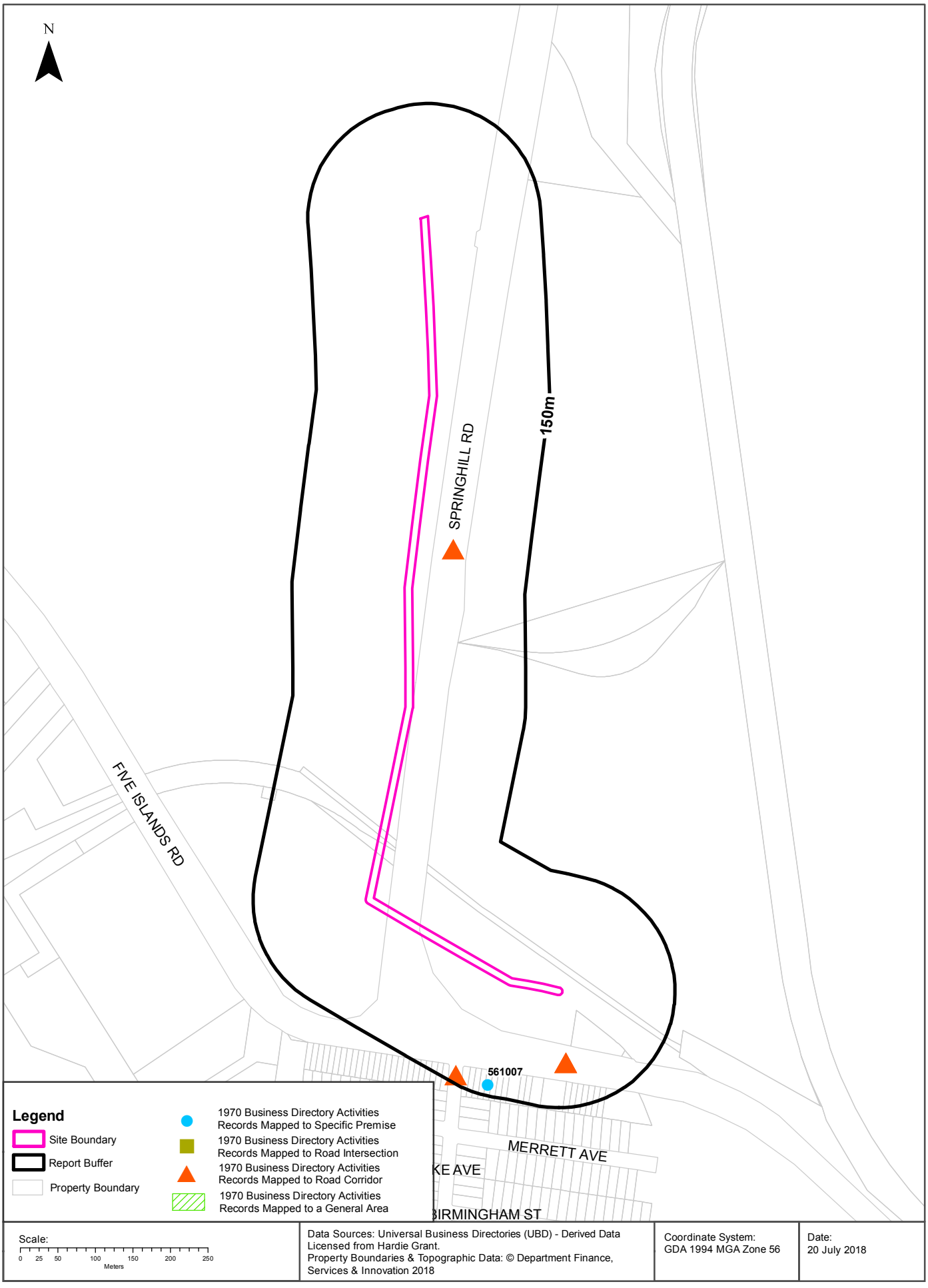
Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
PUMP & PUMPING EQUIPMENT MFRS. &/OR DISTS	Titan Manufacturing Co. Pty. Ltd, Five Islands Rd., Unanderra., Wollongong	144292	Road Match	62m
ENGINEERS - MINING	Titan Manufacturing Co. Pty. Ltd. Five Islands Road, Unanderra., Wollongong	140962	Road Match	62m
COPPER TUBING MFRS. &/OR DISTS	Tubemakers of Australia Ltd. Stewarts & Lloys Division, Five Islands Rd., Unanderra., Wollongong	140232	Road Match	62m
ENGINEERS SUPPLIES	Tubemakers of Australia Ltd. Stewarts & Lloys Division, Five Islands Rd., Unanderra., Wollongong	141073	Road Match	62m
STEEL TUBING MFRS. &/OR DISTS	Tubemakers of Australia Ltd. Stewarts & Lloys Division, Five Islands Rd., Unanderra., Wollongong	145160	Road Match	62m
-VALVES - STEAM, WATER - MFRS. &/OR DISTS	Tubemakers of Australia Ltd. Stewarts & Lloys Division, Five Islands Rd., Unanderra., Wollongong	145615	Road Match	62m
PIPE &/OR PIPE FITTINGSMFRS. W OR DISTS	Tubemakers of Australia Ltd. Stewarts & Lloys Division. Five Islands Rd., Unanderra., Wollongong	144069	Road Match	62m
DRAINLAYERS	United Earthmoving Co., Five Islands Rd., Cringila., Wollongong	140412	Road Match	62m
EARTH MOVING &/OR ROADMAKING CONTRACTORS	United Earthmoving Co., Five Islands Rd., Cringila., Wollongong	140520	Road Match	62m
HAULAGE CONTRACTORS	United Earthmoving Co., Five Islands Rd., Cringila., Wollongong	141999	Road Match	62m
ENGINEERS - CONSTRUCTIONAL	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	140770	Road Match	62m
ENGINEERS - DESIGNING	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	140788	Road Match	62m
ENGINEERS - REMOTE CONTROL	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	141010	Road Match	62m
FITTERS &/OR TURNERS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	141208	Road Match	62m
PIPE BENDERS &/OR FABRICATORS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	144056	Road Match	62m
PIPE-LINE INSTALLATIONS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	144057	Road Match	62m
STEEL ERECTORS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	145085	Road Match	62m
STEEL REINFORCEMENTS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	145156	Road Match	62m
TANK &/OR TANKSTAND MFRS. &/OR DISTS	W.G.E Pty. Limited, Five Islands Rd., Cringila., Wollongong	145308	Road Match	62m
ENGINEERS - GENERAL &/OR MANUFACTURING &/OR MECHANICAL	W.G.E Pty. Limited, Five Islands Rd., Ganglia., Wollongong	140915	Road Match	62m
ENGINEERS - FABRICATING	W.G.E Pty. Limited. Five Islands Rd., Cringila., Wollongong	140839	Road Match	62m
ENGINEERS - MINING	W.G.E. Ply. Limited, Five Islands Rd., Cringila., Wollongong	140979	Road Match	62m
ENGINEERS - INDUSTRIAL	W.G.E. Pty. Limited, Five Islands Rd, Ganglia., Wollongong	140950	Road Match	62m
BOILERMAKERS	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	139170	Road Match	62m
ENGINEERS - FACTORY MAINTENANCE	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	140844	Road Match	62m
ENGINEERS - PRECISION	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	140993	Road Match	62m
ENGINEERS - PRESSED METAL.	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	140994	Road Match	62m
ENGINEERS - PRODUCTION	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	140996	Road Match	62m
ENGINEERS - STRUCTURAL	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	141040	Road Match	62m
ENGINEERS-- CIVIL	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	140754	Road Match	62m
HIRING SERVICES	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	142049	Road Match	62m
LABOUR HIRE SERVICE	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	142339	Road Match	62m
RIGGERS	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	144500	Road Match	62m
STEEL BRIDGE MFRS	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	145067	Road Match	62m
STEEL BUILDINGS	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	145068	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
STEEL FABRICATORS.	W.G.E. Pty. Limited, Five Islands Rd., Cringila., Wollongong	145130	Road Match	62m
ENGINEERS - RAILWAY ROLLING STOCK	W.G.E. Pty. Limited, Five Islands Rd., Ganglia., Wollongong	140997	Road Match	62m
ENGINEERS - HEAVY'	W.G.E. Pty. Limited, Five Islands Rd.. Cringila., Wollongong	140924	Road Match	62m
BOILER REPAIRERS &/OR SERVICEMEN	W.G.E. Pty. Limited. Five Islands Rd., Cringila., Wollongong	139160	Road Match	62m
AIR COMPRESSORS &/OR EQUIPMENT FOR HIRE	Wreckair Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	138754	Road Match	62m
BUILDERS EQUIPMENT HIRERS	Wreckair Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	139353	Road Match	62m
HIRING SERVICES	Wreckair Pty. Ltd., Five Islands Rd., Port Kembla., Wollongong	142050	Road Match	62m
MEDICAL PRACTITIONERS	Laurin, L. M., Lake Ave., Cringila., Wollongong	142588	Road Match	125m
MEDICAL PRACTITIONERS	Laurin, L. M., Lake Ave., Cringila., Wollongong	142589	Road Match	125m
FRUITERERS &/OR GREENGROCERS	Ongard G., -A Lake Ave.. Cringita., Wollongong	141360	Road Match	125m
MIXED BUSINESSES	Ongard, G., -A Lake Ave., Cringila., Wollongong	142829	Road Match	125m
FRUITERERS &/OR GREENGROCERS	Ongard. G.. -A Lake Ave. Cringila., Wollongong	141359	Road Match	125m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
CAFES, TEA ROOMS & COFFEE LOUNGES	Mostar Coffee Lounge, 85 Five Islands Rd., Cringilla gilla Wollongong	561007	Premise Match	136m	South

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Business Directory Records
Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS-PREFABRICATED-MANUFACTURERS & DISTRIBUTORS	Lysaght, J. (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	560810	Road Match	0m
LAMINATED MATERIALS & PRODUCTS MFRS.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	564307	Road Match	0m
ROOFING MATERIAL MFRS.&/OR DIST.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	566944	Road Match	0m
SILO MANUFACTURERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567270	Road Match	0m
STEEL FLOORING-INDUSTRIAL-SUPPLIERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567511	Road Match	0m
TANK & TANK STAND MFRS. &/OR DISTRIBUTORS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567626	Road Match	0m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Ampol Garage, Five Islands Rd., Cringila Wollongong	565732	Road Match	62m
SHIP OWNERS	Associated Steamships Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567225	Road Match	62m
SHIPPING & FORWARDING AGENTS	Associated Steamships Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567229	Road Match	62m
TRAVEL AGENCIES & BOOKING OFFICES	Associated Steamships Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567925	Road Match	62m
PIPE BENDERS/FABRICATORS	Australian Iron & Steel Ltd., Five Islands Rd., Port Kembla Wollongong	566377	Road Match	62m
INVISIBLE MENDING SPECIALISTS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	564226	Road Match	62m
STEEL MANUFACTURERS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567515	Road Match	62m
TIN PLATE IMPORTERS &/OR MERCHANTS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567775	Road Match	62m
MOTOR ACCESSORIES SPARE PARTS DEALERS	BP South Pacific Service Station, Five Islands Rd., Cringila Wollongong	565128	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	BP South Pacific Service Station, Five Islands Rd., Cringila Wollongong	565469	Road Match	62m
CUSTOMS AGENTS	Chambers & Co. Pty. Ltd., c/- Mayne Nickless Ltd., Five Islands Rd., Port Kembla Wollongong	561670	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
SHIPPING & FORWARDING AGENTS	Chambers & Co. Pty. Ltd., C/- Mayne Nickless Ltd., Five Islands Rd., Port Kembla Wollongong	567230	Road Match	62m
STEVEDORING COMPANIES	Chambers & Co. Pty. Ltd., C/- Mayne Nickless Ltd., Five Islands Rd., Port Kembla Wollongong	567543	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Cleary Bros. (Bombo) Pty. Ltd., Five Islands Rd. Port Kembla Wollongong	561168	Road Match	62m
EARTH MOVING &/OR ROAD MAKING CONTRACTORS	Cleary Bros. (Bombo) Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562040	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Cleary Bros. (Bombo) Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562070	Road Match	62m
HOSTELS	Commonwealth Hostels Ltd., Five Islands Rd., Unanderra Wollongong	563912	Road Match	62m
ELECTRODES-WELDERS'-MANUFACTURERS &/OR DISTRIBUTORS	Commonwealth Industrial Gases Limited Five Islands Rd., Cringila Wollongong	562358	Road Match	62m
GASES-INDUSTRIAL-MFRS. &/OR DISTRIBUTORS	Commonwealth Industrial Gases Limited Five Islands Rd., Cringila Wollongong	563345	Road Match	62m
WELDING-ARC-SET MANUFACTURERS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila Wollongong	568221	Road Match	62m
MEDICAL EQUIPMENT MFRS. &/OR DISTRIBUTORS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila, Port Kembla Wollongong	564503	Road Match	62m
SPRAYING EQUIPMENT MFRS. & DISTRIBUTORS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila, Port Kembla Wollongong	567408	Road Match	62m
ELECTRODES-WELDERS'-MANUFACTURERS &/OR DISTRIBUTORS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila, Port Kembla. Wollongong	562361	Road Match	62m
GASES-INDUSTRIAL-MFRS. &/OR DISTRIBUTORS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila, Port Kembla. Wollongong	563347	Road Match	62m
WELDING EQUIPMENT & SUPPLIES-MFRS. &/OR DISTRIBUTORS	Commonwealth Industrial Gases Ltd., Five Islands Rd., Cringila, Port Kembla. Wollongong	568231	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Cringila Motors, Five Islands Rd., Cringila Wollongong	565502	Road Match	62m
WELDERS-ELECTRIC & OXY	Cringila Motors, Five Islands Rd., Cringila Wollongong	568150	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Cringila Motors, Five Islands Rd., Cringila. Wollongong	565749	Road Match	62m
HIRE CAR SERVICES	Cringila Taxi Service, Five Islands Rd., Cringila Wollongong	563852	Road Match	62m
GOVERNMENT DEPARTMENTS	Dept. of Public Works, Five Islands Rd., Port Kembla Wollongong	563427	Road Match	62m
ENGINEERS-CONSTRUCTIONAL.	Electric Power Transmission Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	562417	Road Match	62m
ELECTRIC POWER SUPPLIES	Electricity Commission of N.S.W., Five Islands Rd., Unanderra Wollongong	562163	Road Match	62m
GOVERNMENT DEPARTMENTS	Electricity Commission of N.S.W., Five Islands Rd., Unanderra Wollongong	563435	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Esso Servicenter, Five Islands Rd., Cringila Wollongong	565753	Road Match	62m
MOTOR BODY REPAIRERS &/OR CONVERTERS	Esso Servicenter, Five Islands Rd., Cringlla Wollongong	565231	Road Match	62m
MOTOR CAR & TRUCK DEALERS-NEW &/OR USED	F.M. Car Sales, 303-305 Five Islands Rd., Cringila Wollongong	565326	Road Match	62m
TERRAZZO SPECIALISTS	Forsyth J J & Co 373 Five Islands Rd., Unanderra Wollongong	567704	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS.	Forsyth, J. J. & Co., 373 Five Islands Rd., Unanderra Wollongong	561563	Road Match	62m
MARBLE & GRANITE MERCHANTS	Forsyth, J. J. & Co., 373 Five Islands Rd., Unanderra Wollongong	564491	Road Match	62m
TERRAZZO SPECIALISTS	Forsyth, J. J. & Co., 373 Five Islands Rd., Unanderra. Wollongong	567708	Road Match	62m
ENGINEERS-GENERAL & MARINE	GARNOCK ENGINEERING CO PTY LTD,FIVE ISLANDS RD.,PORT KEMBLA,2505	298805	Road Match	62m
WELDERS-ELECTRIC & OXY	Garnock Engineering Co. Pty. Ltd., 6 Five Islands Rd., Port Kembla Wollongong	568158	Road Match	62m
BLACKSMITHS & FARRIERS	Garnock Engineering Co. Pty. Ltd., Five Islanas Rd. Port Kembla Wollongong	560384	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
ENGINEERS-FABRICATING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd, Wollongong	562503	Road Match	62m
AIR COMPRESSOR &/OR EQUIPMENT FOR HIRE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	559905	Road Match	62m
BOILERMAKERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	560436	Road Match	62m
CRANES-MOBILE-PROPRIETORS &/OR HIRERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	561650	Road Match	62m
ELECTRICAL CONTRACTORS-LICENSED	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562227	Road Match	62m
ENGINEERS-DESIGNING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562446	Road Match	62m
ENGINEERS-ELECTRICAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562473	Road Match	62m
ENGINEERS-HEAVY	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562579	Road Match	62m
ENGINEERS-MARINE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562625	Road Match	62m
ENGINEERS-MINING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562636	Road Match	62m
ENGINEERS-REFRIGERATION	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562669	Road Match	62m
ENGINEERS-STEAM	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562686	Road Match	62m
ENGINEERS-STRUCTURAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562700	Road Match	62m
IMPORTERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	563993	Road Match	62m
JOINERY MANUFACTURERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	564276	Road Match	62m
MANUFACTURERS' AGENTS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	564481	Road Match	62m
STEEL ERECTORS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567470	Road Match	62m
STEEL FLOORINGS-INDUSTRIAL-SUPPLIERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567501	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	562544	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Garnock Engineering Co., Five Islands Rd., Port Kembla Wollongong	562545	Road Match	62m
MOTOR CARBURETTOR & TUNING SPECIALISTS	Golden Fleece Service Station, Five Islands Rd., Port Kembla, Wollongong	565379	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Golden Fleece Service Station, Five Islands Rd., Port Kembla, Wollongong	565521	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Golden Fleece Service Station, Five Islands Rd., Port Kembla, Wollongong	565759	Road Match	62m
BOILERMAKERS	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	560437	Road Match	62m
ENGINEERS-FABRICATING	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	562506	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	562546	Road Match	62m
ENGINEERS-PRODUCTION	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	562658	Road Match	62m
ENGINEERS-STRUCTURAL	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	562702	Road Match	62m
WELDERS-ELECTRIC & OXY	Goodwin, A. E. Ltd., Five Islands Rd., Port Kembla Wollongong	568168	Road Match	62m
ENGINEERS-CONSTRUCTIONAL.	Goodwin, A. E., Five Islands Rd., Cringila Wollongong	562420	Road Match	62m
ENGINEERS-INDUSTRIAL	Goodwin, A. E., Five Islands Rd., Cringila Wollongong	562610	Road Match	62m
BUILDERS &/OR BUILDING CONTRACTORS-M.M.B.A.	Graham & Hughes, Five Islands Rd., Port Kembla Wollongong	560596	Road Match	62m
JOINERY MANUFACTURERS	Graham & Hughes, Five Islands Rd., Port Kembla Wollongong	564278	Road Match	62m
SHOP & OFFICE FITTERS	Graham & Hughes, Five Islands Rd., Port Kembla Wollongong	567244	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Hans' Service Station, Five Islands Rd., Cringila Wollongong	565538	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
MOTOR PAINTERS & PANEL BEATERS	Hans' Service Station, Five Islands Rd., Cringila Wollongong	565678	Road Match	62m
WELDERS-ELECTRIC & OXY	Hans' Service Station, Five Islands Rd., Cringila Wollongong	568170	Road Match	62m
ENGINEERS-CONSTRUCTIONAL.	Harbour Engineering Pty. Ltd., Five Islands Rd., Port embla Wollongong	562421	Road Match	62m
BOILERMAKERS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	560438	Road Match	62m
CRANES-MOBILE-PROPRIETORS &/OR HIRERS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	561651	Road Match	62m
ENGINEERS-FABRICATING	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562508	Road Match	62m
ENGINEERS-LIFTING & HANDLING	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562617	Road Match	62m
ENGINEERS-STRUCTURAL	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562706	Road Match	62m
STEEL ERECTORS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567471	Road Match	62m
STEEL FABRICATORS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567483	Road Match	62m
STEEL FLOORINGS-INDUSTRIAL-SUPPLIERS	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567504	Road Match	62m
WELDERS-ELECTRIC & OXY	Harbour Engineering Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	568171	Road Match	62m
BOILERMAKERS	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	560439	Road Match	62m
ENGINEERS-DESIGNING	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	562447	Road Match	62m
ENGINEERS-FABRICATING	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	562509	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	562548	Road Match	62m
ENGINEERS-STRUCTURAL	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	562705	Road Match	62m
WELDERS-ELECTRIC & OXY	Hay, D. & Co. Pty. Ltd., Five Islands Rd., Cringila Wollongong	568174	Road Match	62m
PRESSURE VESSEL MANUFACTURERS	Hay, D. &. Co. Pty. Ltd, Five Islands Rd, Cringila Wollongong	566549	Road Match	62m
DELICATESSENS	Hood, L. W. & W. H., Five Islands Rd, Cringila Wollongong	561722	Road Match	62m
GROCERS & SELF-SERVICE STORES	Hood, L. W. and W. H., Five Islands Rd., Cringila Wollongong	563544	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Hughes, L. J. Transport, 332 Five Islands Rd., Unanderra Wollongong	561185	Road Match	62m
ROAD TRANSPORT SERVICES-N.S.W.	Hughes, L. J. Transport, 332 Five Islands Rd., Unanderra Wollongong	566911	Road Match	62m
REFRACTORY MATERIALS MFRS &/OR SUPPLIERS (R240)	KAISER REFRACTORIES PTY. LTD. FIVE ISLANDS RD.,PORT KEMBLA. 2505	356414	Road Match	62m
REFRACTORY MATERIALS MFRS. & SUPPLIERS	Kaiser Refractories Pty. Ltd., Five Islands Rd., Port Kembla. Wollongong	566787	Road Match	62m
ENGINEERS-DIESEL	Kembla Equipment Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562461	Road Match	62m
ENGINEERS-FABRICATING	Kembla Equipment Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	562515	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Kembla Equipment Company Pty. Limited, Five Islands Rd., Port Kembla Wollongong	561189	Road Match	62m
CONTRACTORS-GENERAL	Kembla Equipment Company Pty. Limited, Five Islands Rd., Port Kembla Wollongong	561588	Road Match	62m
CRANES-MOBILE-PROPRIETORS &/OR HIRERS	Kembla Equipment Company Pty. Limited, Five Islands Rd., Port Kembla Wollongong	561654	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Kembla Equipment Company Pty. Limited, Five Islands Rd., Port Kembla Wollongong	562079	Road Match	62m
HAULAGE CONTRACTORS	Kembla Equipment Company Pty. Limited, Five Islands Rd., Port Kembla Wollongong	563817	Road Match	62m
CONCRETE-PRE-MIXED-SUPPLIERS	Kembla Ready Mixed Concrete, Five Islands Rd., Wollongong	561571	Road Match	62m
BOOKMAKERS-REGISTERED	L.V.L., Five Islands Rd., Cringila. Wollongong	560452	Road Match	62m

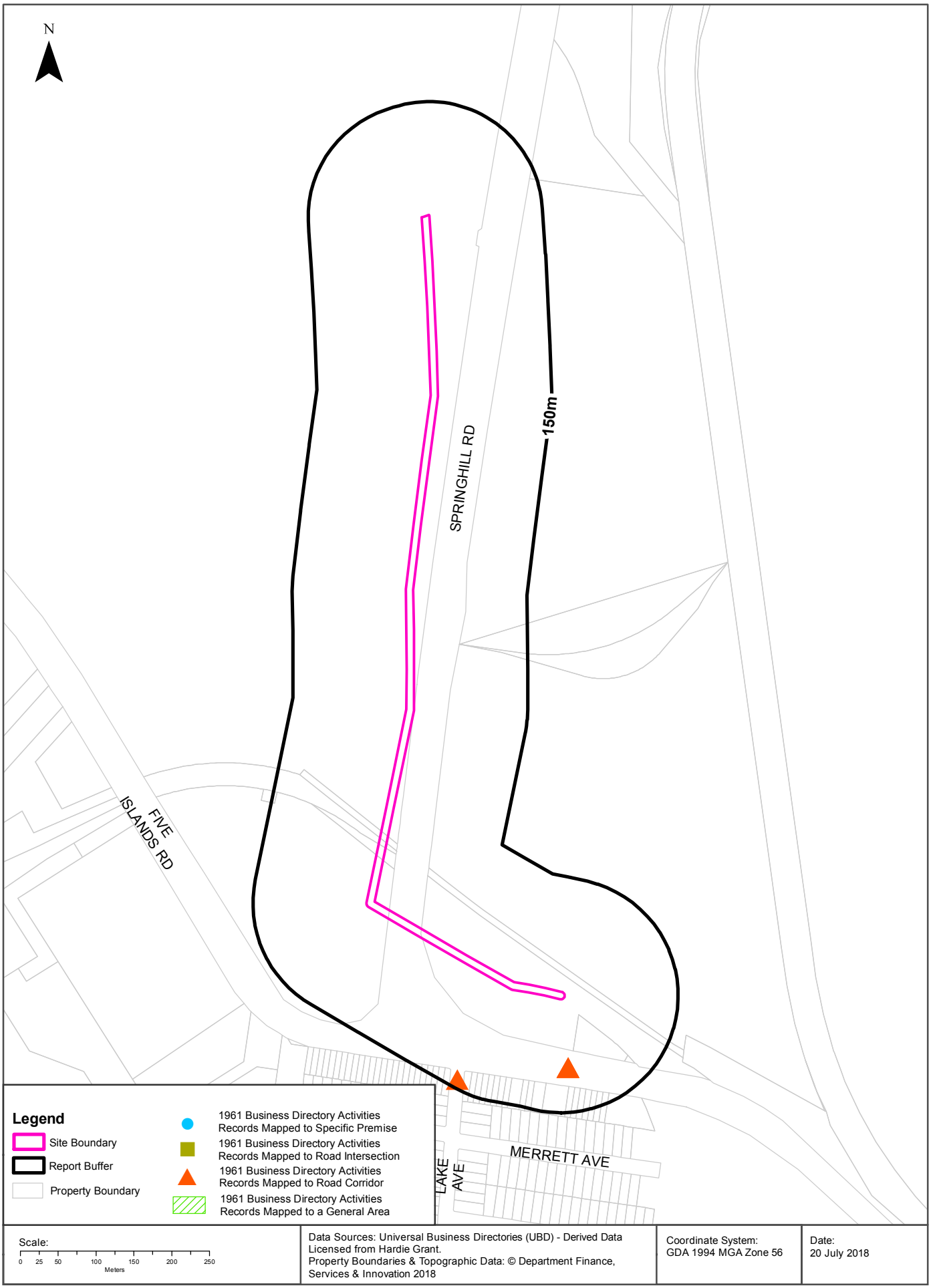
Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDERS &/OR BUILDING CONTRACTORS	Little, A. F. Pty. Limited, Five Island Rd., Port Kembla Wollongong	560681	Road Match	62m
MOTOR CAR STEAM CLEANERS	Lochland & Miller, Five Islands Rd., Port Kembla Wollongong	565295	Road Match	62m
GUEST HOUSES	Lorray Guest House, Five Islands Rd., Port Kemkia Wollongong	563613	Road Match	62m
ENGINEERS' SUPPLIES	M & S Engineering Supplies Pty. Ltd. Five Islands Road Port Kembla Wollongong	562722	Road Match	62m
ENGINEERS' SUPPLIES	M. & S. Engineering Supplies Pty.Ltd., Five Islands Rd., Port Kembla, 2505. Wollongong	562735	Road Match	62m
CHEMICAL MFRS. &/OR DISTS. &/OR IMPRS.	M. & T. Chemicals (Australia) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	561268	Road Match	62m
METAL REFINERS	M. & T. Chemicals (Australia) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	564723	Road Match	62m
PLASTIC MFRS. MATERIALS SUPPLIERS	M. & T. Chemicals (Australia) Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	566436	Road Match	62m
METAL MANUFACTURERS	M. & T. Chemicals Australia Pty. Ltd., Five Islands Rd., Unanderra Wollongong	564713	Road Match	62m
SANITARY FITTINGS & HARDWARE MFRS. & DISTRIBUTORS	Marley Reliance (Wollongong) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	567024	Road Match	62m
CONCRETE BRICK & BLOCK MANUFACTURERS	Marley Wollongong Limited, Five Island Rd., Unanderra Wollongong	561537	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS.	Marley Wollongong Limited, Five Island Rd., Unanderra. Wollongong	561565	Road Match	62m
ROOFING MATERIAL MFRS.&/OR DIST.	Marley Wollongong Limited, Five Islands Rd., Unanderra Wollongong	566945	Road Match	62m
SANITARY FITTINGS & HARDWARE MFRS. & DISTRIBUTORS	Marley Wollongong Limited, Five Islands Rd., Unanderra Wollongong	567025	Road Match	62m
TILE MANUFACTURERS-ROOFING	Marley Wollongong Limited, Five Islands Rd., Unanderra. Wollongong	567751	Road Match	62m
TILERS-ROOF-& SLATERS	Marley Wollongong Limited, Five Islands Rd., Unanderra. Wollongong	567754	Road Match	62m
CONCRETE PRODUCTS MFRS. &/OR DISTS.	Marley Wollongong Ltd Five Islands Rd., Unanderra Wollongong	561560	Road Match	62m
HAULAGE CONTRACTORS	Mayne Nickless Ltd., Five Islands Rd., Port Kembla, Wollongong	563821	Road Match	62m
CRANES-MOBILE-PROPRIETORS &/OR HIRERS	Mayne Nickless Ltd., Five Islands Rd., Port Kembla. Wollongong	561656	Road Match	62m
TYRE & TUBE DEALERS	McLeod, M. S. Ltd., Five Islands Rd., Port Kembla Wollongong	567977	Road Match	62m
TYRE DEALERS, RETREADERS & VULCANIZERS	McLeod, M. S. Ltd., Five Islands Rd., Port Kembla Wollongong	568012	Road Match	62m
SHIPPING & FORWARDING AGENTS	Shipping & Transport Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	567236	Road Match	62m
HOTELS-LICENSED	South Pacific Hotel, Five Islands Rd., Cringila Wollongong	563971	Road Match	62m
BUILDERS HARDWARE WIFRS. & DISTRIBUTORS	Southern Plating & Galvanising Pty. Ltd., Five Islands Rd., Cringila Wollongong	560722	Road Match	62m
ENGINEERS-FABRICATING	Stewart's & Lloyd's (Distributors) Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	562520	Road Match	62m
ENGINEERS-FABRICATING	Stewarts & Lloyds (Distributors) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	562521	Road Match	62m
HARDWARE DEALERS & IRONMONGERS	Stewarts & Lloyds (Distributors) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	563774	Road Match	62m
COPPER TUBING MFRS. &/OR DISTRIBUTORS	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Island Rd., Unanderra Wollongong	561620	Road Match	62m
ENGINEERS' SUPPLIES	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	562745	Road Match	62m
PIPES & PIPE FITTINGS-MFRS./DISTS.	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	566396	Road Match	62m
STEEL MERCHANTS-GENERAL	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	567525	Road Match	62m
STEEL TUBING MFRS. &/OR DISTRIBUTORS	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	567539	Road Match	62m
TUBE BENDERS	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	567957	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
VALVE-STEAM, WATER-MANUFACTURERS & DISTRIBUTORS	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	568061	Road Match	62m
WELDING EQUIPMENT & SUPPLIES-MFRS. &/OR DISTRIBUTORS	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	568241	Road Match	62m
WIRE NETTING MFRS. &/OR DISTS.	Stewarts & Lloyds (Dists.) Pty. Ltd., Five Islands Rd., Unanderra Wollongong	568260	Road Match	62m
ENGINEERS-FABRICATING	Stewarts & Lloyds Distributors Pty. Ltd. (Fabricating Division), Five Islands Rd., Unanderra Wollongong	562522	Road Match	62m
PIPE BENDERS/FABRICATORS	Stewarts & Lloyds Distributors Pty. Ltd. (Fabrication Div.), Five Islands Rd., Unanderra Wollongong	566380	Road Match	62m
DELICATESSENS	Stosic, T., Five Islands Rd., Cringila Wollongong	561740	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Thumb Steel Pty. Ltd., Five Islands Rd., Cringila Wollongong	562575	Road Match	62m
STEEL FABRICATORS	Thumb Steel Pty. Ltd., Five Islands Rd., Cringllla Wollongong	567495	Road Match	62m
ENGINEERS-MINING	Titan Manufacturing Co Pty Ltd Five Islands Rd., Unanderra Wollongong	562629	Road Match	62m
ENGINEERS-FABRICATING	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra Wollongong	562525	Road Match	62m
ROCK DRILLS & BREAKERS MFRS &/OR DISTS.	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra Wollongong	566931	Road Match	62m
TOOL IMPORTERS &/OR DISTRIBUTORS	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra Wollongong	567805	Road Match	62m
ENGINEERS' SUPPLIES	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra. Wollongong	562747	Road Match	62m
ENGINEERS-MINING	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra. Wollongong	562639	Road Match	62m
MINING MACHINERY & EQUIPMENT IMPORTERS, DISTRIBUTORS & MANUFACTURERS	Titan Manufacturing Co. Pty. Ltd., Five Islands Rd., Unanderra. Wollongong	564886	Road Match	62m
MOTOR ACCESSORIES SPARE PARTS DEALERS	Verdon Bros., Five Islands Rd., Port Kembla Wollongong	565191	Road Match	62m
BOOT & SHOE REPAIRERS	Angelinos Shoes, Lake Ave., Cringila, Wollongong	560492	Road Match	125m
FOOTWEAR RETAILERS	Angelinos Shoes, Lake Ave., Cringila, Wollongong	563011	Road Match	125m
HAIRDRESSERS-GENT'S	Austral Continental Barber, Lake Ave., Cringila Wollongong	563638	Road Match	125m
BUTCHERS-RETAIL	Green's, Jack South Pacific Butchery, Lake Ave., Cringila, Wollongong	560870	Road Match	125m
CAFES, TEA ROOMS & COFFEE LOUNGES	Jim's Espresso Coffee Lounge, Lake Ave., Cringila Wollongong	560992	Road Match	125m
DENTAL LABORATORIES & TECHNICIANS	Makse, S. ,Lake Ave., Cringila, Wollongong	561746	Road Match	125m
GROCERS & SELF-SERVICE STORES	Olympla Grocery, Lake Ave., Cringila Wollongong	563564	Road Match	125m
GROCERS & SELF-SERVICE STORES	Osanoski, O., Lake Ave., Cringila Wollongong	563565	Road Match	125m
FRUITERERS & GREENGROCERS	Osanoskl, O., Lake Ave., Cringila Wollongong	563162	Road Match	125m
MILK/FRUIT JUICE BARS & CONFECTIONERS	Osanoskl, O., Lake Ave., Cringila Wollongong	564822	Road Match	125m
MIXED BUSINESSES	Osanoskl, O., Lake Ave., Gringlla Wollongong	565039	Road Match	125m
BEAUTY SALONS & LADIES' HAIRDRESSERS	Parracchlera, Cnr. Hosklns & Lake Ave., Cringila Wollongong	560339	Road Match	125m
STATIONERS-RETAILERS	Pavia & Sons, Lakt Ave., Cringila Wollongong	567446	Road Match	125m
HAIRDRESSERS-GENT'S	Roppa, V., Lake Ave., Cringila Wollongong	563694	Road Match	125m
BUTCHERS-RETAIL	Samaras Butchery, Lake Ave., Cringila Wollongong	560898	Road Match	125m
DELICATESSENS	Samaras Butchery, Lake Ave., Cringila Wollongong	561737	Road Match	125m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

1961 Business Directory Records
Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Business Directory Records
Road or Area Matches

Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDERS & CONTRACTORS	A.F. Little Pty. Limited., South Coast Office Five Islands Road Port Kembla, Wollongong	234401	Road Match	62m
PIPE BENDERS/FABRICATORS	Australian Iron & Steel Ltd., Five Islands Rd., Port Kembla, Wollongong	240134	Road Match	62m
STEEL MANUFACTURERS	Australian Iron & Steel Pty Ltd., Cringila, Wollongong	241097	Road Match	62m
STEEL MANUFACTURERS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241098	Road Match	62m
STEEL STRIP MANUFACTURERS	Australian Iron & Steel Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241119	Road Match	62m
SOLVENT MANUFACTURERS	Australian Iron and Steel Ltd., Five Islands Rd., Cringila, Wollongong	240894	Road Match	62m
STEEL MANUFACTURERS-SPRING	Australian Iron and Steel Ltd., Five Islands Rd., Cringila, Wollongong	241100	Road Match	62m
STEEL TAPER SECTION MANUFACTURERS	Australian Iron and Steel Ltd., Five Islands Rd., Port Kembla, Wollongong	241126	Road Match	62m
SHIP OWNERS	Australian National Line (The), Five Islands Rd., Port Kembla, Wollongong	240800	Road Match	62m
SANDWICH LUNCHEON SHOPS	Barnes, A. & E., Five Islands Rd., Port Kembla, Wollongong	240633	Road Match	62m
AERATED WATER & CORDIAL MANUFACTURERS	Brough Bros., Five Islands Rd., Unanderra, Wollongong	233698	Road Match	62m
MACHINISTS-HEAVY	C.H.S. Engineering Pty. Ltd., Five islands Rd., Port Kembla, Wollongong	238223	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Cleary Bros. (Bambo) Pty. Ltd., Five Islands Rd Port Kembla, Wollongong	234932	Road Match	62m
BRAMBLES SOUTHERN TRANSPORT	Cleary Bros. (Bombo) Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	235815	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Cleary Bros. (Bombo) Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	235852	Road Match	62m
HOSTELS	Commonwealth Hostels Ltd., Five Islands Rd., Unanderra, Wollongong	237753	Road Match	62m
STEEL FABRICATORS	Commonwealth Steel Company Limited., Five Islands Rd, Unanderra, Wollongong	241066	Road Match	62m
DISPOSAL STORES	Cringila Disposals, 5 Five Islands Rd., Cringila , Wollongong	235643	Road Match	62m
GUEST HOUSES	Cuitty, L. A., Five Islands Rd., Unanderra, Wollongong	237465	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
CARRIERS & CARTAGE CONTRACTORS	Darby's (Kembla) Transport Co., Five Islands Rd., Port Kembla, Wollongong	234938	Road Match	62m
ROOFING MATERIAL MFRS.	Dura-Crete Concrete Product Co., Five Islands Rd., Unanderra, Wollongong	240603	Road Match	62m
CONCRETE PRODUCTS MANUFACTURERS	Dura-Crete Products Pty Ltd., Five Islands Rd., Unanderra., Wollongong	235349	Road Match	62m
CONCRETE BLOCK & BRICK MFRS.	Dura-crete Products Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	235326	Road Match	62m
CONCRETE PRODUCTS MANUFACTURERS	Dura-Crete Products Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	235350	Road Match	62m
TILE MANUFACTURERS-ROOFING	Dura-Crete Products Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	241281	Road Match	62m
CONTRACTORS-GENERAL	Electric Power Transmission Pty. Limited., Five Islands Rd., Steel Haven, Wollongong	235394	Road Match	62m
ELECTRIC POWER SUPPLIES	Electricity Commission of N.S.W., Five Islands Rd., Port Kembla, Wollongong	235931	Road Match	62m
GOVERNMENT DEPARTMENTS	Electricity Commission of N.S.W., Five islands Rd., Port Kembla, Wollongong	237161	Road Match	62m
MOTOR CAR & TRUCK DEALERS-NEW &/OR USED	F.M. Car Sales 303 Five Islands Road, Cringila, Wollongong	239153	Road Match	62m
MOTOR CAR & TRUCK DEALERS-NEW &/OR USED	F.M. Car Sales, 303-305 Five Islands Rd., Cringila, Wollongong	239151	Road Match	62m
WELDERS-ELECTRIC & OXY	Garnock Engineering Co. Pty. Ltd., 6 Five Islands Rd., Port Kembla, Wollongong	241659	Road Match	62m
ENGINEERS-STRUCTURAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembia, Wollongong	236421	Road Match	62m
AGRICULTURAL MACHINERY REPAIRERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	233719	Road Match	62m
BLACKSMITHS & FARRIERS	Garnock Engineering Co. Pty. Ltd., Five islands Rd., Port Kembla, Wollongong	234087	Road Match	62m
BOILERMAKERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	234120	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	235451	Road Match	62m
ENGINEERS-ELECTRICAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236228	Road Match	62m
ENGINEERS-FABRICATING	Garnock Engineering Co. Pty. Ltd., Five islands Rd., Port Kembla, Wollongong	236254	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236299	Road Match	62m
ENGINEERS-LIFTING & HANDLING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236352	Road Match	62m
ENGINEERS-MARINE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236359	Road Match	62m
ENGINEERS-MINING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236369	Road Match	62m
ENGINEERS-REFRIGERATION	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236391	Road Match	62m
ENGINEERS-STEAM	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236405	Road Match	62m
STEEL EXPORTERS	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241060	Road Match	62m
BATTERY DISTRIBUTORS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	233941	Road Match	62m
BATTERY SERVICE STATIONS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	233982	Road Match	62m
ENGINEERS-CONSTRUCTIONAL	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	236172	Road Match	62m
ENGINEERS-FABRICATING	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	236257	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	239357	Road Match	62m
MOTOR ACCESSORIES & SPARE PARTS DEALERS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringlia, Wollongong	239000	Road Match	62m
TYRE & TUBE DEALERS	Gillman Engineering Pty. Ltd., Five islands Rd., Cringlia, Wollongong	241534	Road Match	62m
CRANES-MOBILE---CONTRACTORS	Gillman Engineering Pty. Ltd., Five Islands Rd., Port Kembia, Wollongong	235440	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
CRANES-MOBILE-PROPRIETORS & HIRERS	Gillman Engineering Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	235452	Road Match	62m
ELECTRODES--WELDERS'-MANUFACTURERS	Gillman Engineering Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236123	Road Match	62m
STEEL FABRICATORS	Gillman Engineering Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241077	Road Match	62m
CAFES, TEA ROOMS & COFFEE LOUNGES, ETC	Green & White Cafe, Princes Hghwy., Dapto Five Islands Rd., Gringlla, Wollongong	234739	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	235453	Road Match	62m
ENGINEERS-FABRICATING	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	236260	Road Match	62m
ENGINEERS-FACTORY MAINTENANCE	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	236278	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	236303	Road Match	62m
ENGINEERS-STRUCTURAL	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	236424	Road Match	62m
MOTOR BODY BUILDERS & REPAIRERS	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	239087	Road Match	62m
WELDERS-ELECTRIC & OXY	Heath Engineering Pty. Ltd., Five Islands Rd., Unanderra, Wollongong	241668	Road Match	62m
DELICATESSENS	Hood, L. W. & W. H., Five Islands Rd., Cringila, Wollongong	235545	Road Match	62m
GROCERS & GENERAL STOREKEEPERS	Hood, L. W. and W. H., Five Islands Rd., Cringila, Wollongong	237325	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Hornibrook, McKenzie and Clark Pty. Ltd., Five Islands Rd., Pert Kembla, Wollongong	236305	Road Match	62m
BUILDERS & CONTRACTORS	Hornibrook, McKenzie, Clark Pty. Limited., Five Islands Rd., Port Kembia, Wollongong	234394	Road Match	62m
CONTRACTORS-GENERAL	Hornibrook, McKenzie, Clark Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	235396	Road Match	62m
ENGINEERS-CIVIL	Hornibrook, McKenzie, Clark Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	236150	Road Match	62m
ENGINEERS-CONSTRUCTIONAL	Hornibrook, McKenzie, Clark Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	236174	Road Match	62m
ENGINEERS-STRUCTURAL	Hornibrook, McKenzie, Clark Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236425	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Hornibrook, McKenzie, Clark Pty. Ltd., Five islands. Rd., Port Kembla, Wollongong	235857	Road Match	62m
CAFES, TEA ROOMS & COFFEE LOUNGES, ETC	International Coffee Lounge, 298 Five Islands Rd., Cringila, Wollongong	234744	Road Match	62m
ENGINEERS-FABRICATING	Kembia Equipment Co. Pty. Ltd., Five islands Rd., Port Kembla, Wollongong	236264	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Kembia Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	235454	Road Match	62m
ENGINEERS-DIESEL	Kembla Equipment Co. Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236214	Road Match	62m
BRAMBLES SOUTHERN TRANSPORT	Kembla Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	235824	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Kembla Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	234971	Road Match	62m
CONTRACTORS-GENERAL	Kembla Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	235397	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Kembla Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	235858	Road Match	62m
HAULAGE CONTRACTORS	Kembla Equipment Company Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	237688	Road Match	62m
BOILERMAKERS	L.V.L., Five Islands Rd., Cringila, Wollongong	234124	Road Match	62m
ENGINEERS-CONSTRUCTIONAL	L.V.L., Five Islands Rd., Cringila, Wollongong	236178	Road Match	62m
ENGINEERS-FABRICATING	L.V.L., Five Islands Rd., Cringila, Wollongong	236265	Road Match	62m
ENGINEERS-STRUCTURAL	L.V.L., Five Islands Rd., Cringila, Wollongong	236430	Road Match	62m
WELDERS-ELECTRIC & OXY	L.V.L., Five Islands Rd., Cringila, Wollongong	241682	Road Match	62m
BOOKMAKERS-REGISTERED	L.V.L., Five Islands Rd., Cringila. , Wollongong	234133	Road Match	62m

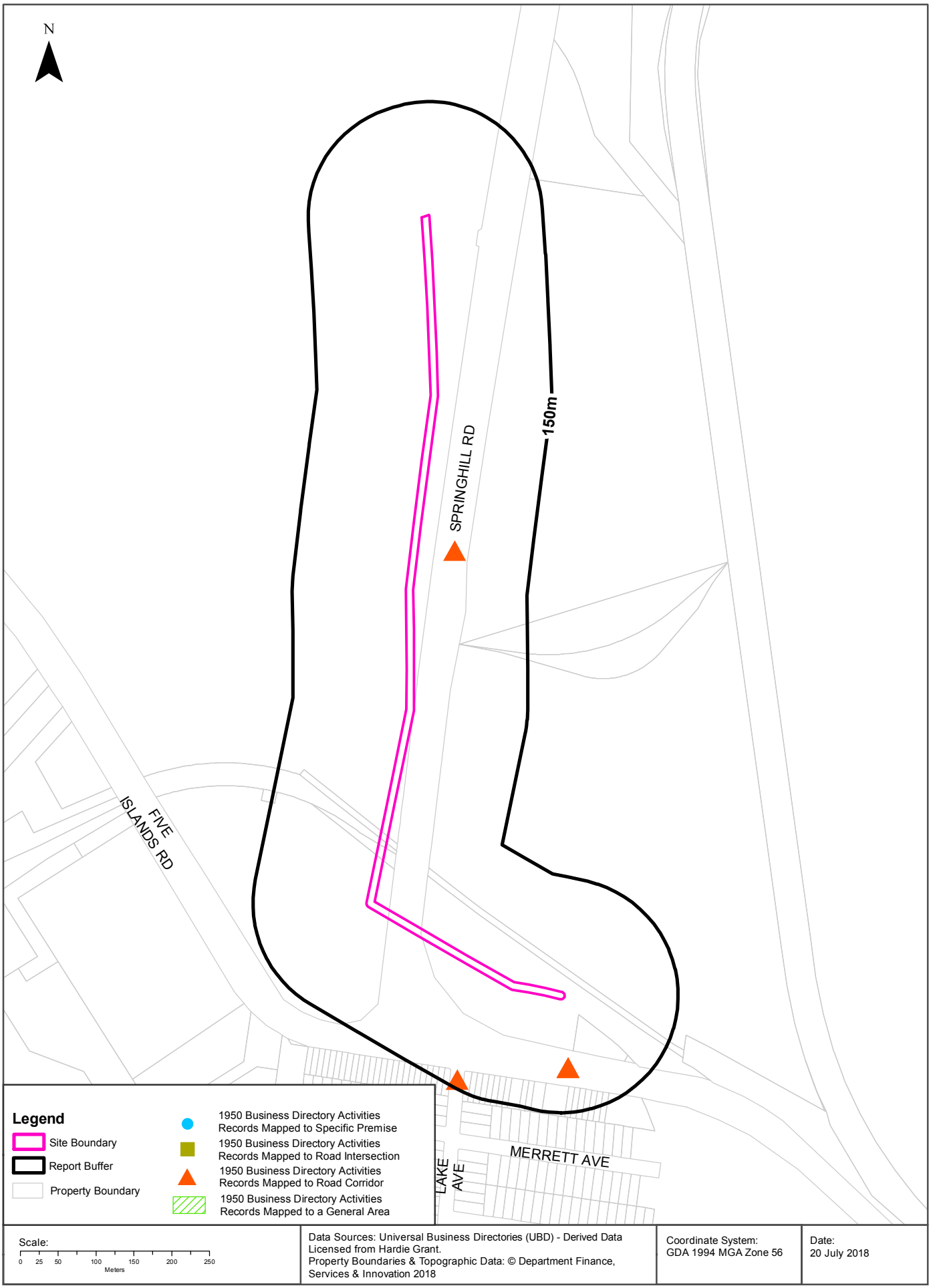
Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
CRANES-MOBILE-PROPRIETORS & HIRERS	L.V.L., Five Islands Rd., Cringlia, Wollongong	235455	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	L.V.L., Five Islands Rd., Cringlia, Wollongong	236310	Road Match	62m
STEEL FABRICATORS	L.V.L., Five Islands Rd., Cringlia. , Wollongong	241084	Road Match	62m
BUILDERS & CONTRACTORS	Little A F Pty Limited., Five Islands Rd., Port Kembla, Wollongong	234336	Road Match	62m
BUILDERS & CONTRACTORS	Little, A. F. Pty. Limited., Five Islands Rd., Port Kembla, Wollongong	234413	Road Match	62m
BRAMBLES SOUTHERN TRANSPORT	Mayne Nickless Limited., Five Islands Rd., Port Kembla , Wollongong	235828	Road Match	62m
CARRIERS & CARTAGE CONTRACTORS	Mayne Nickless Limited., Five Islands Rd., Port Kembla, Wollongong	234984	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Mayne Nickless Limited., Five Islands Rd., Port Kembla, Wollongong	235457	Road Match	62m
EARTH-MOVING MACHINERY HIRERS	Mayne Nickless Limited., Five Islands Rd., Port. Kembla, Wollongong	235860	Road Match	62m
HAULAGE CONTRACTORS	Mayne, Nickless Ltd., Five Islands Rd., Port Kembla, Wollongong	237691	Road Match	62m
TYRE DEALERS, RETREADERS & VULCANIZERS	McLeod, M. S. Ltd., Five Islands Rd., Port Kembla , Wollongong	241515	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Mobile Welding Service Pty. Ltd., Five islands Rd., Port Kembia, Wollongong	235458	Road Match	62m
BOILERMAKERS	Mobile Welding Service Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	234125	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Mobile Welding Service Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236312	Road Match	62m
WELDERS-ELECTRIC & OXY	Mobile Welding Service Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241686	Road Match	62m
TIMBER MERCHANTS	Molloy Bros (Port Kembla) Pty Ltd., Cnr. Five Islands Rd., , Wollongong	241292	Road Match	62m
JOINERY MANUFACTURERS	Molloy Bros. (Port Kembla) Pty. Ltd. Five Islands Rd., Port Kembla, Wollongong	238061	Road Match	62m
WALLBOARD MERCHANTS	Molloy Bros. (Port Kembla) Pty. Ltd., Five Islands Rd., Port Kembia, Wollongong	241597	Road Match	62m
BUILDERS' SUPPLIERS	Molloy Bros. (Port Kembla) Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	234511	Road Match	62m
TIMBER MERCHANTS	Molloy Bros. (Port Kembla) Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241308	Road Match	62m
ENGINEERS-FABRICATING	Pacific Fabrications Pty. Ltd. Five Islands Road, Port Kembla , Wollongong	236242	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembia, Wollongong	235460	Road Match	62m
ENGINEERS-FABRICATING	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembia, Wollongong	236267	Road Match	62m
BOILERMAKERS	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	234126	Road Match	62m
ENGINEERS-GENERAL, MFRG. & MECHANICAL	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236314	Road Match	62m
ENGINEERS-STRUCTURAL	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	236433	Road Match	62m
STEEL FABRICATORS	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241086	Road Match	62m
WELDERS-ELECTRIC & OXY	Pacific Fabrications Pty. Ltd., Five Islands Rd., Port Kembla, Wollongong	241690	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	South Pacific Service Station., Five Islands Rd., Cringila, Wollongong	239421	Road Match	62m
ELECTRICAL SUPPLIES & APPLIANCES-RETAILERS	Southern Electro Plating & Galvanising Pty. Ltd. Five Islands Road, Cringila , Wollongong	236070	Road Match	62m
ELECTROPLATERS	Southern Electroplating Galvanising Pty. Ltd., Five Islands Rd., Cringila. , Wollongong	236131	Road Match	62m
GALVANIZING	Southern Plating & Galvanising Pty. Ltd., Five Islands Rd., Cringlia, Wollongong	237100	Road Match	62m
BUILDERS HARDWARE MFRS. & DISTRIBUTORS	Southern Plating and Galvanising Pty. Ltd., Five Islands Rd., Cringlla, Wollongong	234475	Road Match	62m
METAL POLISHERS	Southern Plating and Galvanizing Pty. Ltd., Five Islands Rd., Cringila, Wollongong	238448	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
FISH MERCHANTS-RETAIL	Stefanou, J., Five Islands Rd., Cringila, Wollongong	236635	Road Match	62m
TUBE FABRICATORS/ERECTORS	Stewarts and Lloyds (Distributors) Pty Limited., Five Islands Rd., Unanderra, Wollongong	241494	Road Match	62m
CRANES-MOBILE-PROPRIETORS & HIRERS	Verdon Bros., Five Islands Rd., Port Kembia , Wollongong	235464	Road Match	62m
MOTOR ACCESSORIES & SPARE PARTS DEALERS	Verdon Bros., Five Islands Rd., Port Kembla , Wollongong	239054	Road Match	62m
MOTOR TOWING SERVICES	Verdon Bros., Five Islands Rd., Port Kembla , Wollongong	239672	Road Match	62m
MOTOR WRECKERS	Verdun Bros., Five Islands Rd., Port Kembla, Wollongong	239704	Road Match	62m
MOTOR ELECTRICIANS	Woods, R., Five Islands Rd., Port Kembla, Wollongong	239276	Road Match	62m
GROCERS & GENERAL STOREKEEPERS	,Osanoski, O., Lake Ave., Cringila, Wollongong	237373	Road Match	125m
MIXED BUSINESSES	Asanouski, O., Lake Ave., Gringila, Wollongong	238724	Road Match	125m
GROCERS & GENERAL STOREKEEPERS	Asanovskl, O., Lake Ave., Cringila, Wollongong	237219	Road Match	125m
MIXED BUSINESSES	Colella, P., Lake Rd., Cringila, Wollongong	238771	Road Match	125m
BUTCHERS-RETAIL	Covell, L. & C. E., Lake Ave., Cringila. , Wollongong	234601	Road Match	125m
FRUITERERS & GREENGROCERS	Osanoski, O., Lake Ave., Cringila, Wollongong	236940	Road Match	125m
MILK, FRUIT JUICE BARS & CONFECTIONERS	Osanoski, O., Lake Ave., Cringila, Wollongong	238559	Road Match	125m
MIXED BUSINESSES	Osanoski, O., Lake Ave., Gringila, Wollongong	238890	Road Match	125m
STATIONERS-RETAIL	Pavia & Sons, Lake Ave., Cringila, Wollongong	241034	Road Match	125m
BOOKSELLERS-RETAIL	Pavia and Magro, Lake Ave., Cringila, Wollongong	234168	Road Match	125m
TOBACCONISTS-RETAIL	Scoble G. R., Lake Ave., Cringila, Wollongong	241352	Road Match	125m
FISHING TACKLE RETAILERS	Scoble, G. R., Lake Ave., Cringila, Wollongong	236655	Road Match	125m
SPORTS & TRAVEL GOODS-RETAIL	Scoble, G. R., Lake Ave., Cringila, Wollongong	240938	Road Match	125m
HAIRDRESSERS (GENT.'S) & TOBACCONISTS	Scoble, G. R., Lake Ave., Cringila. , Wollongong	237545	Road Match	125m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Business Directory Records
Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
PAINTER PAPERHANGER DECORATOR	Tomlin,L., Spring Hill Rd., Cohiston Wollongong	190382	Road Match	0m
GUEST HOUSES	"Fermanagh" (Mrs. L. A. Quilty), Five Islands Rd., Unanderra Wollongong	188064	Road Match	62m
GUEST HOUSES	"Lorray" (N. Rogan, Propr.), 5 Islands Rd., Port Kembla Wollongong	188073	Road Match	62m
ROOFING TILE MANUFACTURERS	Dura-Crete Concrete Product Co., Five Islands Rd., Unanderra Wollongong	191832	Road Match	62m
CONFECTIONERY MANUFACTURERS &/OR WHOLESALERS	Dura-Crete Concrete Products Co. 5 Islands Road, Unanderra Wollongong	185799	Road Match	62m
CONCRETE PRODUCT MANUFACTURERS	Duracrete Concrete Products Co., 5 Islands Rd. Wollongong	185792	Road Match	62m
CONCRETE MANUFACTURERS	Dura-Crete Concrete Products Co., 5 Islands Rd.; Unanderra Wollongong	185796	Road Match	62m
CONCRETE BUILDING BLOCK MANUFACTURERS	Dura-Crete Concrete Products Co., Five Islands Rd., Unanderra Wollongong	185783	Road Match	62m
CONCRETE PRODUCT MANUFACTURERS	Dura-Crete Concrete Products Co., Five Islands Rd., Unanderra Wollongong	185794	Road Match	62m
PAVING BLOCK MANUFACTURERS	Dura-crete Concrete Products Co., Five Islands Rd., Unanderra Wollongong	190386	Road Match	62m
BUILDERS-PREFABRICATED	Elweld Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	185353	Road Match	62m
WELDERS-ELECTRIC &/OR OXY	Garnock Engineering Co. Pty. Ltd., 6 Five Islands Rd., Port Kembla Wollongong	192267	Road Match	62m
ENGINEERS-ELEVATING & CONVEYING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187334	Road Match	62m
ENGINEERS-MARINE	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187392	Road Match	62m
ENGINEERS-MATERIAL HANDLING EQUIPMENT	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187395	Road Match	62m
ENGINEERS-MINING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187396	Road Match	62m
ENGINEERS-REFRIGERATION	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187409	Road Match	62m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
ENGINEERS-STEAM EQUIPMENT	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187419	Road Match	62m
ENGINEERS-STONE QUARRY MACHINERY	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187421	Road Match	62m
ENGINEERS-STRUCTURAL &/OR DESIGNING	Garnock Engineering Co. Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187423	Road Match	62m
ENGINEERS-GENERAL &/OR MANUFACTURING &/OR MECHANICAL	Garnock Engineering Co., Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187356	Road Match	62m
BUILDERS AND BUILDING, CONTRACTORS	Graham and Hughes, Five Islands Rd., Port Kembla Wollongong	185239	Road Match	62m
JOINERY MANUFACTURERS	Graham and Hughes, Five Islands Rd., Port Kembla Wollongong	189563	Road Match	62m
CONTRACTORS-GENERAL	Hornibrook, McKenzie, Clark Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	185808	Road Match	62m
EARTH MOVING EQUIPMENT FOR HIRE	Hornibrook, McKenzie, Clark Pty. Ltd., Five islands Rd., Port Kembla Wollongong	187204	Road Match	62m
ENGINEERS-CIVIL	Hornibrook, McKenzie, Clark Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187316	Road Match	62m
ENGINEERS-STRUCTURAL &/OR DESIGNING	Hornibrook, McKenzie, Clark Pty. Ltd., Five Islands Rd., Port Kembla Wollongong	187425	Road Match	62m
SHEET METAL MANUFACTURERS	Lysaghts Works Pty. Ltd., Springhill Rd., Port Kembla Wollongong	191935	Road Match	62m
TIMBER MERCHANTS & BUILDERS SUPPLIERS	Madden and Madden, Cnr Horne and Five Islands Rd., Port Kembla Wollongong	192139	Road Match	62m
SAWMILLERS	Madden and Madden, Cnr. Horne and Five Islands Rd., Port Kembla Wollongong	191860	Road Match	62m
ENGINEERS-STRUCTURAL &/OR DESIGNING	O'Donnell, J. E. Five Islands Rd., Port Kembla Wollongong	187422	Road Match	62m
ENGINEERS-STRUCTURAL &/OR DESIGNING	O'Donnell, J. E., Five Islands Rd., Port Kembla Wollongong	187429	Road Match	62m
MOTOR GARAGE AND ENGINEER	O'Donnell, J. E., Five Islands Rd., Port Kembla Wollongong	190107	Road Match	62m
CARRIERS AND CARTAGE CONTRACTOR	O'Donnell, J., Five Islands Rd., Port Kembla Wollongong	185632	Road Match	62m
MOTOR SERVICE STATIONS	Pacific Service Station, Five Islands Rd., Port Kembla Wollongong	190204	Road Match	62m
RANGES & STOVES-DEALERS	Pioneer Service Station (Agent, B.G.E.), Five islands Rd., Port Kembla Wollongong	190588	Road Match	62m
REFRIGERATOR DEALERS &/OR SERVICEMEN	Pioneer Service Station (Agent, B.G.E.), Five Islands Rd., Port Kembla Wollongong	191826	Road Match	62m
ELECTRICAL SUPPLIES & APPLIANCES-RETAIL	Pioneer Service Station (Agents, B.G.E.), Five Islands Rd., Port Kembla Wollongong	187287	Road Match	62m
MOTOR CAR & TRUCK DEALERS-NEW &/OR USED	Pioneer Service Station (Sub-Agent Ford Motor Co Five Islands Rd., Port Kembla Wollongong	190021	Road Match	62m
ENGINEERS-REFRIGERATION	Pioneer Service Station, Five Islands Rd., Port Kembla Wollongong	187412	Road Match	62m
MOTOR ACCESSORY DEALERS	Pioneer Service Station, Five Islands Rd., Port Kembla Wollongong	189945	Road Match	62m
MOTOR GARAGE AND ENGINEER	Pioneer Service Station, Five Islands Rd., Port Kembla Wollongong	190110	Road Match	62m
TYRE DEALERS	Pioneer Service Station, Five Islands Rd., Port Kembla Wollongong	192215	Road Match	62m
GUEST HOUSES	Qultty, L. A., Five Islands Rd., Unanderra Wollongong	188080	Road Match	62m
GUEST HOUSES	Rogan, N. W., Five Islands Rd., Port Kembla Wollongong	188081	Road Match	62m
ENGINEERS-LIFTING & HANDLING	Thirlwell & Mckenzie Limited Five Islands Rd., Port Kembla Wollongong	187387	Road Match	62m
ENGINEERS-LIFTING & HANDLING	Thirlwell and McKenzie Limited, Five Islands Rd., Port Kembla Wollongong	187390	Road Match	62m
BOOKSELLERS & STATIONERS	Cartwright, A. R. M., Lake Ave., Comilla, Port Kembla Wollongong	185144	Road Match	125m
NEWSAGENTS	Cartwright, A. R. M., Lake Ave., Congila, Port Kembla Wollongong	190279	Road Match	125m
BANKS	Commonwealth Savings Bank of Australia, Lake Ave., Cringila Wollongong	185066	Road Match	125m
DRESSMAKERS & COSTUMIERS	Frend, C., Lake Ave., Cringila Wollongong	187168	Road Match	125m

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
GROCERS & GENERAL STOREKEEPERS	Jeanneret, M., Lake Ave., Cringila Wollongong	187913	Road Match	125m
GROCERS AND GENERAL STOREKEEPERS	Smyth, C., Lake Ave., Cringila, Port Kembla Wollongong	188017	Road Match	125m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Ampol Cringila, Five Islands Rd.: Cringila., Wollongong	143215	1982	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Ampol Garage, Five Islands Rd., Cringila Wollongong	565732	1970	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	BP South Pacific Service Station, Five Islands Rd., Cringila Wollongong	565469	1970	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	BP South Pacific, 65 Five Islands Rd., Cringila,., Wollongong	143244	1982	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Cringila Motors, Five Islands Rd., Cringila Wollongong	565502	1970	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Cringila Motors, Five Islands Rd., Cringila. Wollongong	565749	1970	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Esso Servicenter, Five Islands Rd., Cringila Wollongong	565753	1970	Road Match	62m
BATTERY SERVICE STATIONS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	233982	1961	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Gillman Engineering Pty. Ltd., Five Islands Rd., Cringila, Wollongong	239357	1961	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Golden Fleece Service Station, Five Islands Rd., Port Kembla, Wollongong	565521	1970	Road Match	62m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	Golden Fleece Service Station, Five Islands Rd., Port Kembla, Wollongong	565759	1970	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Golden Fleece Service Station. Five Islands Rd., Port Kembla., Wollongong	143279	1982	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	Hans' Service Station, Five Islands Rd., Cringila Wollongong	565538	1970	Road Match	62m
MOTOR GARAGE AND ENGINEER	O'Donnell, J. E., Five Islands Rd., Port Kembla Wollongong	190107	1950	Road Match	62m
MOTOR SERVICE STATIONS	Pacific Service Station, Five Islands Rd., Port Kembla Wollongong	190204	1950	Road Match	62m
MOTOR GARAGE AND ENGINEER	Pioneer Service Station, Five Islands Rd., Port Kembla Wollongong	190110	1950	Road Match	62m
MOTOR GARAGES &/OR ENGINEERS	South Pacific Service Station., Five Islands Rd., Cringila, Wollongong	239421	1961	Road Match	62m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Aerial Imagery 2016

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

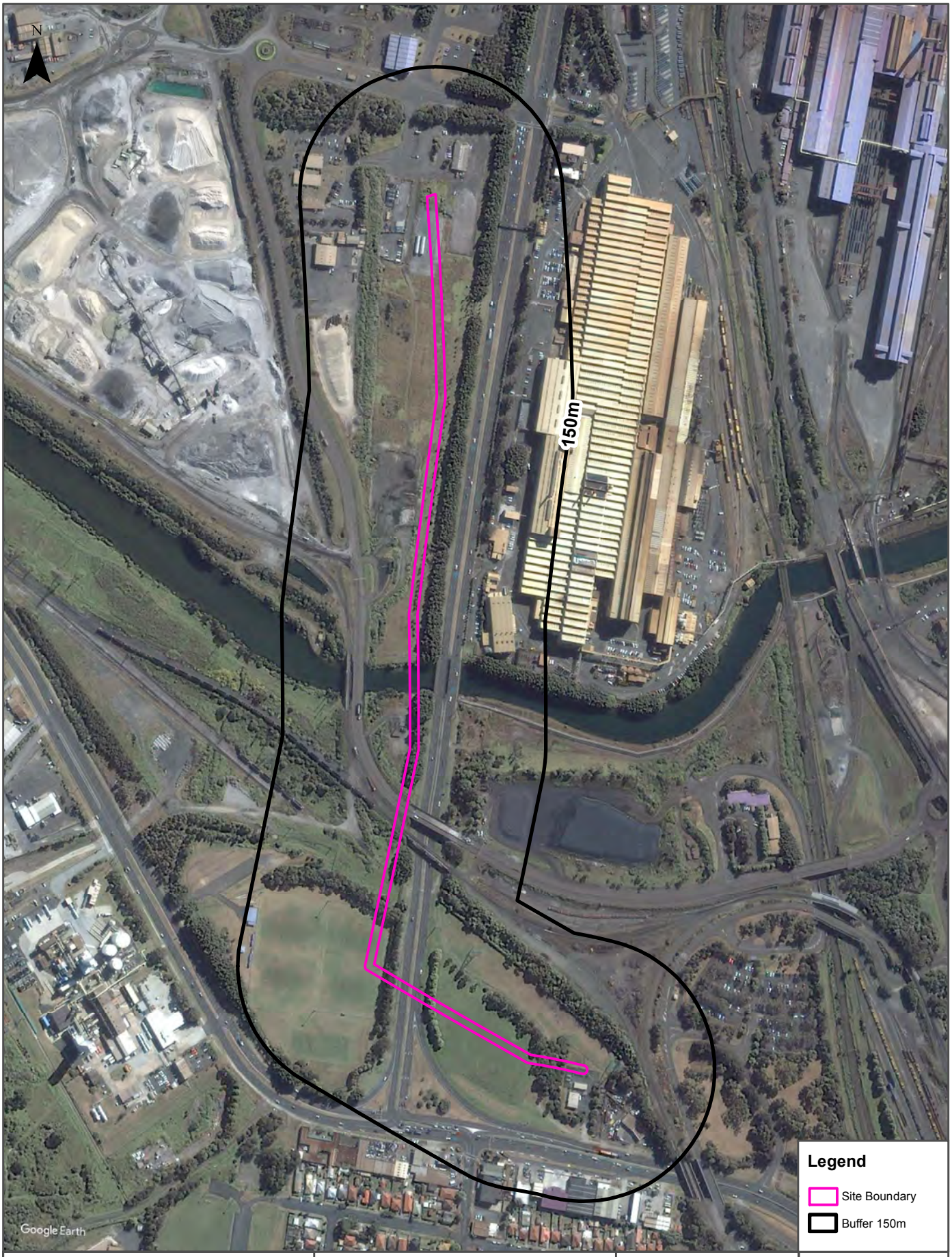


Scale:	Data Sources: Aerial Imagery © Department Finance, Services & Innovation	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

0 50 100 200 300
Meters

Aerial Imagery 2013

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



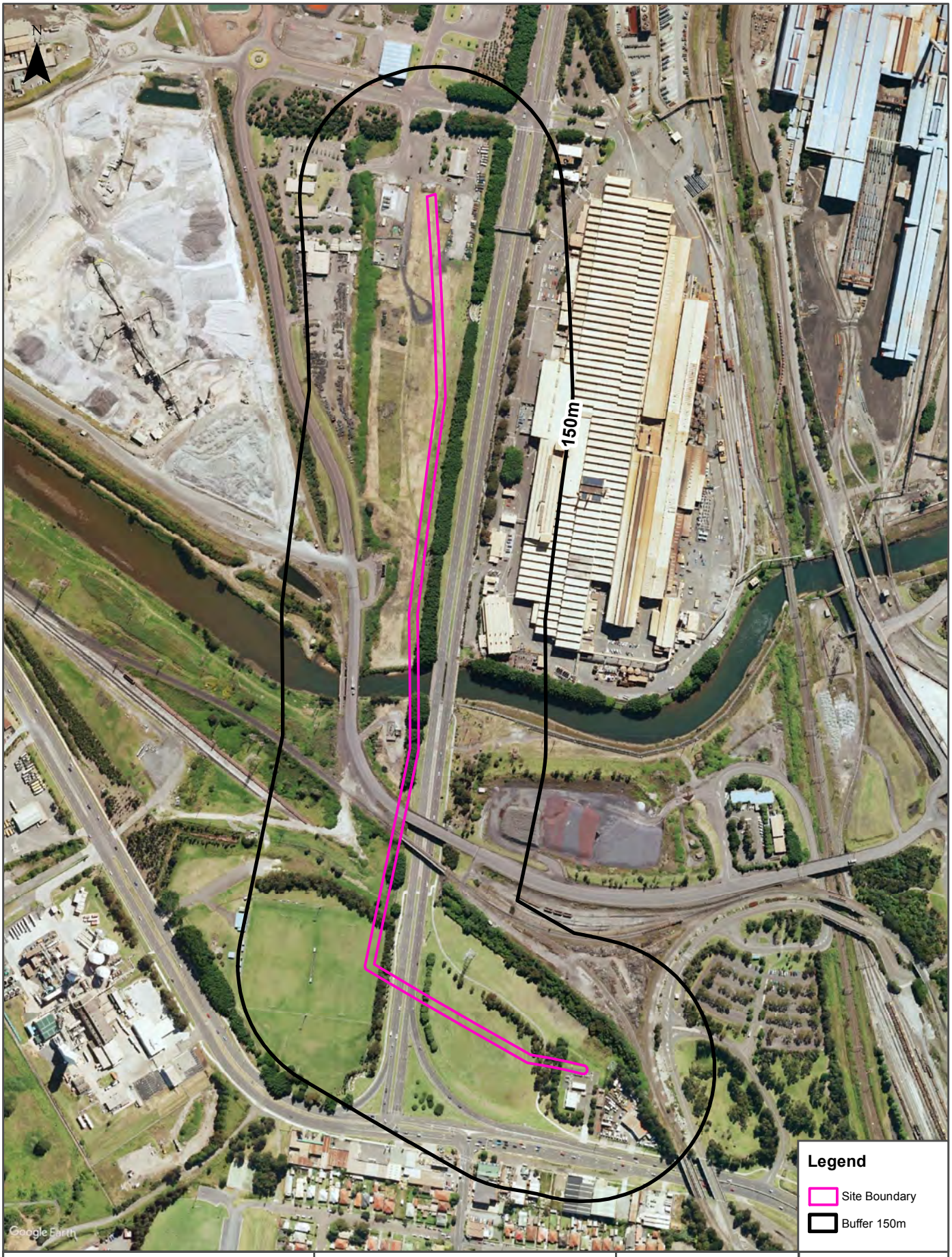
Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 17 July 2018

Aerial Imagery 2008

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

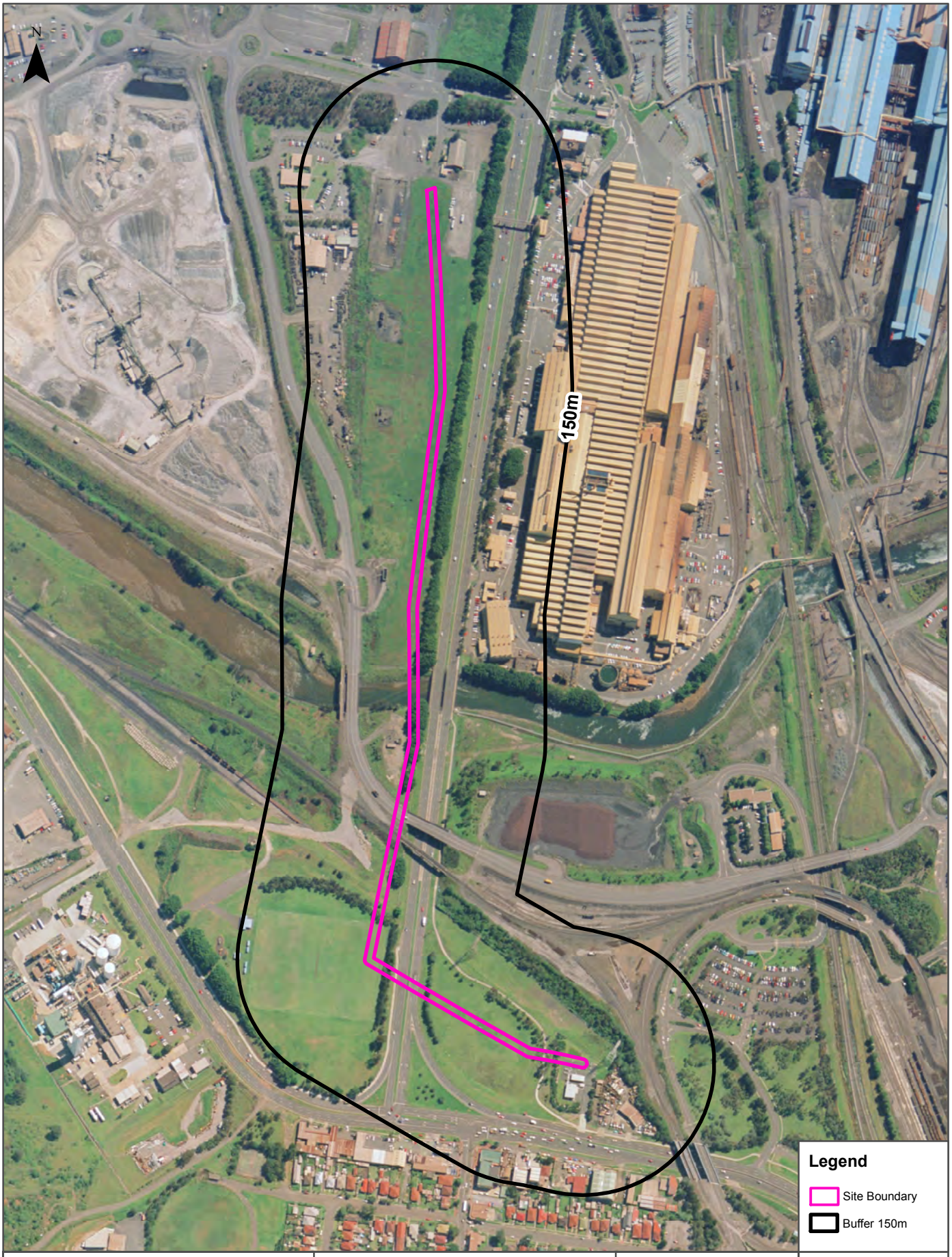


Scale:	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

0 50 100 200 Meters

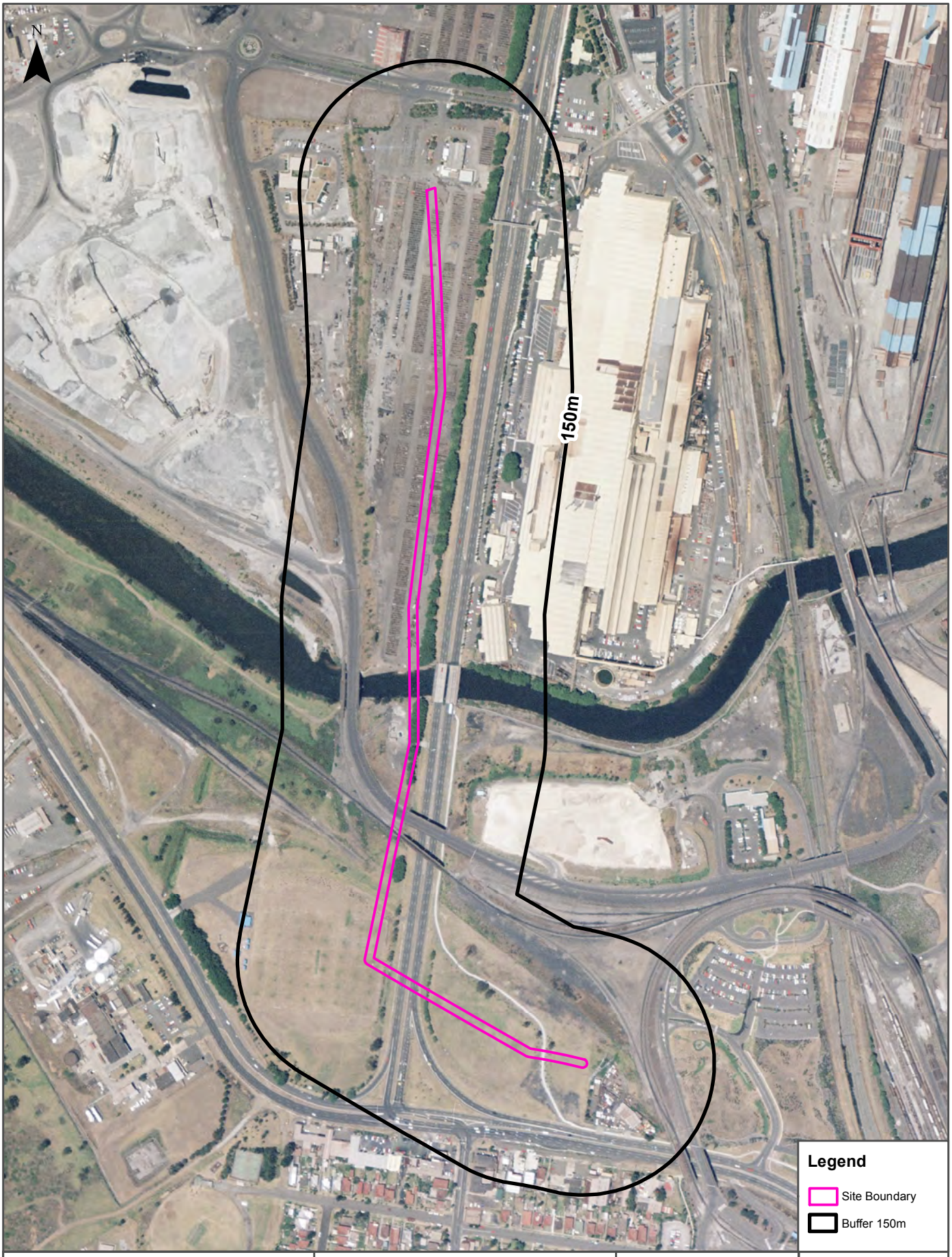
Aerial Imagery 2002

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



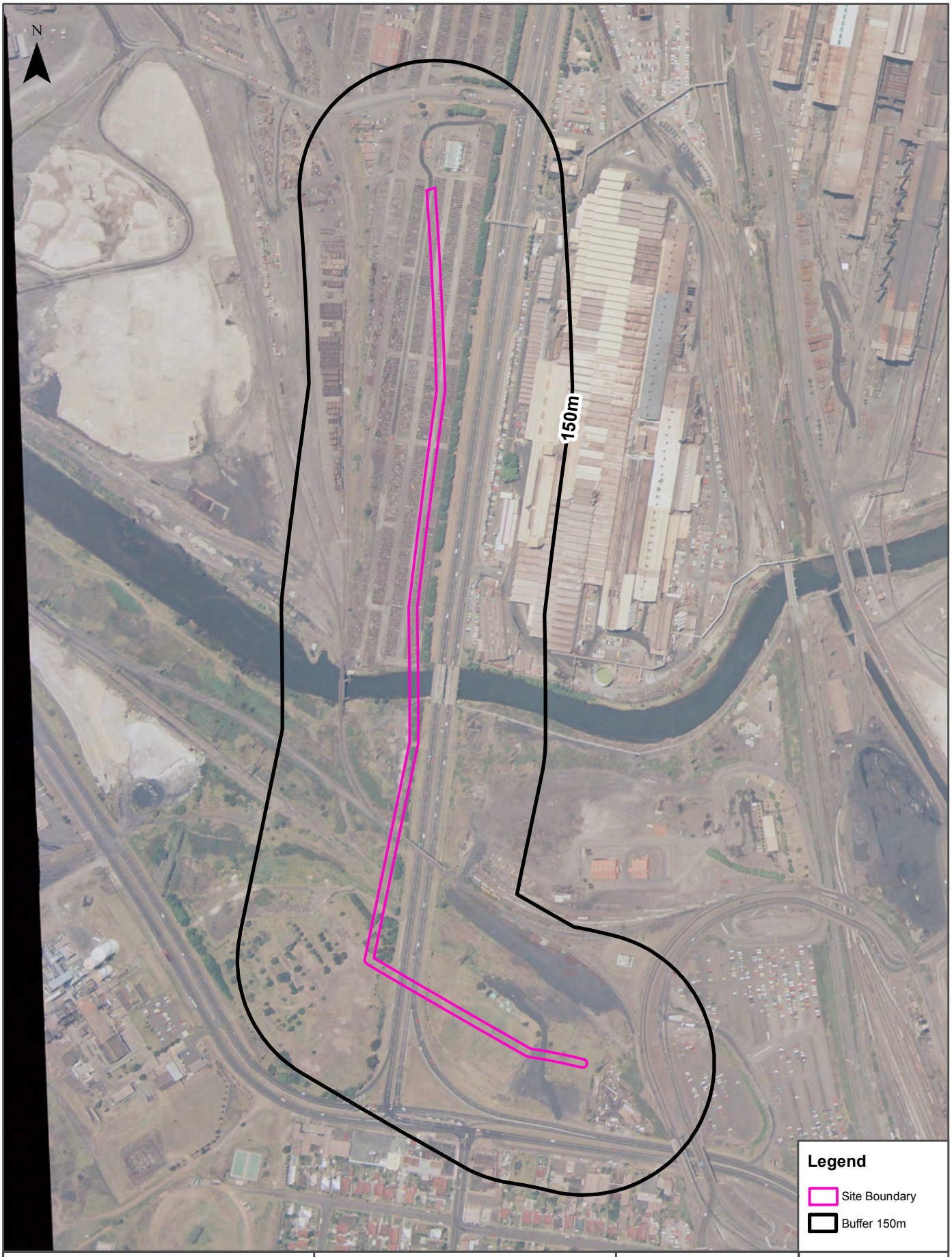
Aerial Imagery 1994

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



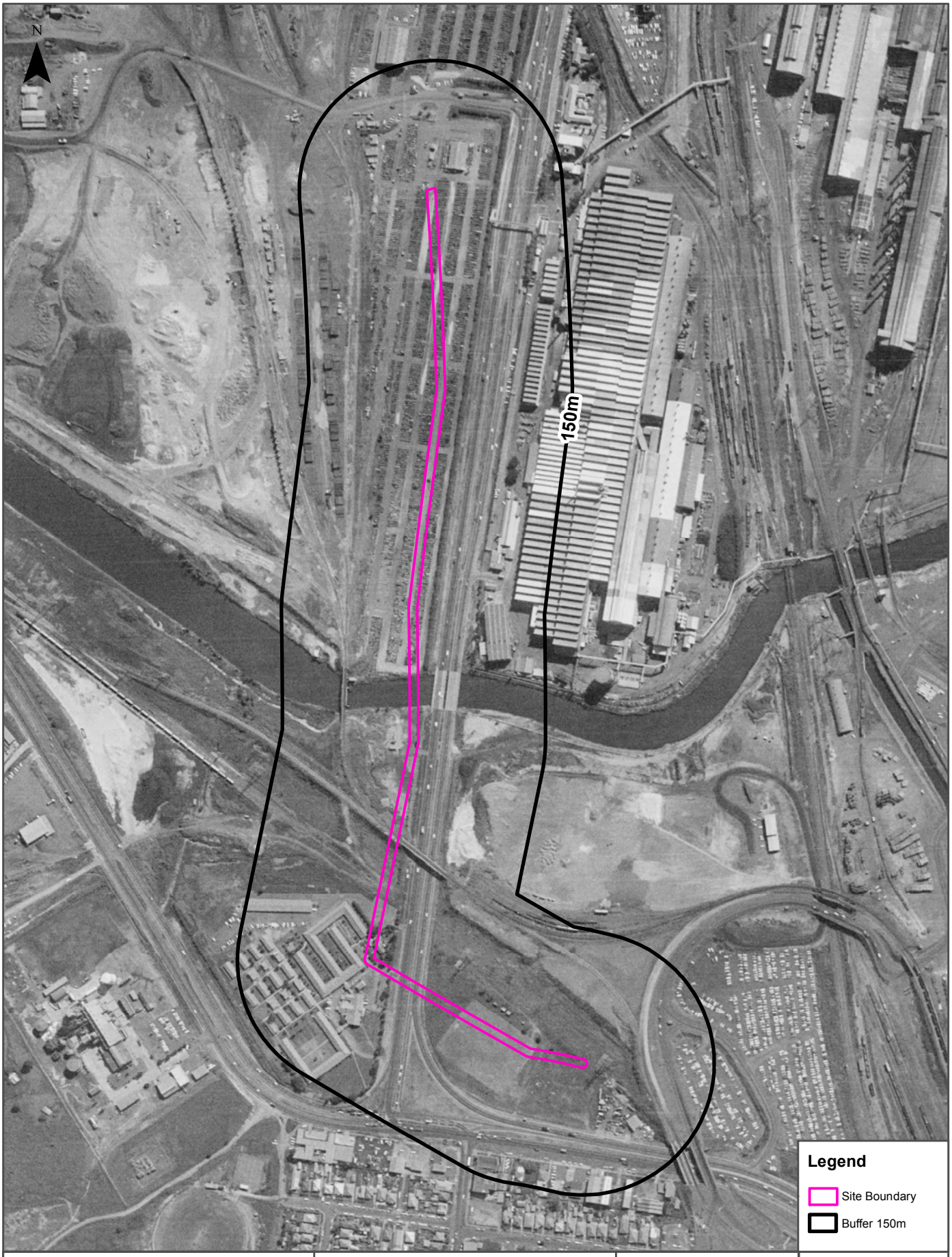
Aerial Imagery 1984

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



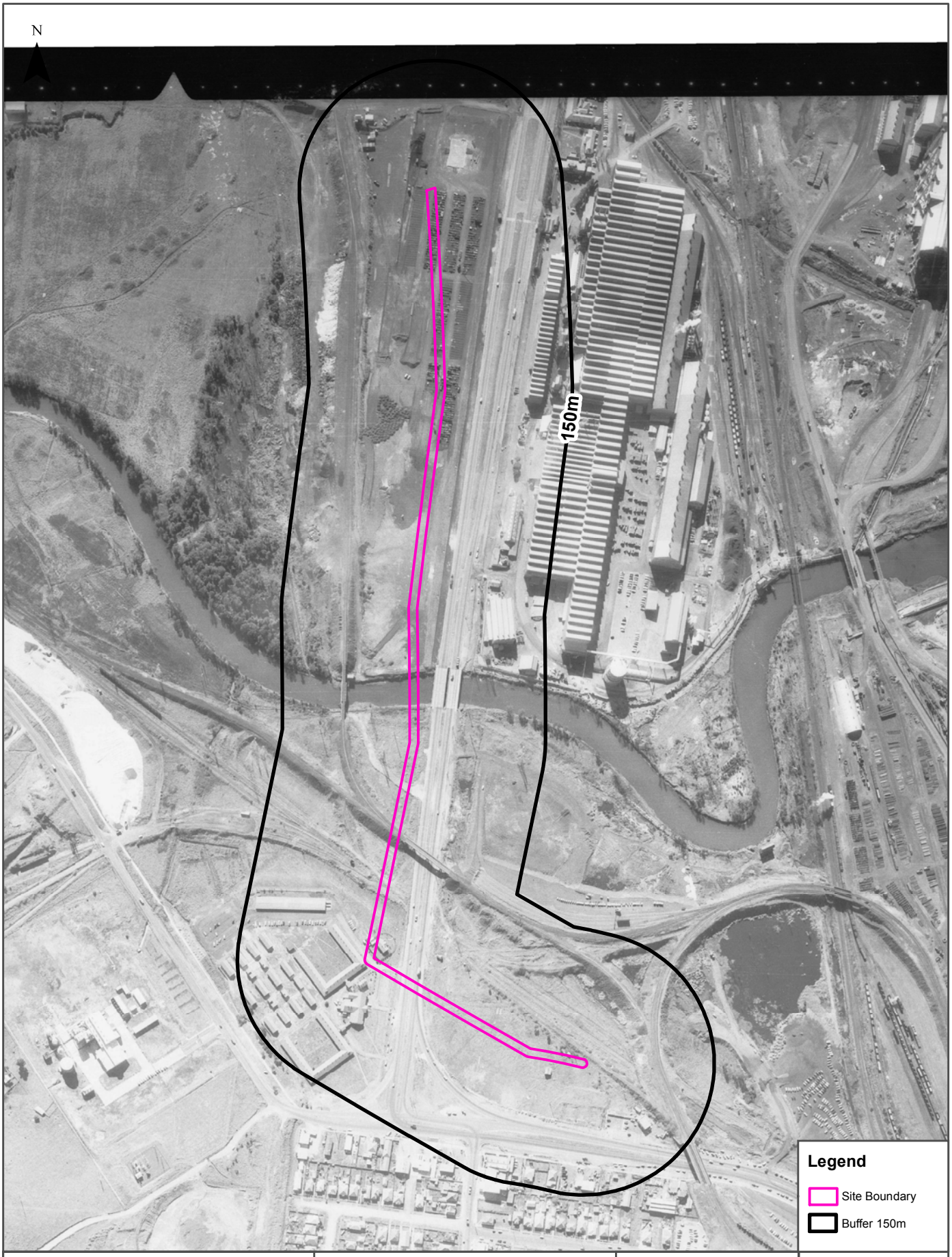
Aerial Imagery 1975

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



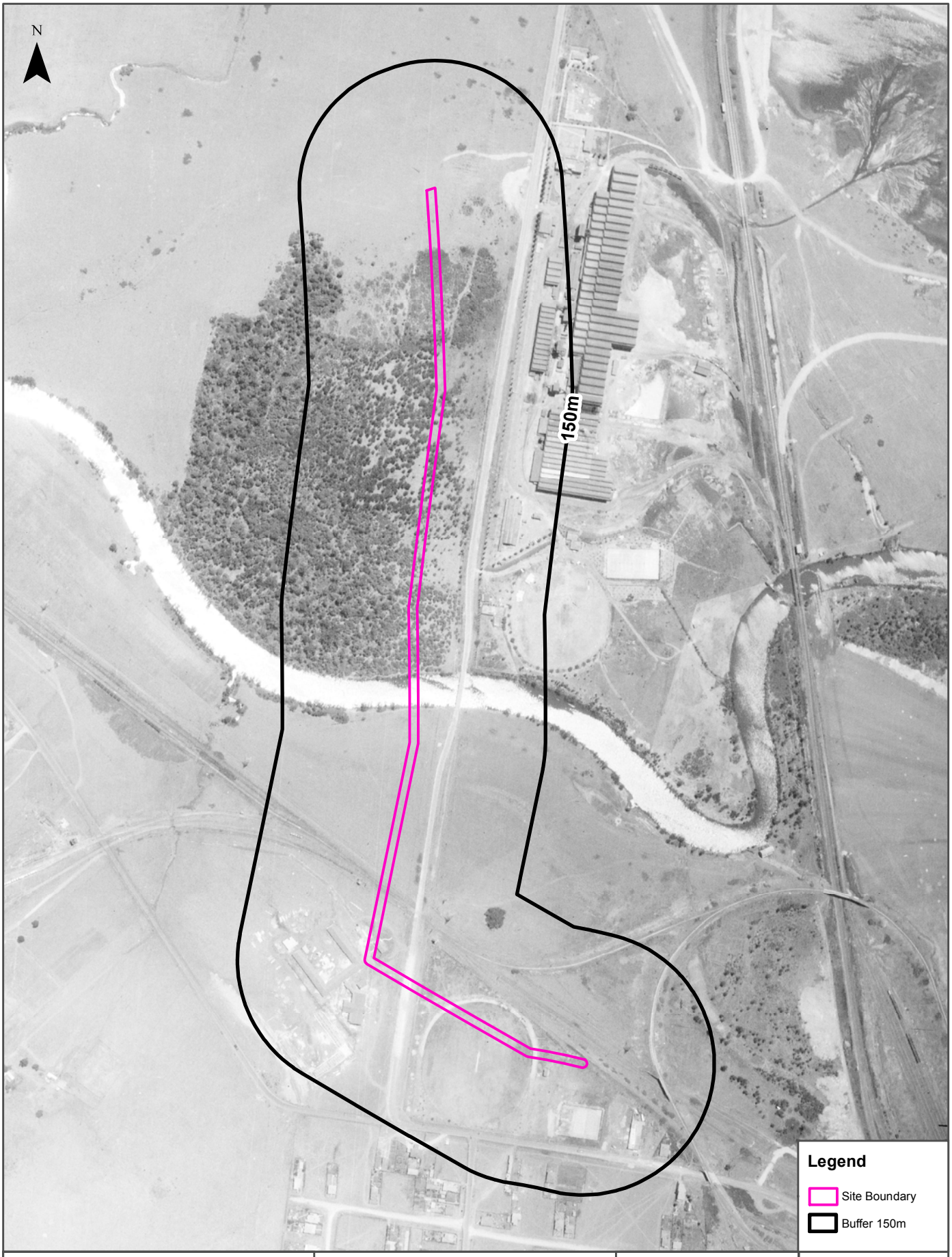
Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



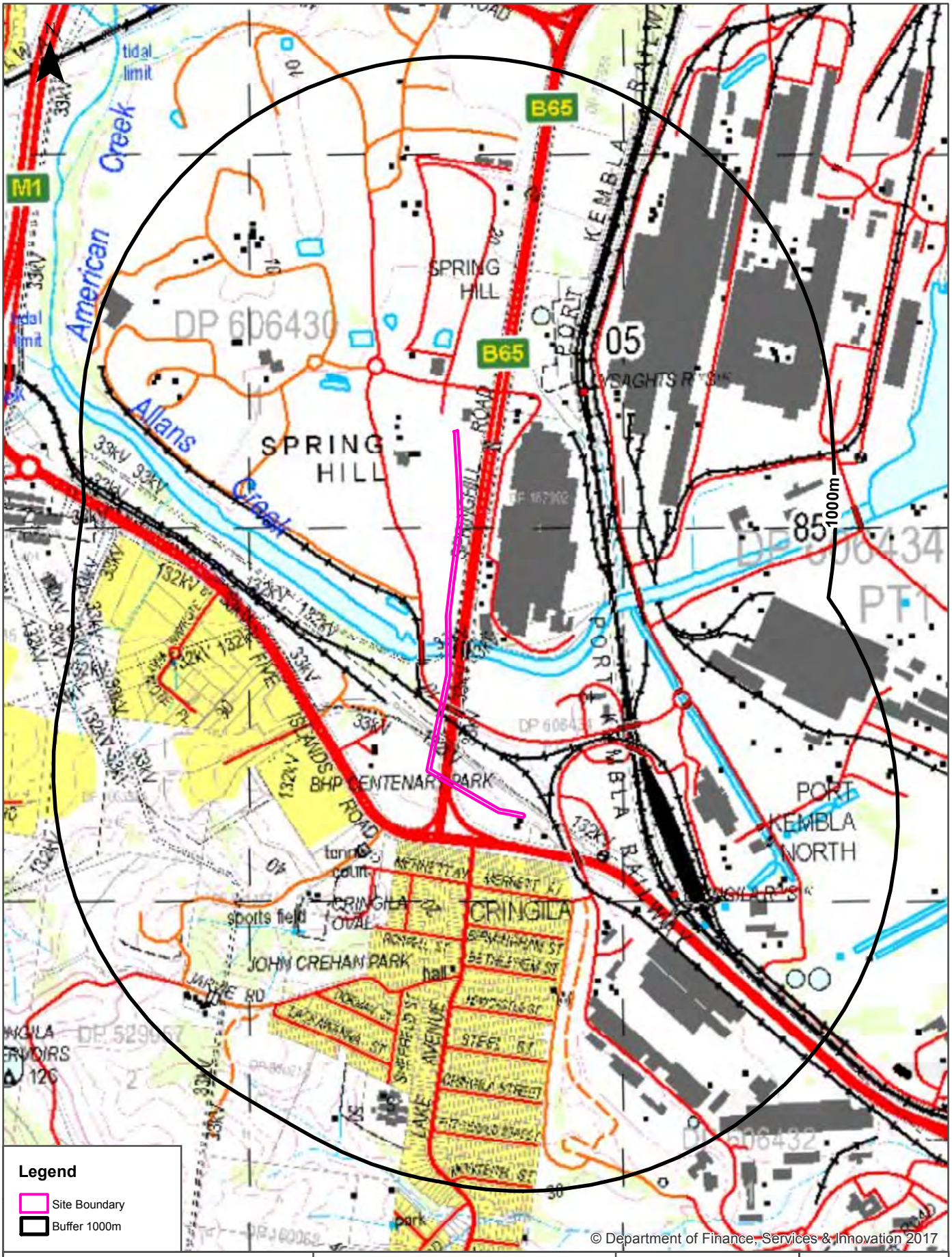
Aerial Imagery 1951

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



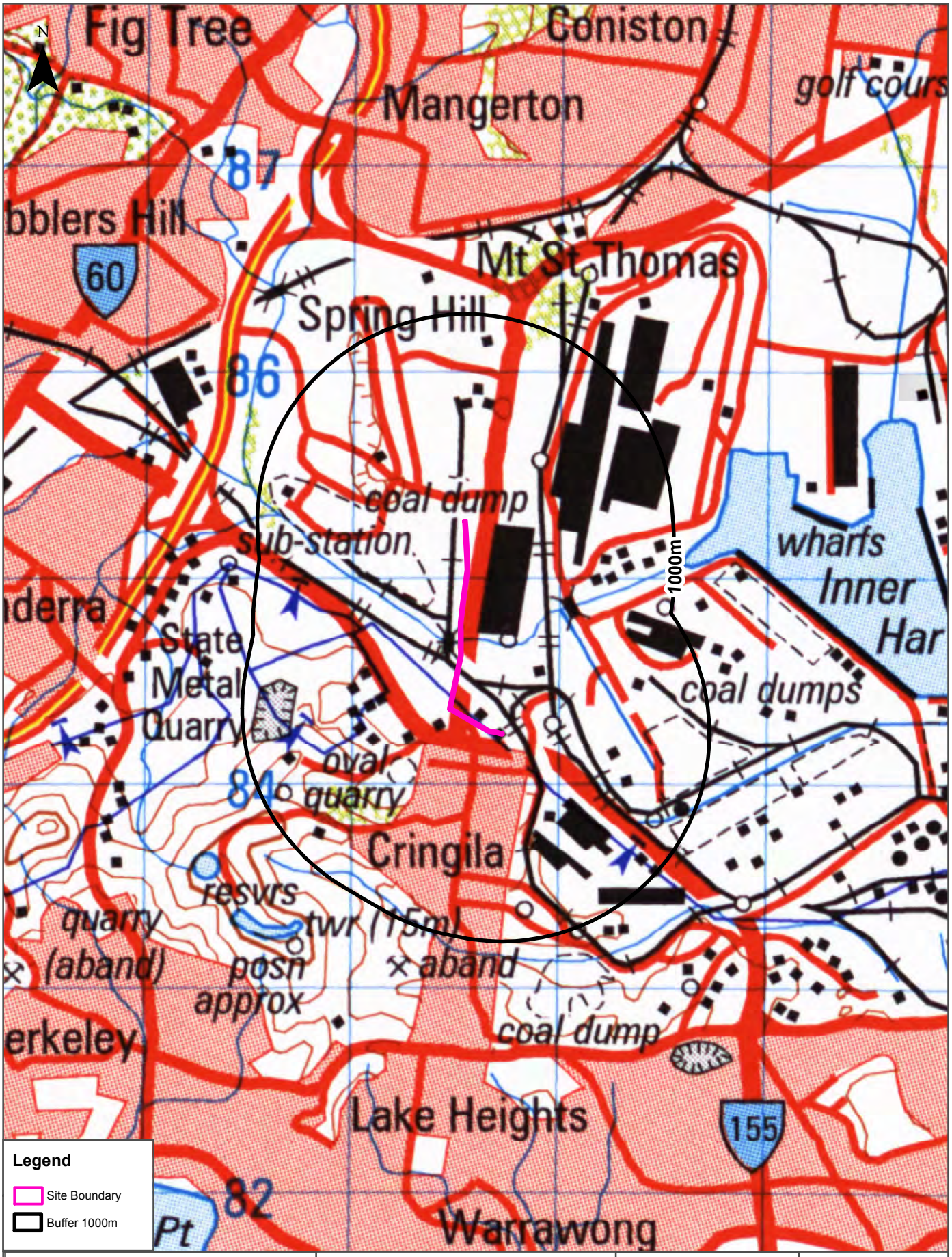
Topographic Map 2015

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



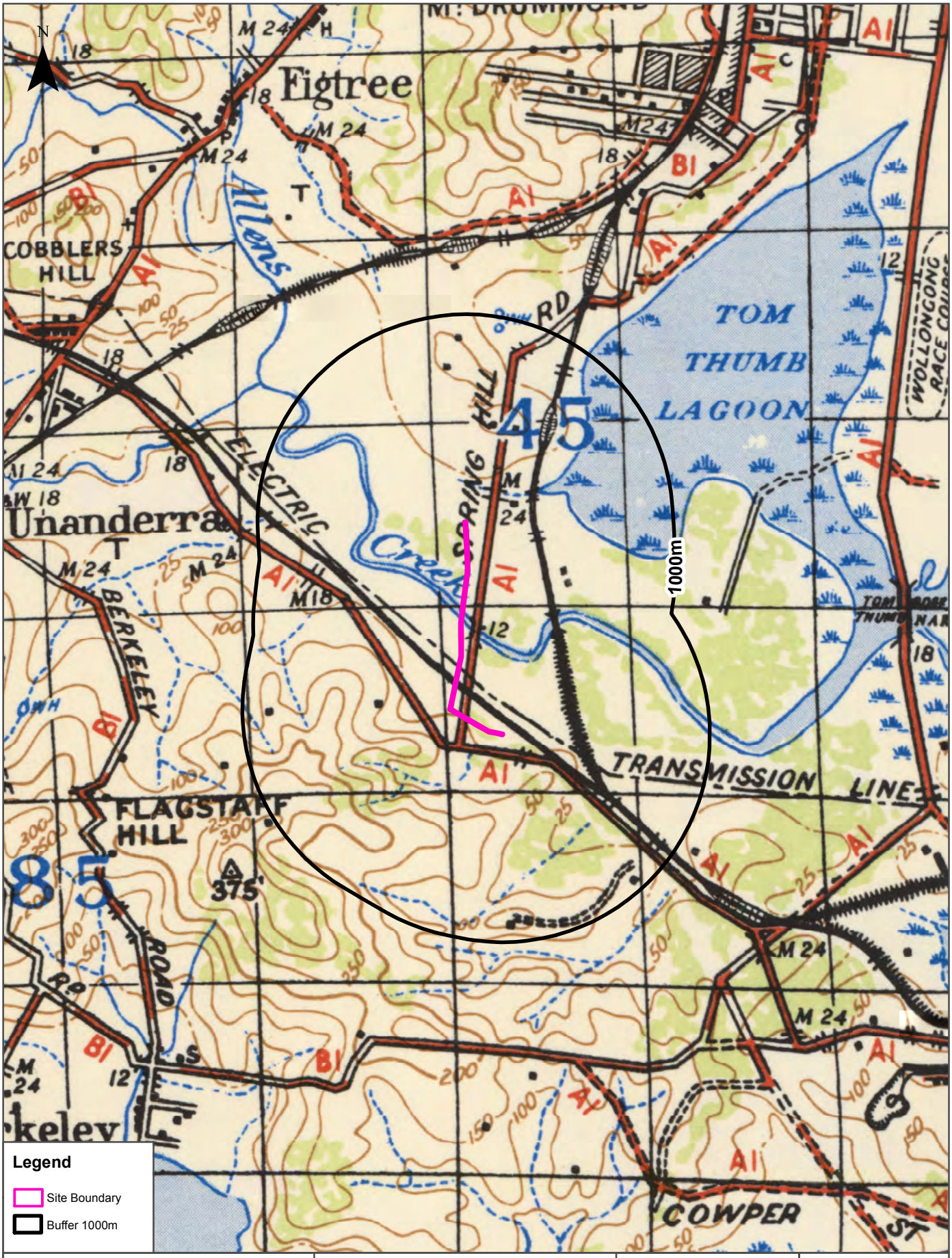
Historical Map 1998

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



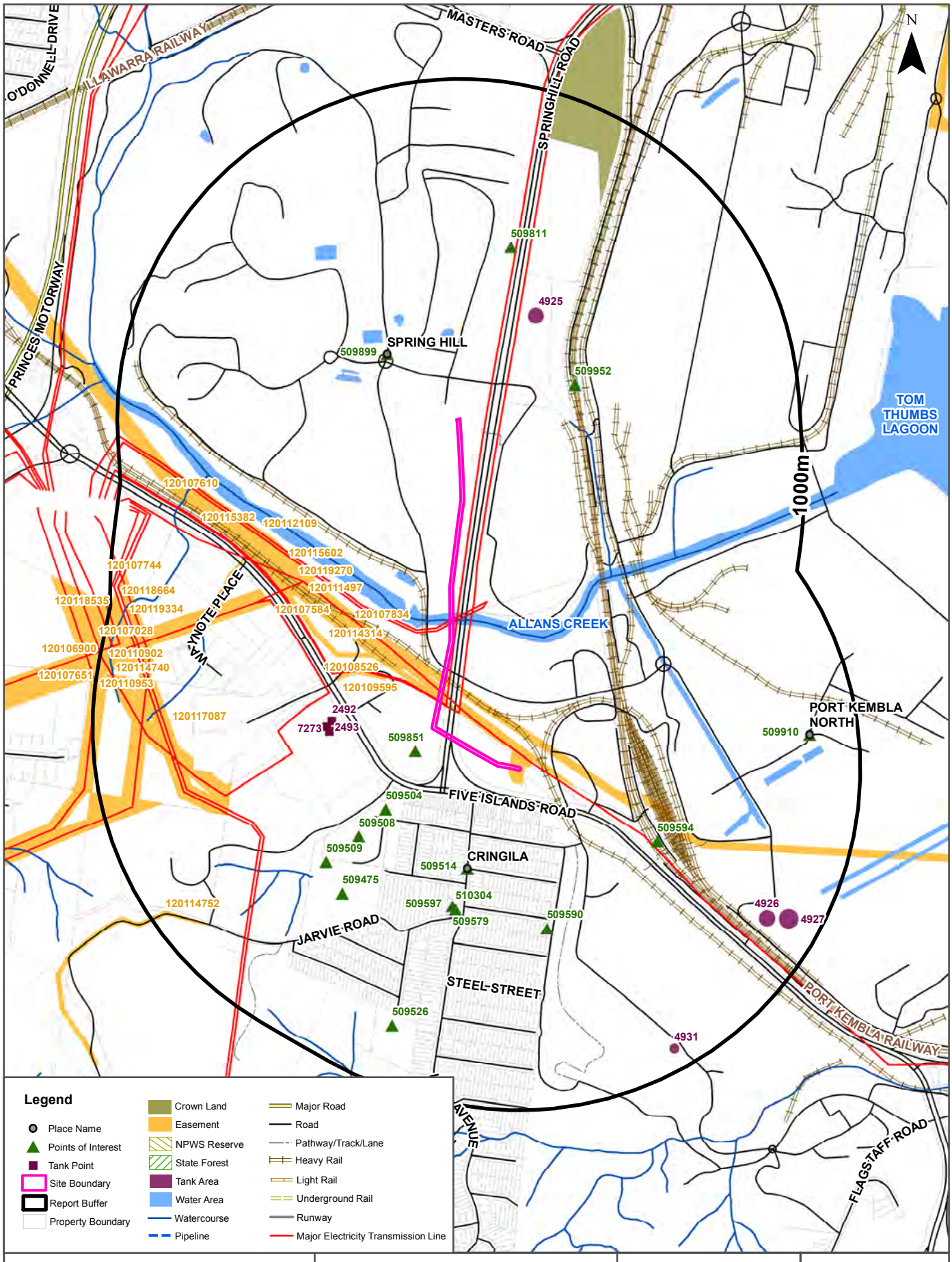
Historical Map 1942

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
509851	Park	BHP CENTENARY PARK	84m	South
509504	Sports Court	TENNIS COURT	274m	South
509899	Locality	SPRING HILL	280m	North
509514	Suburb	CRINGILA	314m	South
509952	Railway Station	LYSAGHTS RAILWAY STATION	353m	North East
509508	Sports Field	CRINGILA OVAL	384m	South West
509579	Medical Centre	CRINGILA COMMUNITY HEALTH CENTRE	433m	South
509597	Medical Centre	CRINGILA EARLY CHILDHOOD HEALTH CENTRE	433m	South
510304	Community Facility	CRINGILA COMMUNITY HALL	439m	South
509594	Railway Station	CRINGILA RAILWAY STATION	455m	South East
509590	Place Of Worship	CRINGILA ISLAMIC	473m	South
509509	Sports Field	Sports Field	502m	South West
509811	Mountain/Hill/Peak	SPRING HILL	525m	North
509475	Park	JOHN CREHAN PARK	553m	South West
509526	Primary School	CRINGILA PUBLIC SCHOOL	823m	South
509910	Suburb	PORT KEMBLA NORTH	856m	East

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
4925	Undefined	Operational		09/04/2006	352m	North
4926	Undefined	Operational		09/04/2006	823m	South East
4927	Undefined	Operational		09/04/2006	874m	South East
4931	Undefined	Operational		09/04/2006	923m	South East

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
2492	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	295m	South West
7273	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	301m	South West
2493	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	310m	South West

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120114314	Primary	Undefined		0m	Onsite
120115602	Primary	Undefined		0m	Onsite
120112109	Primary	Undefined		0m	Onsite
120119270	Primary	Undefined		0m	Onsite
120107834	Primary	Undefined		0m	Onsite
120107610	Primary	Undefined		116m	West
120111497	Primary	Undefined		121m	West

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120108526	Primary	Undefined		164m	South West
120109595	Primary	Undefined		175m	South West
120107584	Primary	Undefined		527m	West
120111561	Primary	Undefined		548m	West
120117087	Primary	Undefined		613m	South West
120115382	Primary	Undefined		619m	West
120119334	Primary	Undefined		703m	South West
120107744	Primary	Undefined		828m	South West
120114752	Primary	Undefined		879m	South West
120110953	Primary	Undefined		882m	West
120107066	Primary	Undefined		898m	West
120114763	Primary	Undefined		913m	West
120114777	Primary	Undefined		917m	West
120118664	Primary	Undefined		922m	West
120110864	Primary	Undefined		922m	West
120114740	Primary	Undefined		924m	West
120106900	Primary	Undefined		939m	West
120107028	Primary	Undefined		943m	West
120110902	Primary	Undefined		948m	West
120118535	Primary	Undefined		948m	West
120107651	Primary	Undefined		984m	West

Easements Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Legend

- Elevation Contour (m AHD)
- Site Boundary
- Report Buffer
- Property Boundary

Accuracy & Currency: This contour data can be up to 0.4 of the contour interval out in height and must therefore not be used for any design or engineering works, but only as a general guide to topography. Gaps may occur along contour lines due to vertical topography, obscured topography in the source photography such as buildings, dense vegetation or dead ground, or the fact that original buildings have been replaced in the intervening thirty years since the original contour capture.

Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

0 100 200 400 Meters

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Hydrogeology

Description of aquifers on-site:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Botany Groundwater Management Zones

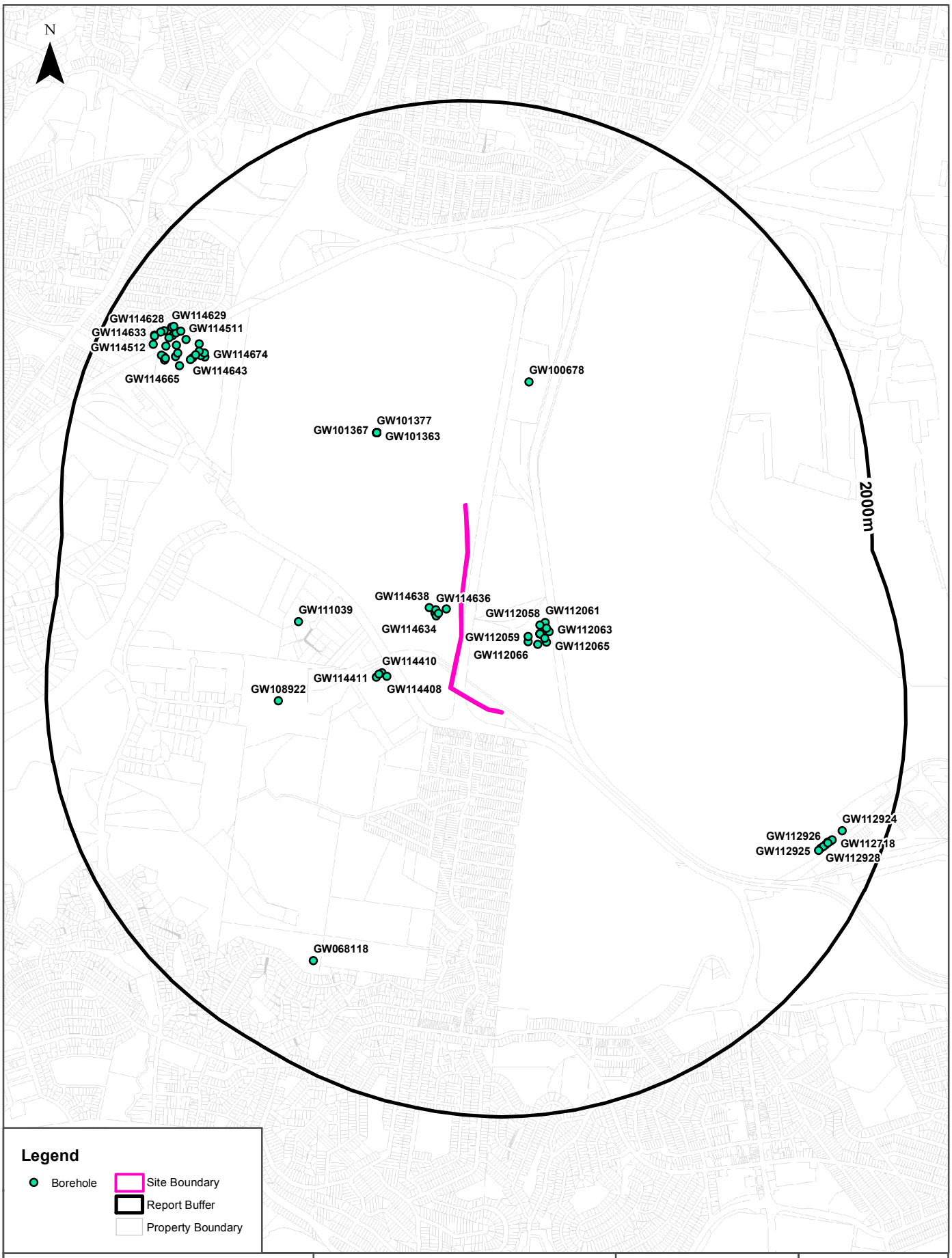
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114817	10BL605478	Bore	Private	Monitoring bore	ENVIRODRILL	11/12/2014	3.00	3.00					67m	North West
GW114637	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					107m	West
GW114634	10BL605432	Bore	Private	Monitoring bore	ENVIRODRILL	21/03/2014	2.40	2.40					118m	West
GW114636	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					121m	West
GW114635	10BL605432	Bore	Private	Monitoring bore		07/01/2013	3.00	3.00					125m	West
GW114638	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					152m	West
GW114408	10BL605157	Bore	Private	Monitoring		06/03/2012	7.20	7.20					315m	South West
GW112059	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					327m	East
GW112066	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					328m	East
GW114410	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					341m	South West
GW114409	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					356m	South West
GW114411	10BL605157	Bore	Private	Monitoring		06/03/2012	4.60	4.60					367m	South West
GW112062	10BL157702	Bore	Private	Monitoring		03/08/1994	3.00	3.00					376m	East
GW112058	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					385m	East
GW100524	10BL156496	Bore	Private	Monitoring		14/10/1993	11.21	11.21					386m	East
GW112057	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					386m	East
GW100525	10BL156496	Bore	Private	Monitoring		14/10/1993	13.48	13.48					386m	East
GW100526	10BL156496	Bore	Private	Monitoring		14/10/1993	12.38	12.38					386m	East
GW112065	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					408m	East
GW112060	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					409m	East
GW112061	10BL157702	Bore	Private	Monitoring		03/08/1994	1.20	1.20					412m	East
GW112064	10BL157702	Bore	Private	Monitoring		03/08/1994	1.70	1.70					418m	East
GW112063	10BL157702	Bore	Private	Monitoring		03/08/1994	1.50	1.50					431m	East
GW101377	10BL156497	Bore	Mines	Monitoring		09/04/1992	5.10	5.10					561m	North West
GW101367	10BL156497	Bore	Mines	Monitoring		04/05/1992	26.00	30.00					561m	North West
GW101375	10BL156497	Bore	Mines	Monitoring		12/05/1992	11.00	11.00					561m	North West
GW101385	10BL156497	Bore	Mines	Monitoring		29/04/1992	6.00	6.00					561m	North West
GW101363	10BL156497	Bore	Mines	Monitoring		08/04/1992	21.00	21.00					561m	North West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW101387	10BL156497	Bore	Mines	Monitoring		30/04/1992	13.00	13.00					561m	North West
GW101368	10BL156497	Bore	Mines	Monitoring		14/05/1992	5.60	5.60					561m	North West
GW101388	10BL156497	Bore	Mines	Monitoring		13/05/1992	10.00	10.00					561m	North West
GW101374	10BL156497	Bore	Mines	Monitoring		12/05/1992	38.60	38.60					561m	North West
GW101366	10BL156497	Bore	Mines	Monitoring		28/04/1992	5.00	5.00					561m	North West
GW101386	10BL156497	Bore	Mines	Monitoring		01/05/1992	10.10	10.10					561m	North West
GW101370	10BL156497	Bore	Mines	Monitoring		23/04/1992	40.00	40.00					561m	North West
GW101382	10BL156497	Bore	Mines	Monitoring		14/04/1992	13.50	13.50					561m	North West
GW101551	10BL156497	Bore		Monitoring		18/05/1992	6.00	6.00					561m	North West
GW101378	10BL156497	Bore	Mines	Monitoring		10/04/1992	19.60	19.60					561m	North West
GW101365	10BL156497	Bore	Mines	Monitoring		28/04/1992	17.50	17.60					561m	North West
GW101372	10BL156497	Bore	Mines	Monitoring		15/04/1992	26.70	26.70					561m	North West
GW101376	10BL156497	Bore	Mines	Monitoring		08/04/1992	11.80	11.80					561m	North West
GW101392	10BL156497	Bore	Mines	Monitoring		15/05/1992	13.00	13.00					561m	North West
GW101364	10BL156497	Bore	Mines	Monitoring		08/04/1992	7.90	7.90					561m	North West
GW101369	10BL156497	Bore	Private	Monitoring		08/05/1992	6.50	6.60					561m	North West
GW101384	10BL156497	Bore	Mines	Monitoring		29/04/1992	22.00	22.00					561m	North West
GW101389	10BL156497	Bore	Mines	Monitoring		13/05/1992	4.00	4.00					561m	North West
GW101383	10BL156497	Bore	Mines	Monitoring		22/04/1992	9.00	9.00					561m	North West
GW101379	10BL156497	Bore	Mines	Monitoring		01/04/1992	9.60	9.60					561m	North West
GW101371	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.60	8.60					561m	North West
GW101391	10BL156497	Bore	Mines	Monitoring		18/05/1992	6.50	6.50					561m	North West
GW101380	10BL156497	Bore	Mines	Monitoring		14/05/1992	15.00	15.00					561m	North West
GW101381	10BL156497	Bore	Mines	Monitoring		13/04/1992	32.50	32.50					561m	North West
GW101390	10BL156497	Bore	Mines	Monitoring		18/05/1992	12.00	12.00					561m	North West
GW101373	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.00	8.00					561m	North West
GW100678	10BL156580	Bore	Private	Monitoring	KH Adams & Sons Pty Ltd	22/03/1995	65.00	65.00	2200	8.20	7.500		682m	North
GW111039	10BL604123	Well	Private	Monitoring	Macquarie Drilling	16/07/2010	3.50	3.50		1.00			800m	West
GW108922	10BL601914, 10BL602135, 10WA106720	Bore	Private	Industrial	Southern Tablelands Drilling	17/06/2008	31.00	31.00	384	7.00	0.080		850m	South West
GW114674	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	19/03/2014	5.00	5.00					1479 m	North West
GW114672	10BL605474	Bore	Private	Monitoring bore		06/11/2013	5.50	5.50					1492 m	North West
GW114673	10BL605474	Bore	Private	Monitoring bore		04/11/2013	5.50	5.50					1499 m	North West
GW068118	10BL145389, 10WA106088	Bore	Private	Domestic, Stock		18/02/1992	46.00	46.00		6.00	8.000		1507 m	South West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114671	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1518 m	North West
GW114644	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1525 m	North West
GW114643	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	19/05/2014	5.00	5.00					1531 m	North West
GW114670	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1537 m	North West
GW114642	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1537 m	North West
GW114665	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1570 m	North West
GW114668	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1604 m	North West
GW114669	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1607 m	North West
GW114666	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1609 m	North West
GW114667	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.20	7.20					1631 m	North West
GW114511	10BL605524	Bore	Private	Monitoring	ENVIRODRILL	28/03/2014	8.60	8.60					1648 m	North West
GW114640	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1649 m	North West
GW114641	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	17/03/2014	5.00	5.00					1649 m	North West
GW114557	10BL605526	Bore	Private	Monitoring bore	ENVIRODRILL	28/03/2014	6.40	6.40					1657 m	North West
GW114823	10BL605533	Bore	Private	Monitoring bore		27/11/2013	7.30	7.30		6.00			1660 m	North West
GW114509	10BL605535	Bore	Private	Monitoring		28/03/2014	6.80	6.80					1664 m	North West
GW114508	10BL605525	Spear	Private	Monitoring	ENVIRODRILL	21/03/2014	6.50	6.50					1672 m	North West
GW114639	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1674 m	North West
GW114822	10BL605516	Bore	Private	Monitoring bore	Total Drilling	16/02/2014	5.40	5.40		3.00			1675 m	North West
GW114513	10BL605522	Bore	Private	Monitoring	ENVIRODRILL	21/03/2014	6.80	6.80					1682 m	North West
GW114631	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.80	6.80					1689 m	North West
GW114629	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	8.60	8.60					1697 m	North West
GW112925	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	4.00	4.00					1710 m	South East
GW112926	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	4.60	4.60					1717 m	South East
GW114628	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.30	7.30					1719 m	North West
GW112927	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/11/2004	5.50	5.50					1726 m	South East
GW114632	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.00	6.00					1730 m	North West
GW112928	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/05/2011	7.50	7.50					1732 m	South East
GW114512	10BL605534	Bore	Other Govt	Monitoring	ENVIRODRILL	28/03/2014	6.00	6.00					1734 m	North West
GW112716	10BL604502	Bore	Private	Monitoring	TERRATEST	03/03/2011	5.30	5.30		1.20			1738 m	South East
GW112929	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/05/2011	6.70	6.70					1739 m	South East
GW112717	10BL604502	Bore	Private	Monitoring	TERRATEST	03/03/2011	6.00	6.00		1.30			1748 m	South East
GW114630	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.10	6.10					1749 m	North West
GW114633	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.80	7.80					1750 m	North West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW112718	10BL604502	Bore	Private	Monitoring	TERRATEST		4.60	4.60		1.20			1754 m	South East
GW112924	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	5.30	5.30					1784 m	South East

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW114817	0.00m-1.00m GRAVEL FILL 1.00m-3.00m SANDY CLAY DARK GREY FILL	67m	North West
GW114637	0.00m-0.50m FILL,CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	107m	West
GW114634	0.00m-0.50m FILL CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-2.40m CLAY DARK GREY	118m	West
GW114636	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	121m	West
GW114635	0.00m-0.50m FILL ,CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	125m	West
GW114638	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL, METAL BLACK 1.20m-3.00m CLAY DARK GREY	152m	West
GW114408	0.00m-0.25m CONCRETE SLABAND MINOR SUB BASE 0.25m-3.00m FILL SILTY CLAY BROWN MINOR GRAVEL 3.00m-7.20m SILTY CLAY M/BROWN,GREY,STIFF	315m	South West
GW114410	0.00m-0.25m CONCRETE SLAB AND MINOR FILL 0.25m-0.70m FILL, GRAVELLY SILTY 0.70m-3.00m FILL GRAVELLY SANDY CLAY 3.00m-6.00m SILTY CLAY MED.BROWN/GREY	341m	South West
GW114409	0.00m-0.25m CONCRETE SLAB AND MINOR SUB BASE 0.25m-2.10m FILL GRAVELLY CLAY 2.10m-5.00m SILTY CLAY FIRM M/BROWN,MOIST 5.00m-6.00m SILTY CLAY,M/GREY BROWN STIFF NO ODOUR	356m	South West
GW114411	0.00m-0.25m CONCRETE SLAB,FILL,SANDY CLAY 0.25m-2.10m FILL SANDY CLAY 2.10m-2.40m FILL SANDY CLAY AND GRAVEL 2.40m-4.00m SILTY CLAY DARK GREY 4.00m-4.60m SILTY CLAY DARK GREY MOIST	367m	South West
GW100524	0.00m-4.00m GREY SLAG FILL 4.00m-5.00m GREY SAND 5.00m-11.21m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	386m	East
GW100525	0.00m-3.50m GREY SLAG FILL 3.50m-5.00m GREY SAND 5.00m-7.00m DARK BROWN TO GREY STIFF ESTUARINE CLAYS. SOME BANDS OF SAND. 7.00m-13.48m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	386m	East
GW100526	0.00m-5.00m GREY SLAG FILL 5.00m-6.80m DARK GREY SLIGHTLY SANDY FIRM ESTUARINE CLAYS. 6.80m-12.38m DARK BROWN TO GREY STIFF ESTUARINE CLAYS.	386m	East
GW101363	0.00m-7.00m FILL. Dark slag fill range from 300mm near surface to 10mm and fines increase at depth 7.00m-10.00m CLAYS.Esturine. Dark brown to grey stiff esturine clays 10.00m-16.60m SANDSTONE.Weathered grey to light yellow.Drilled to refusal. 16.60m-21.00m SANDSTONE. Fresh grey sandstone. Water loss high.	561m	North West
GW101364	0.00m-6.80m FILL Dark slag fill size range from 300mm near surface to 10 mm and fines at increased depth 6.80m-7.90m CLAYS.Esturine. Dark brown to grey stiff esturine clays	561m	North West
GW101365	0.00m-2.00m FILL. Compacted coal wash reject 2.00m-12.60m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays 12.60m-15.60m SANDSTONE.H.W. Sandstone becomming fresher with increasing depth 15.60m-17.60m SANDSTONE. Fresh grey sandstone	561m	North West

Groundwater No	Drillers Log	Distance	Direction
GW101366	0.00m-2.00m FILL. Compacted coalwash reject. 2.00m-5.00m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays.	561m	North West
GW101367	1.80m-5.20m FILL. Compacted coal wash reject 5.20m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays 6.40m-13.00m WEATHERED SANDSTONE.Green to grey weathered sandstone with minor gravels 13.00m-30.00m SANDSTONE.Fine grained grey fresh sandstone	561m	North West
GW101368	0.00m-1.40m FILL. Dark slag fill with fines and some clay> 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt 3.20m-4.40m SAND. Grey to lighbrown silty sand> 4.40m-5.60m CLAY. Stiff grey clay.	561m	North West
GW101369	0.00m-0.60m TOP SOIL.Dark top soil 0.60m-1.80m FILL. Grey slag fill 1.80m-5.00m FILL. Compacted coal wash reject. 5.00m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. 6.40m-6.60m CLAY. Very silty clay.	561m	North West
GW101370	0.00m-5.40m FILL.Dark grey slag fill> Some brown slags present> 5.40m-7.60m ESTURINE CLAY. Firm to stiff orange brown clay becoming grey with increasing depth. Some gravels. 7.60m-20.00m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. At 15.8 m Grey stiff clays.At 17.9m Interbedded sands and clays. 20.00m-22.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays interbedded with sands> 22.40m-23.40m RESIDUAL CLAY. Light green clays> 23.40m-31.20m WEATHERED SANDSTONE.Fine grained highly weathered green sandstone 31.20m-40.00m SANDSTONE.Fine grained fresh grey sandstone.	561m	North West
GW101371	0.00m-5.40m FILL.Dark slag fill.Some brown slags present. 5.40m-7.60m CLAY,ESTURINE. Firm to stiff orange brown clay becoming grey with increasing depth.Some gravels 7.60m-8.60m CLAY, ESTURINE.Dark brown to grey stiff esturine clays>	561m	North West
GW101372	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present. 3.40m-6.40m CLAY. Light brown to bright orange wet clay. Possibly of filter cake or flue dust origin 6.40m-19.20m CLAY, ESTURINE. Dark brown to grey stiff esturine clays. 19.20m-22.40m SANDSTONE. E.W. Light brown sandstone. 22.40m-26.70m SANDSTONE. Fresh grey fine grained sandstone.	561m	North West
GW101373	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present 3.40m-6.40m CLAY.Light brown to bright orange wet clay.Possibly of filter cake or flue dust origin. 6.40m-8.00m CLAY,ESTURINE.Dark brown to grey stiff esturine clays.	561m	North West
GW101374	0.00m-0.60m CLAY. Loose sandy clay. 0.60m-9.00m CLAY. Firm sandy grey to brown clay. 9.00m-10.00m CLAY, ESTURINE. Sandy clay esturine clays> 10.00m-21.00m CLAYS, ESTURINE. Sandy esturine clays with some fine gravels. 21.00m-38.60m SANDSTONE.Fine to medium grained fresh grey sandstone.	561m	North West
GW101375	0.00m-0.60m CLAY. Loose sandy clay 0.60m-9.00m CLAY. Firm sandy grey to brownclay> 9.00m-11.00m CLAYS,ESTURINE.Sandy clay. esturine clays,	561m	North West
GW101376	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-4.80m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone. 4.80m-8.20m SANDSTONE.EW toW light brown sandstone becoming harder with increased depth. 8.20m-11.80m SANDSTONE.Fresh fine grained grey sandstone.	561m	North West
GW101377	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-5.10m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone.	561m	North West
GW101378	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm & fines at increased depth. 8.60m-16.20m CLAY,ESTURINE.Dark grey stiff esturine clay. 16.20m-17.40m CLAY,ESTURINE.Dark grey stiff esturine clays with some minor sandstone particles. 17.40m-19.60m SANDSTONE.Fresh hard grey sandstone.	561m	North West
GW101379	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm& fines at increased depth. 8.60m-9.60m CLAY,ESTURINE.Dark grey stiff esturine clay.	561m	North West
GW101380	0.00m-1.40m FILL.Dark slag fill with fines and some clay 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt. 3.20m-4.40m SAND.Grey to light brown silty sand. 4.40m-6.00m CLAY.Stiff grey clay. 6.00m-6.80m SAND.Light brown silty sand. 6.80m-7.00m CLAY. Stiff grey to brown clay. 7.00m-9.00m SANDSTONE.Gravelly residual brown to yellow sandstone. 9.00m-12.40m SANDSTONE.Moderately weathered yellow sandstone. 12.40m-15.00m SANDSTONE.Fresh light brown to yellow Budgong sandstone.	561m	North West

Groundwater No	Drillers Log	Distance	Direction
GW101381	0.00m-11.40m FILL. Mixed fill consisting of slag< filter cake and coalwash reject> Nodifinite bands-generally mixed. 11.40m-19.20m CLAY,ESTURINE:Grey esturine clay with some thin sand bands. Organic material< wood and root fragments. 19.20m-27.40m SANDSTONE.Weathered soft sandstone.Becomes less weathered with increasing depth. 27.40m-30.00m SANDSTONE.Brown to yellow slightly weathered sandstone. 30.00m-32.50m SANDSTONE.Fresh hard grey sandstone.	561m	North West
GW101382	0.00m-12.00m FILL.Mixed fill consisting of slag,Filter cake and coal wash reject. No difinite bands-generally mixed. 12.00m-13.50m CLAYS, ESTURINE.Firm dark esturine clays.	561m	North West
GW101383	0.00m-7.60m FILL.Dark slag fill size range from 300mm near surface to 10mm and fines at increased depth. 7.60m-9.00m CLAY,ESTURINE.Dark grey stiff esturine clay.	561m	North West
GW101384	0.00m-3.00m FILL, Compacted coal wash reject with brown clays and gravels. 3.00m-15.00m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 15.00m-20.00m SAND. Light brown to yellow sands. 20.00m-20.80m SANDSTONE. Extremely to weathered sandstone. 20.80m-22.00m SANDSTONE. Fresh hard light brown sandstone.	561m	North West
GW101385	0.00m-3.00m FILL.Compacted coal wash reject with brown clays and gravels. 3.00m-6.00m CLAYS,ESTURINE Dark brown to grey stiff esturine clays.	561m	North West
GW101386	0.00m-9.00m FILL.Hard coal wash reject with slag possibly of open hearth furnace origin 9.00m-10.10m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays.	561m	North West
GW101387	0.00m-7.20m FILL. Hard coal wash reject with slag possibly of open hearth furnace origin 7.20m-8.20m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 8.20m-13.00m SANDSTONE.E.W. Sandstone with sandy clay.	561m	North West
GW101388	0.00m-1.40m FILL.Dark brown to grey soils with some clay.May be from North Wall construction.Becomes brown clay with incr. depth. 1.40m-5.00m CLAY.Red to brown stiff clay> Some silty sand and pebbles up to20mm. 5.00m-6.00m SANDSTONE.Light brown weathered sandstone. 6.00m-10.00m SANDSTONE.Fresh hard grey sandstone.	561m	North West
GW101389	0.00m-1.40m FILL. Dark brown to grey soils with some clay.May be from North Wall construction. Becomes brown clay with incrs.depth. 1.40m-4.00m CLAY.Red to brown stiff clay.Some silt.	561m	North West
GW101390	0.00m-2.00m TOP SOIL.Dark topsoil turning to soft brown clays. 2.00m-3.00m CLAY.Firm brown to light brown clay. 3.00m-7.00m CLAY.Red to brown stiff clay.Some silt. 7.00m-8.00m SANDSTONE.Extremely to weathered light brown sandstone. 8.00m-12.00m SANDSTONE. Fresh hard yellow to grey sandstone	561m	North West
GW101391	0.00m-0.40m TOP SOIL.Dark topsoil 0.40m-5.20m CLAY.Firm brown to light brown clay. 5.20m-6.50m CLAY.Red to brown stiff clay.Some silt	561m	North West
GW101392	0.00m-0.40m TOP SOIL.Dark topsopil 0.40m-5.20m CLAY.Firm brown to light brown clay 5.20m-7.00m CLAY.Red to brown stiff clay. Some silt 7.00m-7.60m CLAY.Stiff grey sandy clay. 7.60m-8.40m SANDSTONE.Extremely weathered light brown sandstone 8.40m-9.40m SANDSTONE.Weathered light brown to grey sandstone 9.40m-13.00m SANDSTONE.Fresh grey sandstone.	561m	North West
GW101551	0.00m-2.00m TOP SOIL. Dark topsoil turning to soft brown clays 2.00m-3.00m CLAY. Firm brown to light brown clay. 3.00m-6.00m CLAY. Red to brown stiff clay. Some silt	561m	North West
GW100678	0.00m-0.60m TOPSOIL 0.60m-3.80m WEATHERED BASALT 3.80m-9.00m BASALT 9.00m-16.00m INDURATED SHALE 16.00m-65.00m SANDSTONE	682m	North
GW111039	0.00m-1.50m CLAY, GREY AND YELLOW BROWN 1.50m-1.70m CLAY SANDY,BROWN AND GREY 1.70m-3.50m GRAVEL CLAYEY,BROWN,ORANGE AND YELLOW ,SANDY	800m	West
GW108922	0.00m-5.00m CLAY,TOPSOIL 5.00m-31.00m VOLCANIC BASALT	850m	South West
GW114674	0.00m-0.80m FILL.COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.00m SANDSTONE / GRAVELS	1479m	North West

Groundwater No	Drillers Log	Distance	Direction
GW114672	0.00m-0.80m FILL,CEMENTED SLAG,COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-4.00m CLAY LIGHT BROWN 4.00m-5.50m SANDSTONE, GRAVELS	1492m	North West
GW114673	0.00m-0.80m FILL SLAG COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY BROWN 3.00m-4.50m CLAY LIGHT BROWN 4.50m-5.50m SANDSTONE / GRAVELS	1499m	North West
GW068118	0.00m-1.00m TOP SOIL 1.00m-8.00m BROWN CLAY 8.00m-12.00m SAND 12.00m-14.00m SANDSTONE 14.00m-16.00m SHALE 16.00m-46.00m SANDSTONE	1507m	South West
GW114671	0.00m-1.00m FILL CEMENTED SLAG COMPACTED 1.00m-1.50m CLAY DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE , GRAVELS	1518m	North West
GW114644	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.50m SANDSTONE GRAVELS	1525m	North West
GW114643	0.00m-0.80m FILL, COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BRO;WN 4.80m-5.00m SANDSTONE GRAVELS	1531m	North West
GW114642	0.00m-1.00m FILL,CEMENTED SLAG, COMPACTED 1.00m-3.50m CLAY DARK GREY 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE, GRAVELS	1537m	North West
GW114670	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1537m	North West
GW114665	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.50m CLAY BROWN/GREY , SILTSTONE,GRAVELS	1570m	North West
GW114668	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.30m CLAY GREY/BROWN,SILTSTONE,GRAVEL	1604m	North West
GW114669	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.30m CLAY BROWN/GREY,SILTSTONE,GRAVELS	1607m	North West
GW114666	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.50m CLAY BROWN/GREY ,SILTSTONE,GRAVELS	1609m	North West
GW114667	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN/SILTY 6.00m-7.20m CLAY BROWN/GREY,SILTSTONE,GRAVEL	1631m	North West

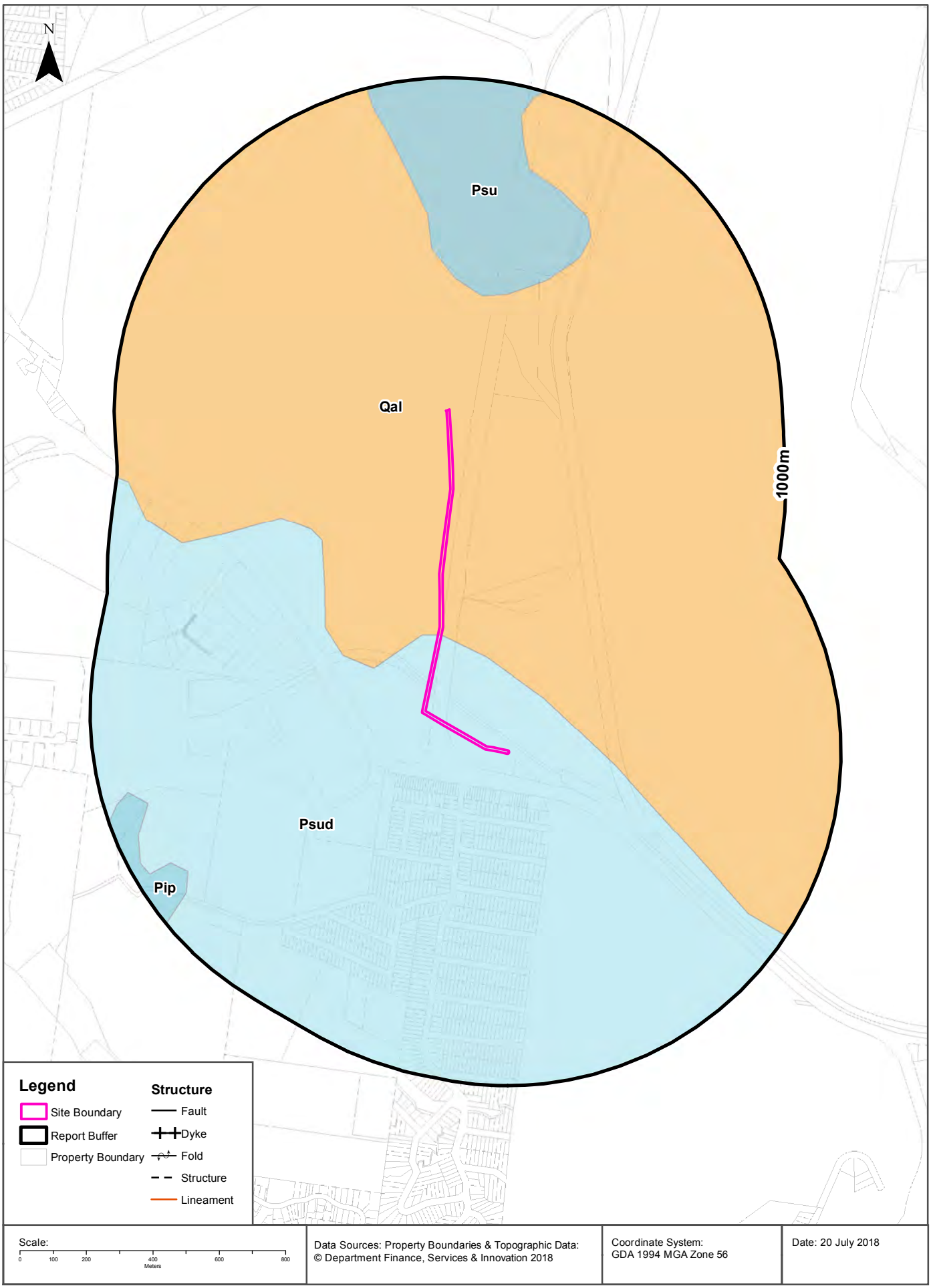
Groundwater No	Drillers Log	Distance	Direction
GW114511	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.40m BLUESTONE, GRAVEL 0.40m-1.00m CLAY BLACK 1.00m-1.80m BROWN SANDY CLAY 1.80m-3.40m CLAY GREY 3.40m-4.00m GREY SAND MOIST 4.00m-6.20m BROWN SANDY CLAY COARSE 6.20m-8.60m FRACTURED SANDSTONE'GRAVELS	1648m	North West
GW114640	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1649m	North West
GW114641	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.00m SANDSTONE GRAVELS	1649m	North West
GW114557	0.00m-1.50m (UNKNOWN) 1.50m-1.80m IRONSTONE 1.80m-3.80m SANDY GRAVELS / CLAY 3.80m-6.40m QUARTZ / SANDY GRAVELS	1657m	North West
GW114823	0.00m-2.00m FILL 2.00m-7.30m ALLUVIAL	1660m	North West
GW114509	0.00m-0.20m BITUMEN, ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m BROWN SAND CLAY 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE 3.30m-4.60m CLAY GREY 4.60m-4.90m SATURATED SANDS GREY 4.90m-6.80m SANDY C;LAY COARSE GRAIN	1664m	North West
GW114508	0.00m-1.20m SANDY CLAY 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m SANDSTONE GRAVELS W/BROWN CLAY 4.40m-6.50m BROWN SANDY CLAY	1672m	North West
GW114639	0.00m-0.80m FILL COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.50m SANDSTONE / GRAVELS	1674m	North West
GW114822	0.00m-3.00m FILL 3.00m-5.40m ALLUVIAL	1675m	North West
GW114513	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m GREY CLAY 4.40m-4.60m SANDSTONE GRAVELS W/BROWN CLAY 4.60m-6.80m BROWN SANDY CLAY	1682m	North West
GW114631	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.80m SANDY CLAY COARSE GREY	1689m	North West
GW114629	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m CLAY BLACK 2.40m-2.60m SANDS SATURATED 2.60m-4.40m CLAY GREY 4.40m-4.60m SANDSTONES,GRAVELS W/BROWN CLAY 4.60m-8.00m SANDY CLAY BROWN 8.00m-8.60m SANDSTONE FRACTURED	1697m	North West
GW114628	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED FINE GRAINED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAINED 4.90m-7.30m SANDSTONE COARSE GRAINED	1719m	North West

Groundwater No	Drillers Log	Distance	Direction
GW114632	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY / FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.00m SANDY CLAY COARSE GRAIN	1730m	North West
GW114512	0.00m-0.80m BLACK LOAMY SOIL 0.80m-2.40m CLAY BLACK 2.40m-3.00m BROWN SANDY CLAY 3.00m-3.20m SANDSTONE 3.20m-6.00m BROWN SANDY CLAY	1734m	North West
GW114630	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.30m SILTY CLAY FILL 0.30m-1.20m SANDY CLAY BROWN 1.20m-3.00m SAND WHITE WEATHERED 3.00m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.10m SANDY CLAY COARSE GRAIN	1749m	North West
GW114633	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAIN 4.90m-7.80m SANDSTONE COARSE GRAIN	1750m	North West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:100,000

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Geology

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psud	melanocratic, coarse-grained and porphyritic latite	Dapto Latite Member	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Pip	interbedded lithic-sandstone, coal, carbonaceous claystone, siltstone, and claystone	Pheasants Nest Formation	Illawarra Coal Measures	Cumberland SubGroup			Wollongong & Port Hacking	1:100,000
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Psud	melanocratic, coarse-grained and porphyritic latite	Dapto Latite Member	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy

© State of New South Wales through the NSW Department of Industry, Resources & Energy

Naturally Occurring Asbestos Potential

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Naturally Occurring Asbestos Potential

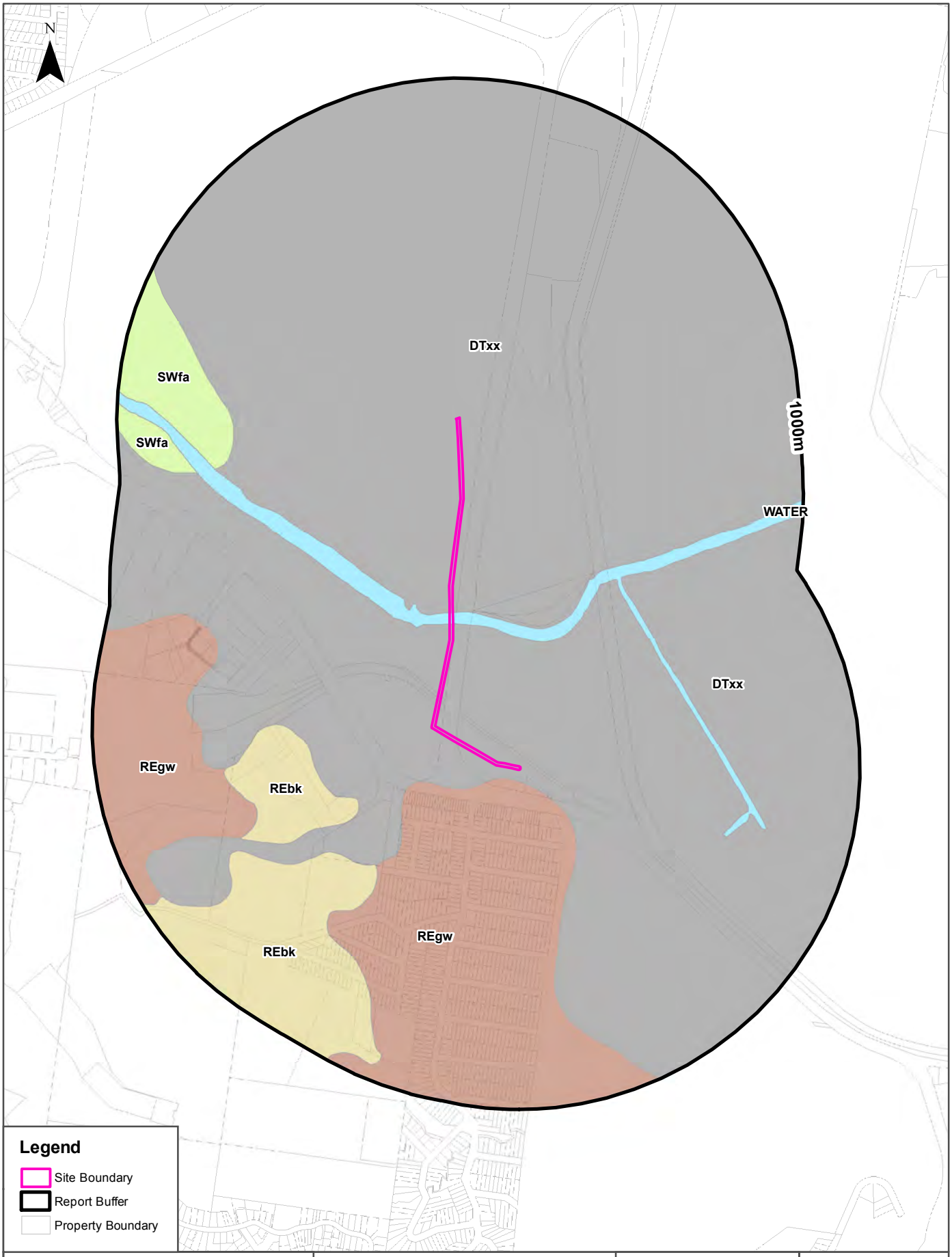
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Soil Landscapes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

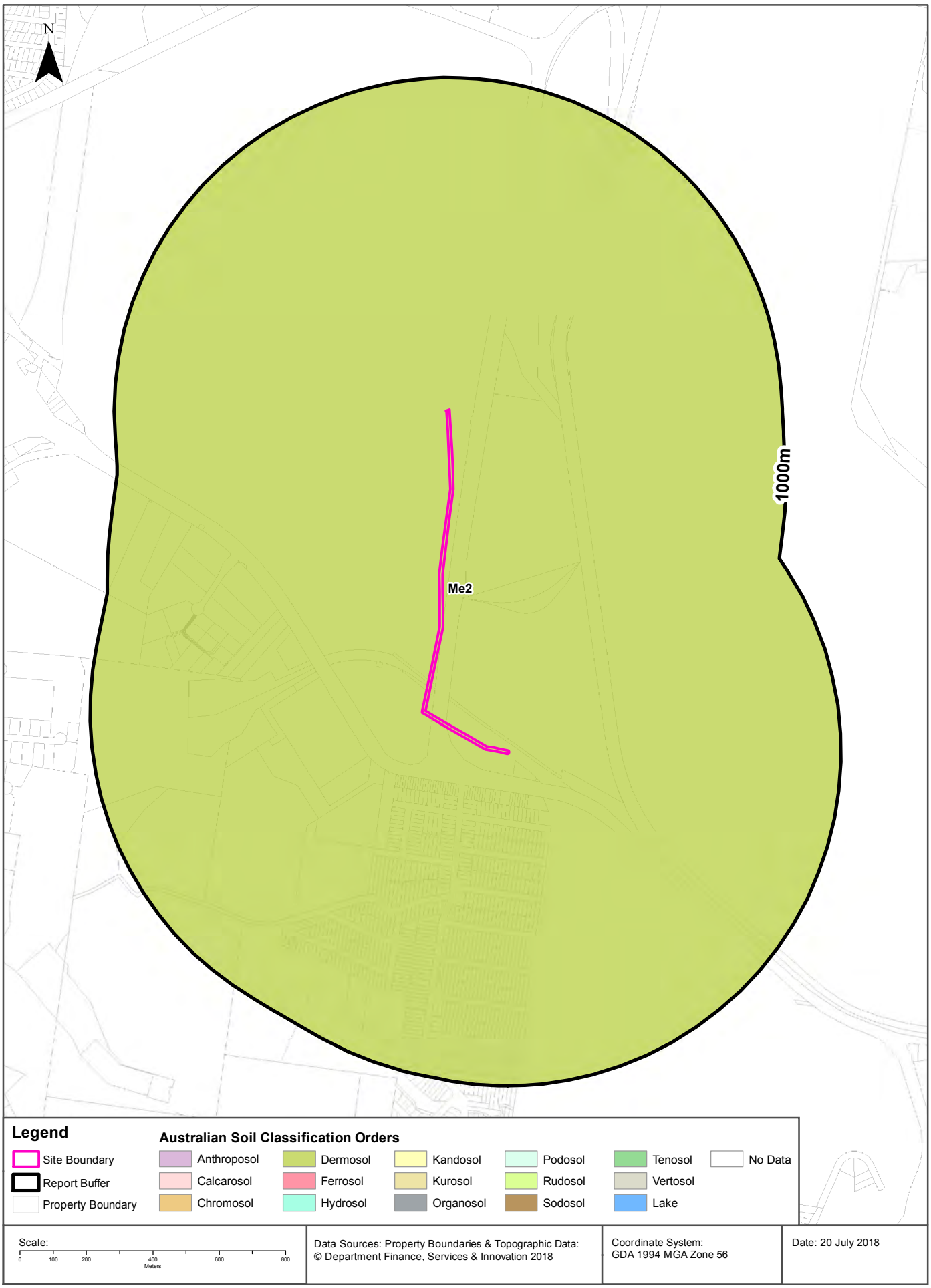
What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
REbk	BERKELEY		RESIDUAL	Wollongong & Port Hacking	1:100,000
REgw	GWYNNEVILLE		RESIDUAL	Wollongong & Port Hacking	1:100,000
SWfa	FAIRY MEADOW		SWAMP	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Atlas of Australian Soils

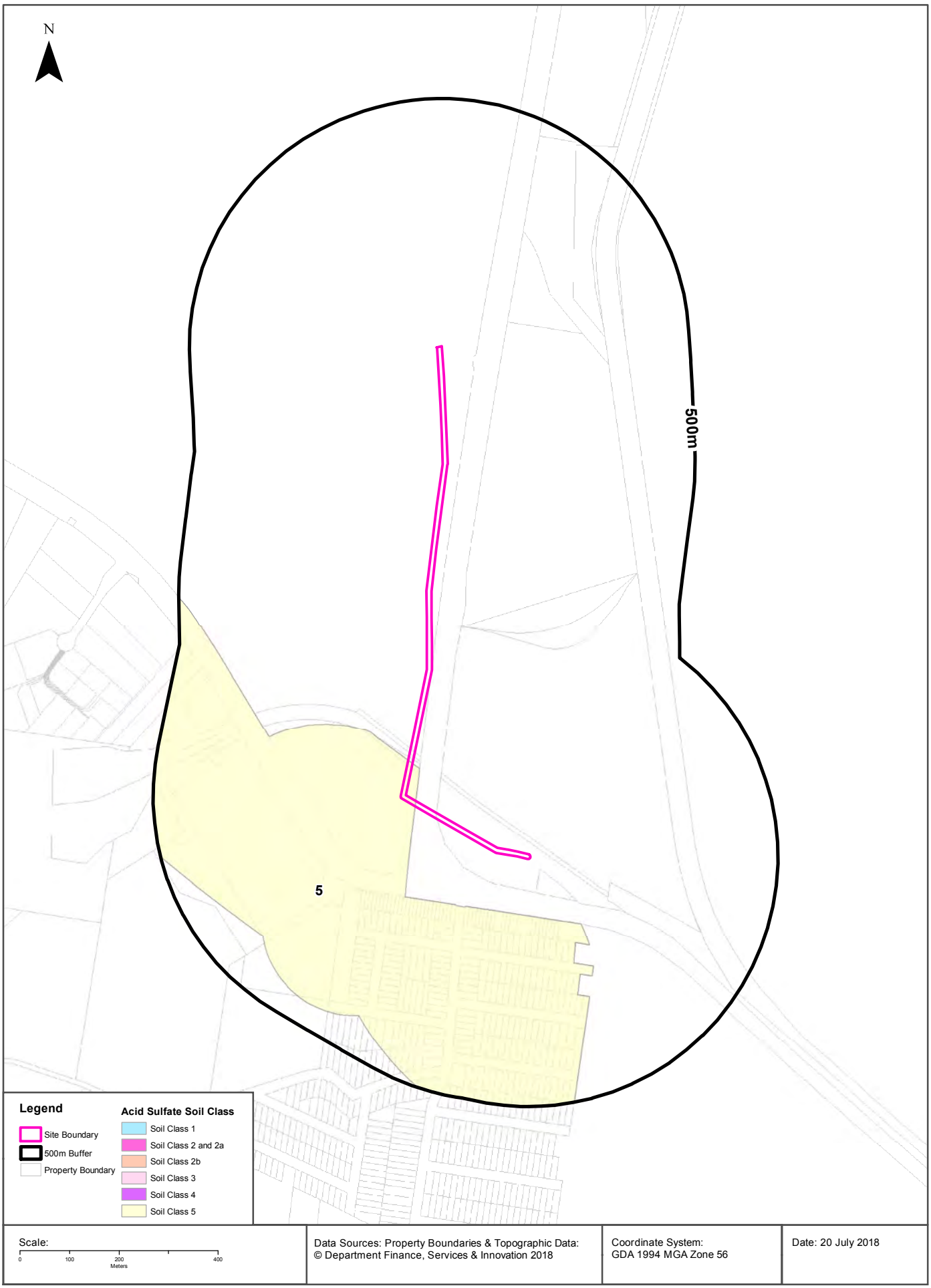
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Me2	Dermosol	Steep hilly to mountainous with incised stream valleys: steep but more or less rounded hill slopes of brown friable earths (Gn3.21 and Gn3.22) and possibly some (Gn4) soils, in association with: at the higher altitudes, steep hill slopes of sandy soils (Uc4.2), loamy soils having an A2 horizon (Um4.2) with yellow-brown earths (Gn2.44), and possibly (Uc6.11) and (Um5.41) soils; and at the lower altitudes, moderate to steep slopes of hard acidic yellow mottled soils (Dy3 21 and Dy3.41), hard acidic red soils (Dr2.21), and yellow leached friable earths (Gn3.54); and narrow incised stream valleys of various soils including (Um6.11) and (Dy) soils. This unit is a broad one. In some areas the (Um4.2) and (Gn2.44) soils and in others the (Dy) and (Dr) soils rather than the (Gn3 soils could be dominant.	0m

Atlas of Australian Soils Data Source: CSIRO
Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Standard Local Environmental Plan Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	LEP
5	Works within 500 metres of adjacent Class 1, 2, 3, or 4 land that is below 5 metres AHD and by which the watertable is likely to be lowered below 1 metre AHD on adjacent Class 1, 2, 3 or 4 land, present an environmental risk	Wollongong Local Environmental Plan 2009

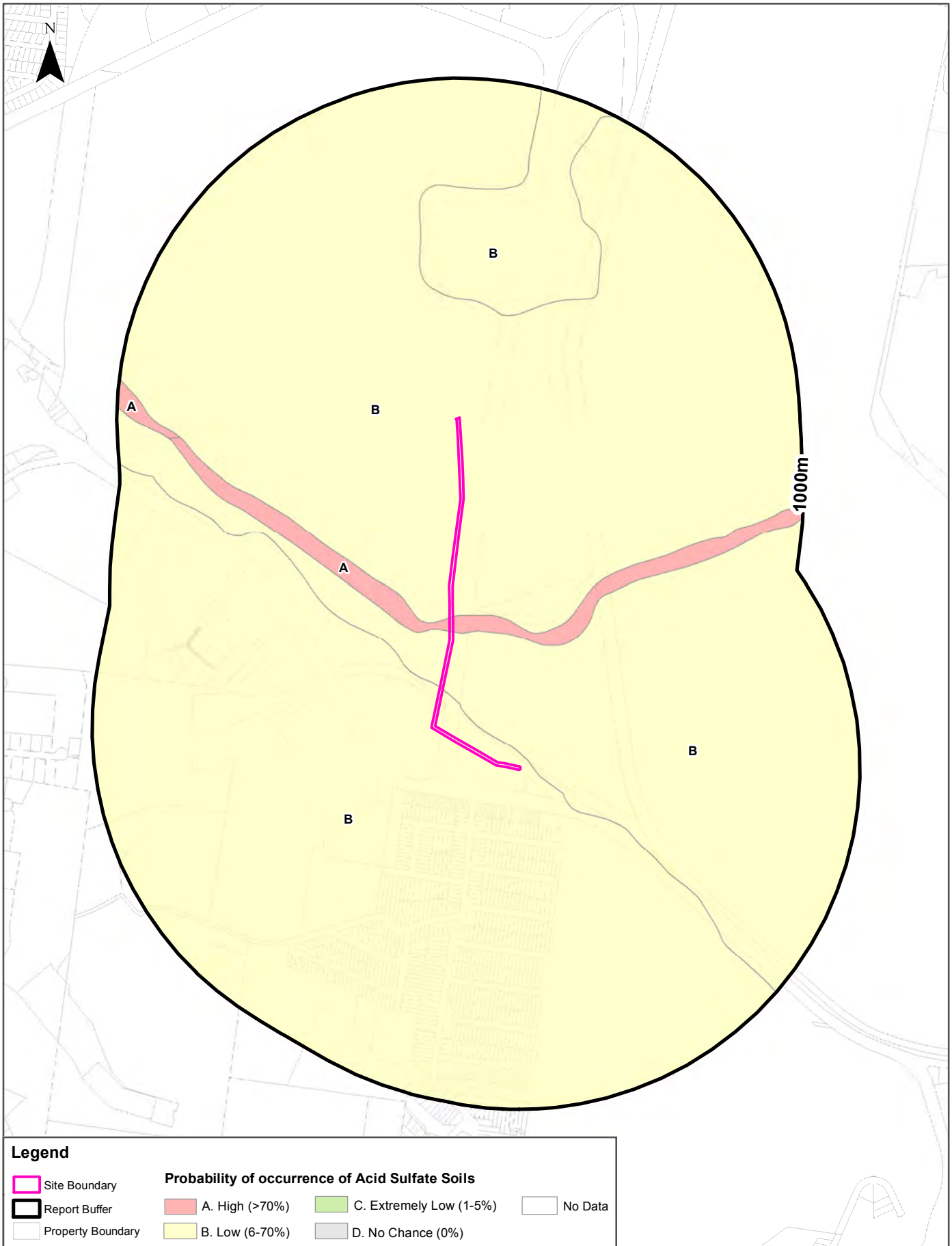
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	LEP	Distance	Direction
None				

Acid Sulfate Data Source Accessed 07/10/2016: NSW Crown Copyright - Planning and Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Legend

- Site Boundary
- Report Buffer
- Property Boundary

Probability of occurrence of Acid Sulfate Soils

- A. High (>70%)
- B. Low (6-70%)
- C. Extremely Low (1-5%)
- D. No Chance (0%)
- No Data

Scale: 0 100 200 400 600 800 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 20July 2018

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
A	High Probability of occurrence. >70% chance of occurrence.	0m
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Dryland Salinity

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining Subsidence Districts

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Environmental Zoning

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

State Environmental Planning Policy Protected Areas

Are there any State Environmental Planning Policy Protected Areas onsite or within the dataset buffer?

Dataset	Onsite	Within Site Buffer	Distance
SEPP14 - Coastal Wetlands	No	No	N/A
SEPP26 - Littoral Rainforests	No	No	N/A
SEPP71 - Coastal Protection Zone	No	Yes	293m

SEPP Protected Areas Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Major Developments (2005)

State Environmental Planning Policy Major Developments within the dataset buffer:

Map Id	Feature	Effective Date	Distance	Direction
68269	Three Ports - Port Kembla	24/07/2009	0m	Onsite

SEPP Major Development Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Strategic Land Use Areas

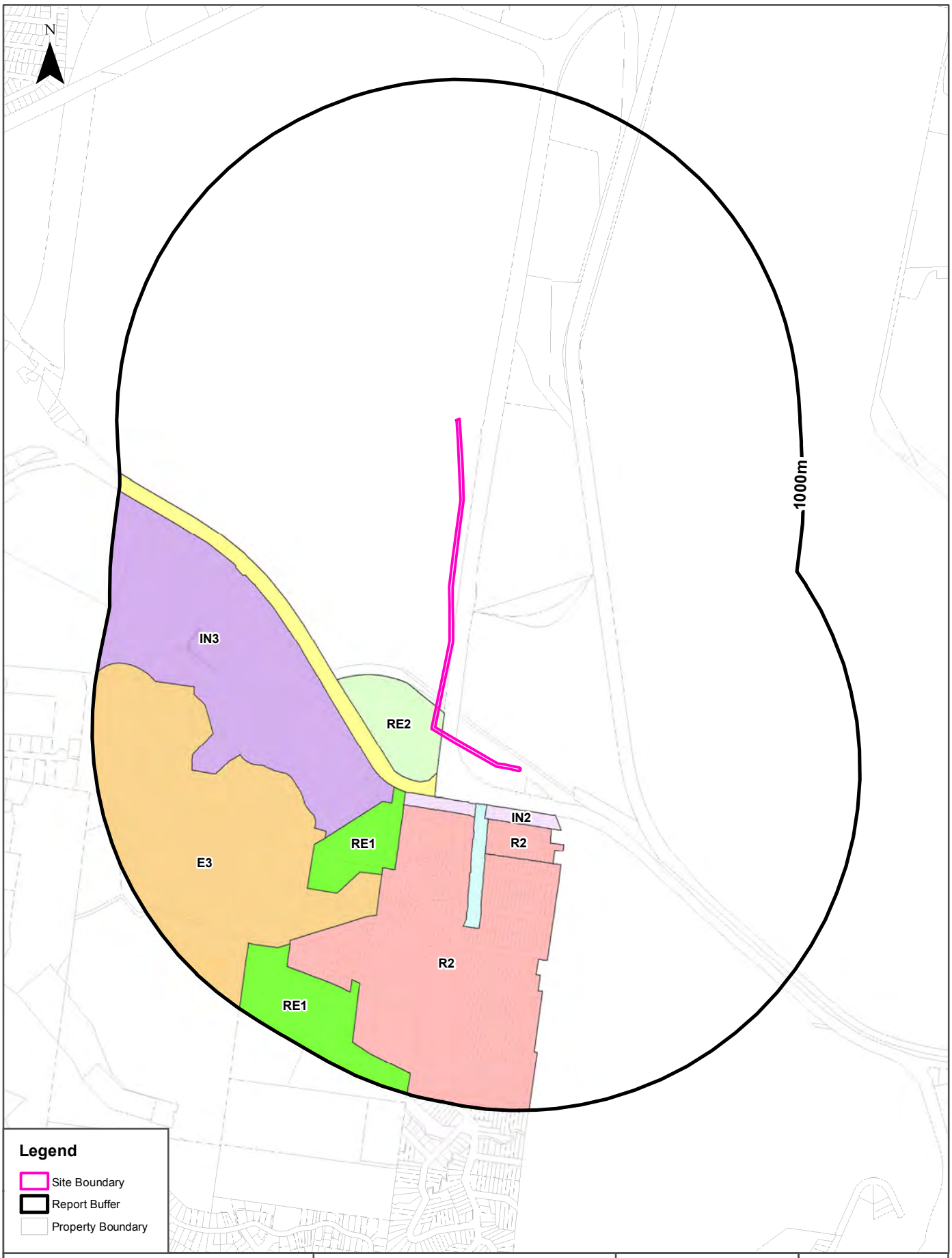
State Environmental Planning Policy Strategic Land Use Areas onsite or within the dataset buffer:

Strategic Land Use	SEPPNo	Effective Date	Amendment	Amendment Year	Distance	Direction
No records within buffer						

SEPP Strategic Land Use Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

LEP Planning Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Data Sources: Property Boundaries & Topographic Data:
© Department Finance, Services & Innovation 2018
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System:
GDA 1994 MGA Zone 56

Date: 20 July 2018

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Land Zoning

What Local Environmental Plan Land Zones exist within the dataset buffer?

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE2	Private Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		0m	Onsite
SP2	Infrastructure	Road	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		104m	North
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		112m	South
B1	Neighbourhood Centre		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		116m	South
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		125m	South
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		153m	South
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		161m	South
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		200m	South West
IN3	Heavy Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		204m	West
E3	Environmental Management		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		429m	South West
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		754m	South

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Minimum Subdivision Lot Size

What are the onsite Local Environmental Plan Minimum Subdivision Lot Sizes?

Symbol	Minimum Lot Size	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Maximum Height of Building

What are the onsite Local Environmental Plan Maximum Height of Buildings?

Symbol	Maximum Height of Building	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
10	9.00 m	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		8.3

Floor Space Ratio

What are the onsite Local Environmental Plan Floor Space Ratios?

Symbol	Floor Space Ratio	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Land Application

What are the onsite Local Environmental Plan Land Applications?

Application Type	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
Included	Wollongong Local Environmental Plan 2009	06/06/2014	06/06/2014	06/06/2014	Amendment No 15	8.28

Land Reservation Acquisition

What are the onsite Local Environmental Plan Land Reservation Acquisitions?

Reservation	LEP	Published Date	Commenced Date	Currency Date	Amendment	Comments	Percentage of Site Area
No Data							

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Heritage

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

State Heritage Items

What are the State Heritage Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Heritage Items

What are the Local Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	LEP or Act	Published Date	Commenced Date	Currency Date	Distance	Direction
N/A	No records in buffer								

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Natural Hazards

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Bush Fire Prone Land

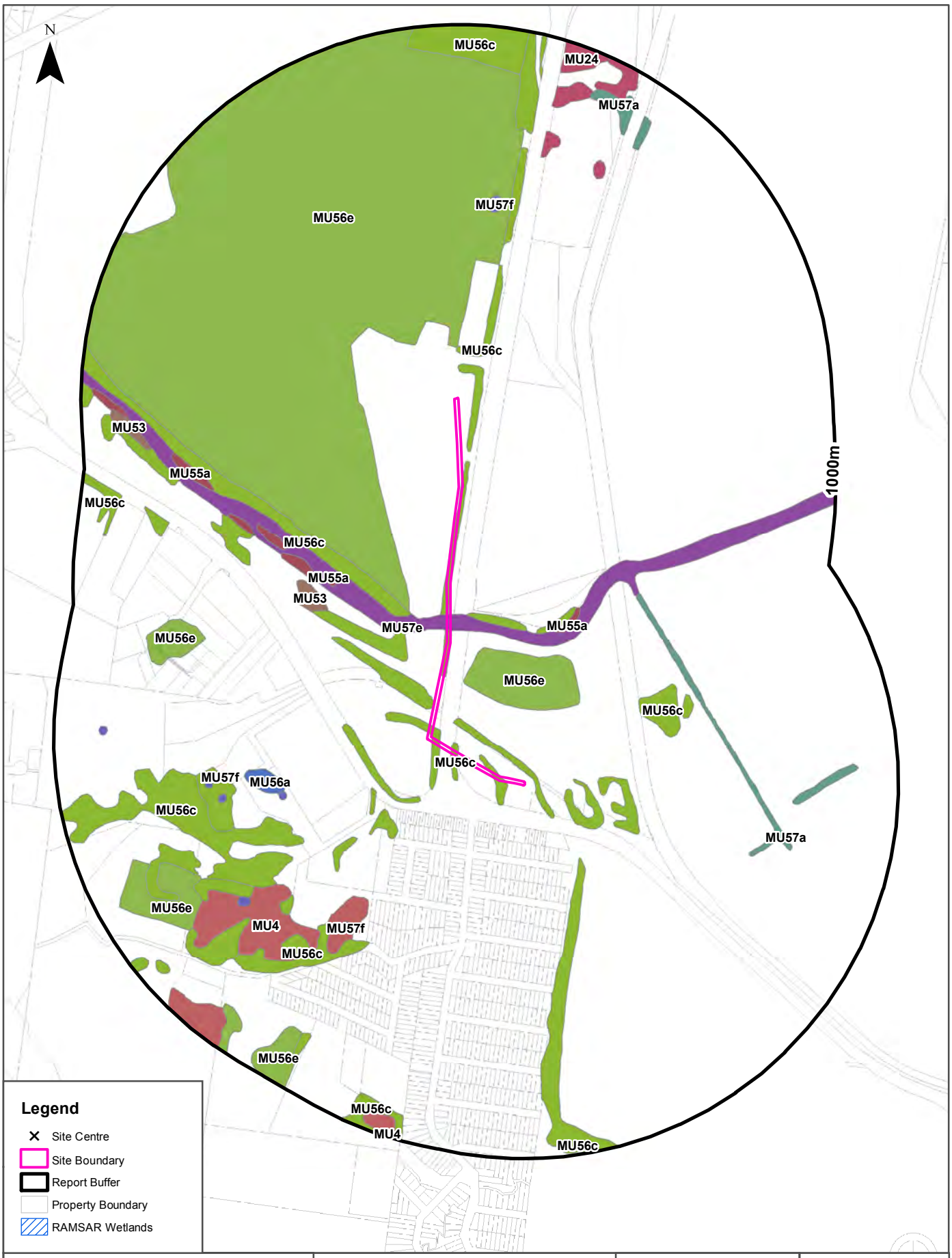
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
No records within buffer		

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & RAMSAR Wetlands

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Native Vegetation of the Illawarra Escarpment & Coastal Plain

What Native Vegetation of the Illawarra Escarpment & Coastal Plain exists within the dataset buffer?

Veg Code	Vegetation Community	Disturbance Class	Disturbance Type	Understorey	Broad Vegetation Type	Endangered Ecological Community	Distance	Direction
MU56c	Weeds and Exotics	Weeds and Exotics			Weeds and Exotics		0m	Onsite
MU57e	Estuarine Lagoons and Channels	Unassessed			Wetlands		0m	Onsite
MU56e	Modified Lands	Weeds and Exotics			Cleared		53m	South East
MU55a	Seagrass Meadows and Estuarine Flats	Unassessed			Seagrass		274m	East
MU53	Estuarine Alluvial Wetland	Unassessed			Native Vegetation	Sydney Coastal Estuary Swamp Complex	317m	West
MU56a	Acacia Scrub	Acacia Scrub			Regenerating Vegetation		399m	South West
MU57f	Fig Trees	Scattered Trees			Scattered Trees		405m	South West
MU4	Lowland Dry-Subtropical Rainforest	High Disturbance		Weeds	Native Vegetation		452m	South
MU57a	Artificial Wetlands	Unassessed			Wetlands		495m	South East
MU24	Lowland Woollybutt-Melaleuca Forest	Scattered Trees			Scattered Trees	Illawarra Coastal Grassy Woodlands	680m	North
MU4	Lowland Dry-Subtropical Rainforest	High Disturbance	Weeds	Acacia Dominant	Native Vegetation		903m	South West
MU24	Lowland Woollybutt-Melaleuca Forest	Moderate Disturbance	Weeds	Melaleuca Dominant	Native Vegetation	Illawarra Coastal Grassy Woodlands	912m	North
MU4	Lowland Dry-Subtropical Rainforest	High Disturbance	Weeds	Lantana	Native Vegetation		942m	South

Native Vegetation of the Illawarra Escarpment & Coastal Plain : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

RAMSAR Wetlands

What RAMSAR Wetland areas exist within the dataset buffer?

Map Id	RAMSAR Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

RAMSAR Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	Low potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	High potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		166m
Terrestrial	Moderate potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		452m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	7	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		96m
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation		166m
Terrestrial	6	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		200m
Terrestrial	5	Deeply dissected sandstone plateaus.	Vegetation		452m
Terrestrial	3	Deeply dissected sandstone plateaus.	Vegetation		616m
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation		702m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 1)

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria littlejohni	Littlejohn's Tree Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calonectris leucomelas	Streaked Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Charadrius mongolus	Lesser Sand-plover	Vulnerable	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Coracina lineata	Barred Cuckoo-shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Diomedea gibsoni	Gibson's Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Plegadis falcinellus	Glossy Ibis	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Stercorarius pomarinus	Pomarine Jaeger	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Sula leucogaster	Brown Booby	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Thalassarche impavida	Campbell Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Miniopterus australis	Little Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Mormopterus norfolkensis	Eastern Freetail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Physeter macrocephalus	Sperm Whale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Arthropteris palisotii	Lesser Creeping Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Chorizema parviflorum	Eastern Flame Pea	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Epacris purpurascens subsp. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus largeana	Craven Grey Box	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Gossia acmenoides	Scrub Ironwood	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Lespedeza juncea subsp. sericea		Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Parsonsia dorrigoensis	Milky Silkpod	Vulnerable	Not Sensitive	Endangered	
Plantae	Flora	Persoonia glaucescens	Mittagong Geebung	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Pimelea spicata	Spiked Rice-flower	Endangered	Not Sensitive	Endangered	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Solanum celatum		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Zieria granulata	Illawarra Zieria	Endangered	Not Sensitive	Endangered	

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage
Data obtained 20/07/2018

USE OF REPORT – APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report. The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available (**Third Party Content Suppliers**);
      (j) content which is derived from content described in paragraph (i);
   (b) Lotsearch does not take any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**);
   (d) Lotsearch has not undertaken any physical inspection of the property;
   (e) Lotsearch does not warrant that all land uses or features whether past or current are identified in the Report;
   (f) the Report does not include any information relating to the actual state or condition of the Property;
   (g) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of a Property for any particular purpose;
   (h) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (i) the End User should undertake its own inspection s of the Property to satisfy itself that there are no defects or failures.
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
5. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
6. To the extent permitted by law and subject to paragraph 7, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these terms other than as expressly set out in these terms are excluded.
7. Subject to paragraph 8, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
8. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
9. Subject to paragraph 7, neither Lotsearch nor the End User is liable to the other for any indirect, incidental,consequential, special or exemplary damages arising out of or in relation to these terms.
10. These terms are subject to New South Wales law.

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 20 Jul 2018 10:11:27

Reference: LS003865

Address: Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Table of Contents

Location Confidences 2
Dataset Listings 3
Site Location Aerial 5
Contaminated Land & Waste Management Facilities 6
EPA PFAS Investigation Program 10
EPA Other Sites with Contamination Issues 11
EPA Current Licensed Activities 12
EPA Delicensed & Former Licensed Activities 15
UPSS Sensitive Zones 17
Historical Business Activities 18
Historical Aerial Imagery & Maps 27
Topographic Features 39
Elevation Contours 44
Hydrogeology & Groundwater 45
Geology 56
Naturally Occurring Asbestos Potential 58
Soils 59
Acid Sulfate Soils 63
Dryland Salinity 66
Mining Subsidence Districts 67
State Environmental Planning 68
Local Environmental Planning 70
Heritage 73
Natural Hazards 74
Ecological Constraints 76
Terms & Conditions 87

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

Dataset Listing

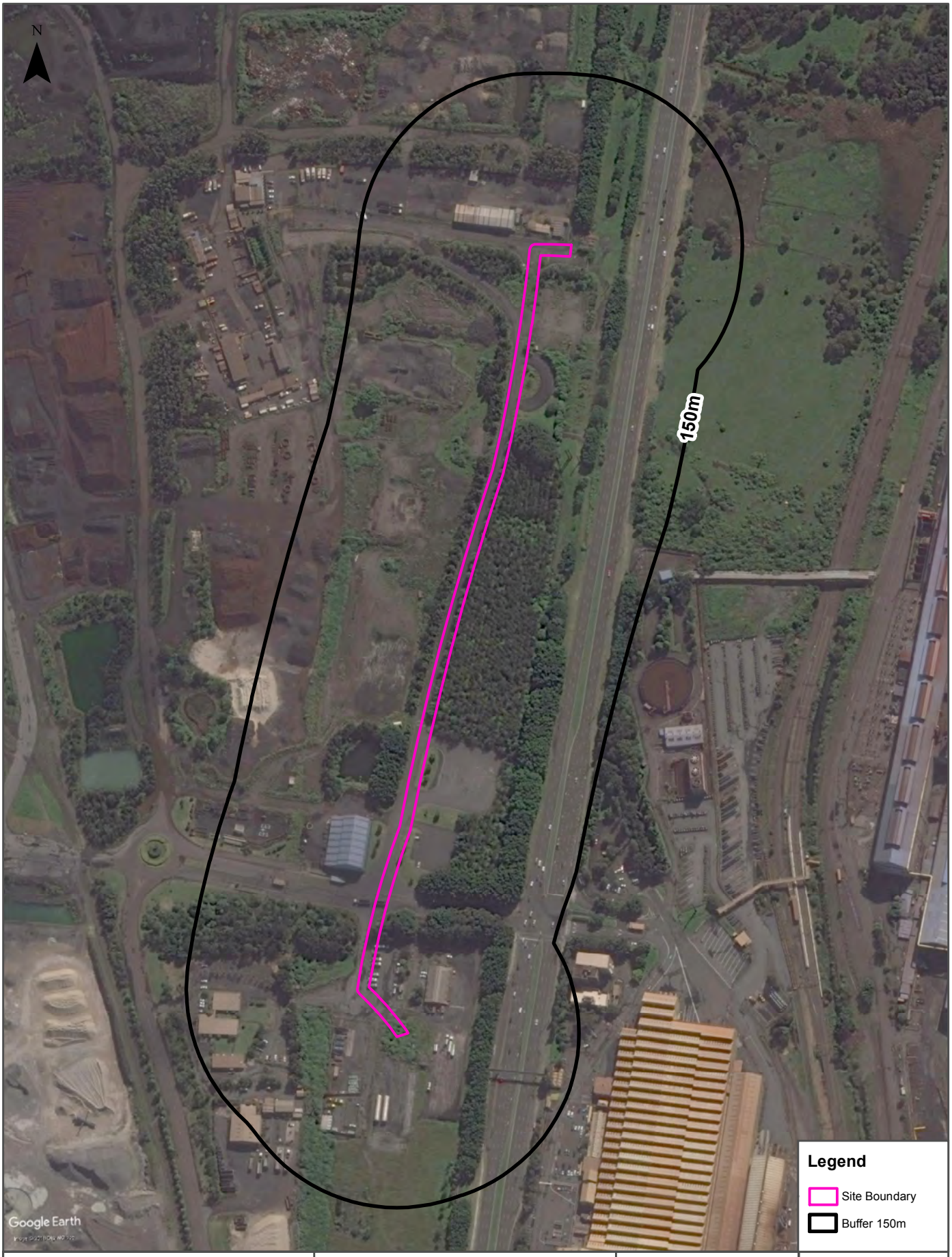
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	Dept. Finance, Services & Innovation	20/07/2018	20/07/2018	Daily	-	-	-	-
Topographic Data	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	06/07/2018	02/07/2018	Monthly	1000	2	2	6
Contaminated Land Records of Notice	Environment Protection Authority	06/07/2018	06/07/2018	Monthly	1000	1	1	2
Former Gasworks	Environment Protection Authority	04/07/2018	11/10/2017	Monthly	1000	0	0	0
National Waste Management Site Database	Geoscience Australia	04/07/2018	07/03/2017	Quarterly	1000	0	0	1
EPA PFAS Investigation Program	Environment Protection Authority	04/07/2018	04/07/2018	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	11/01/2018	11/01/2018	Quarterly	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	18	18	34
Delicensed POEO Activities still Regulated by the EPA	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	1	1	4
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	0	0	4
UPSS Environmentally Sensitive Zones	Environment Protection Authority	14/04/2015	12/01/2010	As required	1000	0	1	1
UBD Business Directory 1982 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1982 (Road & Area Matches)	Hardie Grant			Not required	150	-	3	3
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	6	6
UBD Business Directory 1961 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1961 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	1	1
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	0	0
Points of Interest	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	1	8
Tanks (Areas)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	1
Tanks (Points)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	3
Major Easements	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	1000	0	0	13
State Forest	Dept. Finance, Services & Innovation	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	18/01/2018	30/09/2017	Annually	1000	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Botany Groundwater Management Zones	NSW Department of Primary Industries	15/03/2018	01/10/2005	As required	1000	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	21/03/2016	01/12/2015	Annually	2000	0	0	95
Geological Units 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	2	-	3
Geological Structures 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Soil Landscapes	NSW Office of Environment & Heritage	12/08/2014		None planned	1000	1	-	4
Atlas of Australian Soils	CSIRO	19/05/2017	17/02/2011	As required	1000	1	1	2
Standard Local Environmental Plan Acid Sulfate Soils	NSW Planning and Environment	07/10/2016	07/10/2016	As required	500	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	1	1	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Office of Environment & Heritage	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	Dept. Finance, Services & Innovation	13/07/2017	01/07/2017	As required	1000	0	0	0
SEPP 14 - Coastal Wetlands	NSW Planning and Environment	17/12/2015	24/10/2008	Annually	1000	0	0	0
SEPP 26 - Littoral Rainforest	NSW Planning and Environment	17/12/2015	05/02/1988	Annually	1000	0	0	0
SEPP 71 - Coastal Protection	NSW Planning and Environment	17/12/2015	01/08/2003	Annually	1000	0	0	1
SEPP Major Developments 2005	NSW Planning and Environment	09/03/2013	25/05/2005	Under Review	1000	1	1	1
SEPP Strategic Land Use Areas	NSW Planning and Environment	01/08/2017	28/01/2014	Annually	1000	0	0	0
LEP - Land Zoning	NSW Planning and Environment	11/04/2018	16/03/2018	Quarterly	1000	0	0	9
LEP - Minimum Subdivision Lot Size	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Height of Building	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Floor Space Ratio	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Application	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Reservation Acquisition	NSW Planning and Environment	04/04/2018	09/03/2018	Quarterly	0	0	-	-
State Heritage Items	NSW Office of Environment & Heritage	04/04/2018	30/09/2016	Quarterly	1000	0	0	0
Local Heritage Items	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	1000	0	0	0
Bush Fire Prone Land	NSW Rural Fire Service	10/05/2018	23/01/2018	Quarterly	1000	0	0	1
Native Vegetation of the Illawarra Escarpment & Coastal Plain	NSW Office of Environment & Heritage	20/05/2015	04/08/2011	Unknown	1000	2	4	13
RAMSAR Wetlands	Commonwealth of Australia Department of the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	7
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	19/07/2018	19/07/2018	Daily	10000	-	-	-

Aerial Imagery 2017

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



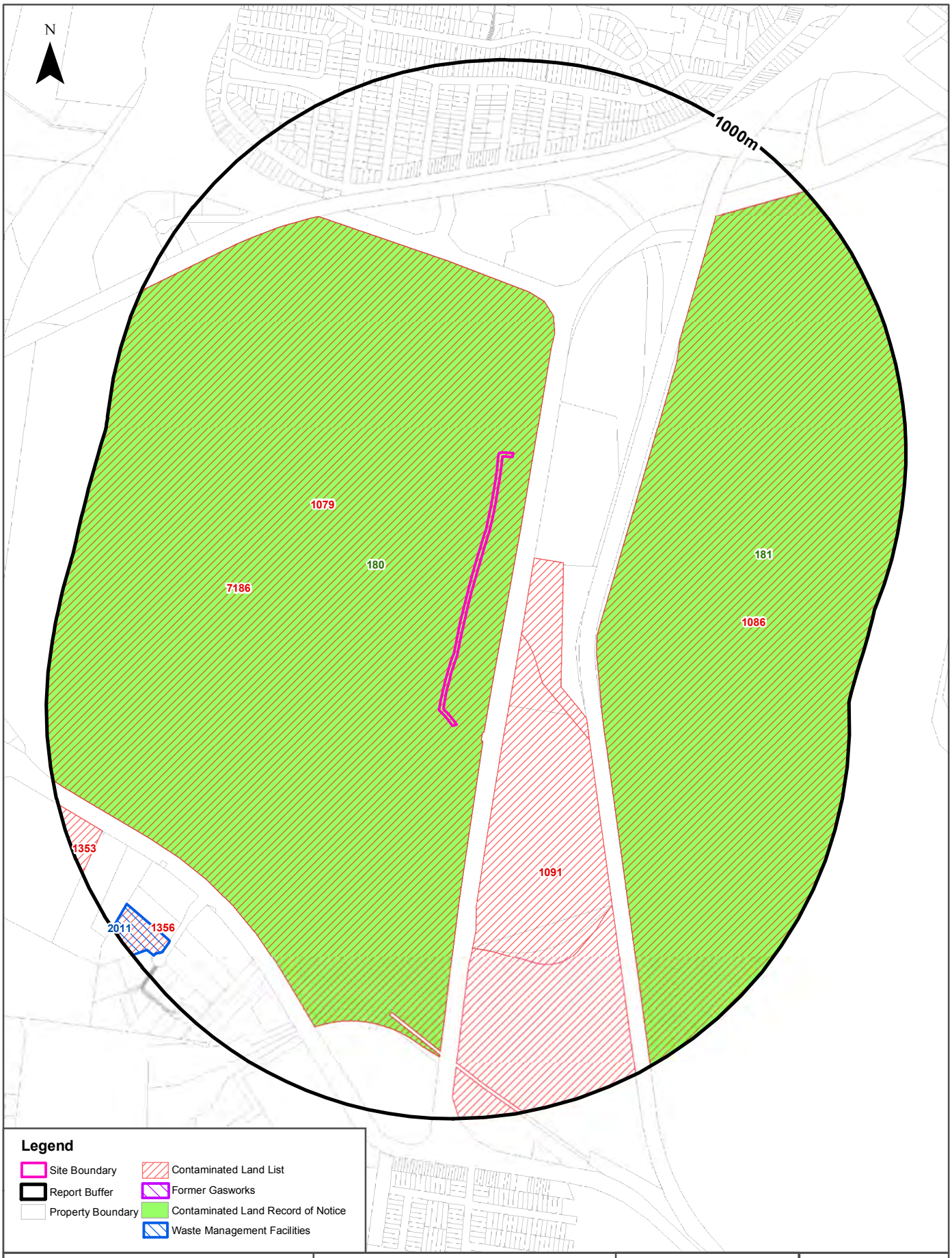
Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 17 July 2018

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1079	BHP Area 21	Springhill Road	Port Kembla	Metal Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	0m	Onsite
7186	Port Kembla Steelworks Recycling Area	Springhill Road	Port Kembla	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1091	Port Kembla Springhill Works	Springhill Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	122m	South
1086	No 2 Steelworks	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	129m	South East
1356	Veolia Environmental Services	9 Waynote Place	Unanderra	Other Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	903m	South West
1353	Endeavour Energy Springhill Field Service Centre	195 Five Island Road	Unanderra	Other Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	910m	South West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.

EPA site management class	Explanation
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
180	BHP Area 21	Springhill Road	Port Kembla	1 former	3121	Premise Match	0m	Onsite
181	No 2 Steelworks	Five Islands Road	Port Kembla	4 former	3337	Premise Match	333m	South East

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
2011	Transpacific Industries / Cleanaway	Transpacific Industries	10-12 Waynote Place	Unanderra	Multi-Purpose		Operational	Operational		Premise Match	903m	South West

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

EPA PFAS Investigation Program

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

EPA Other Sites with Contamination Issues

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

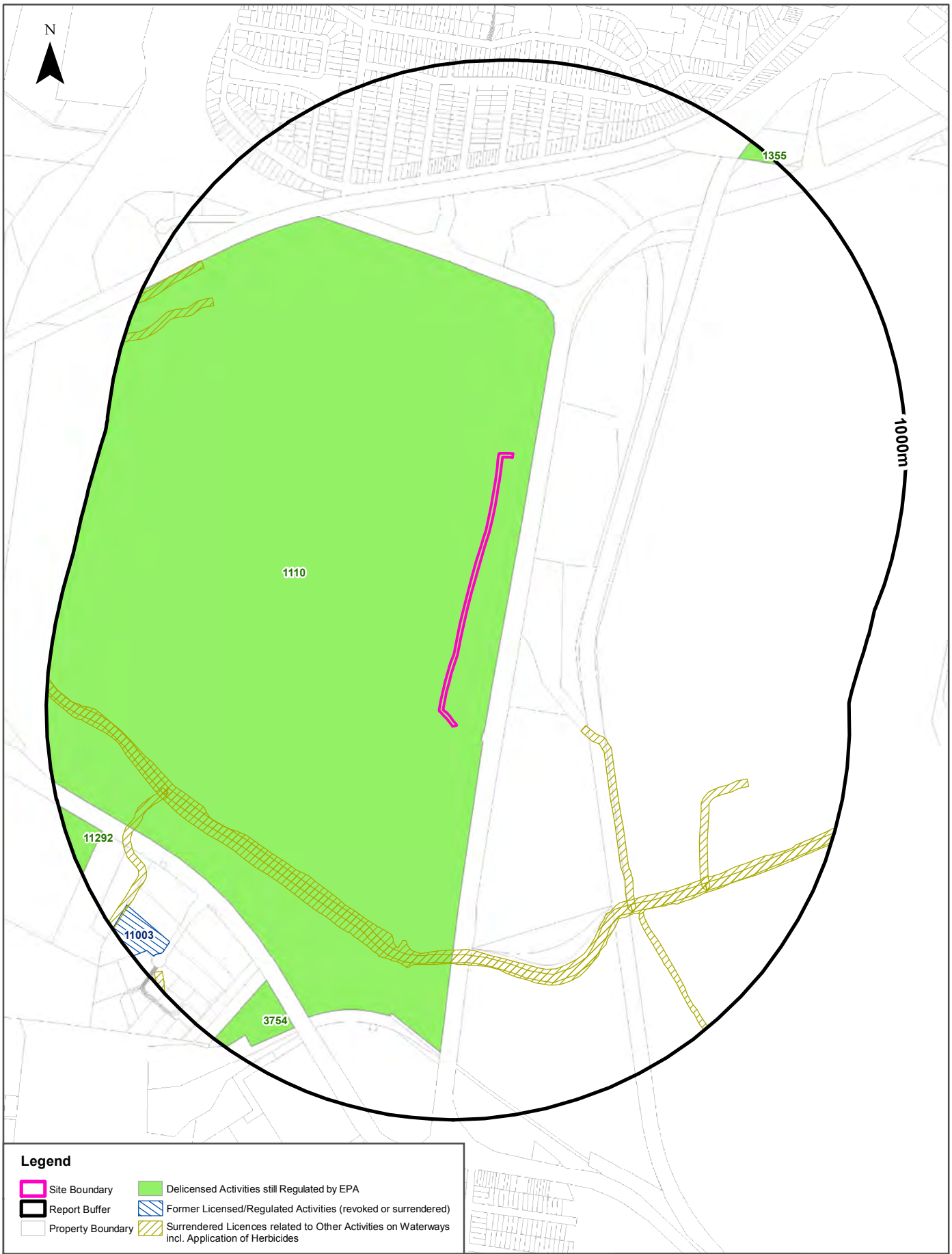
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Agricultural fertiliser (inorganic) production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime handling	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coal works	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coke production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Crushing, grinding or separating	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Dangerous goods production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	General chemicals storage	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Generation of electrical power from gas	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Iron or steel production (iron ore)	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Mineral processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Railway systems activities	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of general waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of waste tyres	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Scrap metal processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - other types of waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - waste tyres	Premise Match	0m	Onsite
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Chemical storage waste generation	Premise Match	122m	South

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal coating	Premise Match	122m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal processing	Premise Match	122m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Non-thermal treatment of hazardous and other waste	Premise Match	122m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Recovery of waste oil	Premise Match	122m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	122m	South
3142	AUSTRALIAN RAIL TRACK CORPORATION LIMITED		GPO BOX 14, SYDNEY, NSW 2001		Railway systems activities	Network of Features	290m	South East
13421	JOHN HOLLAND RAIL PTY LTD		PO Box 215 , PARRAMATTA, NSW 2124		Railway systems activities	Road Match	290m	South East
20870	BENEDICT RECYCLING PTY LIMITED		171-173 Five Islands Road, UNANDERRA, NSW 2526		Recovery of general waste	Premise Match	784m	South West
20870	BENEDICT RECYCLING PTY LIMITED		171-173 Five Islands Road, UNANDERRA, NSW 2526		Waste storage - other types of waste	Premise Match	784m	South West
10095	BOC LIMITED		147 FIVE ISLANDS ROAD	CRINGILA	Dangerous goods production	Premise Match	888m	South
10095	BOC LIMITED		147 FIVE ISLANDS ROAD	CRINGILA	General chemicals storage	Premise Match	888m	South
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Contaminated soil treatment	Premise Match	903m	South West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Non-thermal treatment of hazardous and other waste	Premise Match	903m	South West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Recovery of general waste	Premise Match	903m	South West
10251	CLEANAWAY OPERATIONS PTY LTD	TRANSPACIFIC INDUSTRIES	10-12 WAYNOTE PLACE	UNANDERRA	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	903m	South West

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
1110	BITUPAVE LTD	BORAL ASPHALT	SPRINGHILL ROAD	PORT KEMBLA	Bitumen mixing	Premise Match	0m	Onsite
3754	BORAL RESOURCES (COUNTRY) PTY. LIMITED	BORAL COUNTRY - CONCRETE & QUARRIES	PRT LOTS 1 & 19 FIVE ISLANDS ROAD	PORT KEMBLA	Concrete works	Premise Match	802m	South West
11292	ENDEAVOUR ENERGY	INTEGRAL ENERGY SPRINGHILL TRANSMISSION SUBSTATION	GLASTONBURY AVENUE	UNANDERRA	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	910m	South West
1355	CLEARY BROS (BOMBO) PTY LTD	CLEARY BROS CONCRETE	8 JOHN CLEARY PLACE	CONISTON	Concrete works	Premise Match	944m	North East

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	316m	-
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	316m	-
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	316m	-
11003	VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD	10-16 WAYNOTE PLACE, UNANDERRA, NSW 2526	Surrendered	03/10/2000	Non-thermal treatment of hazardous and other waste	Premise Match	903m	South West

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

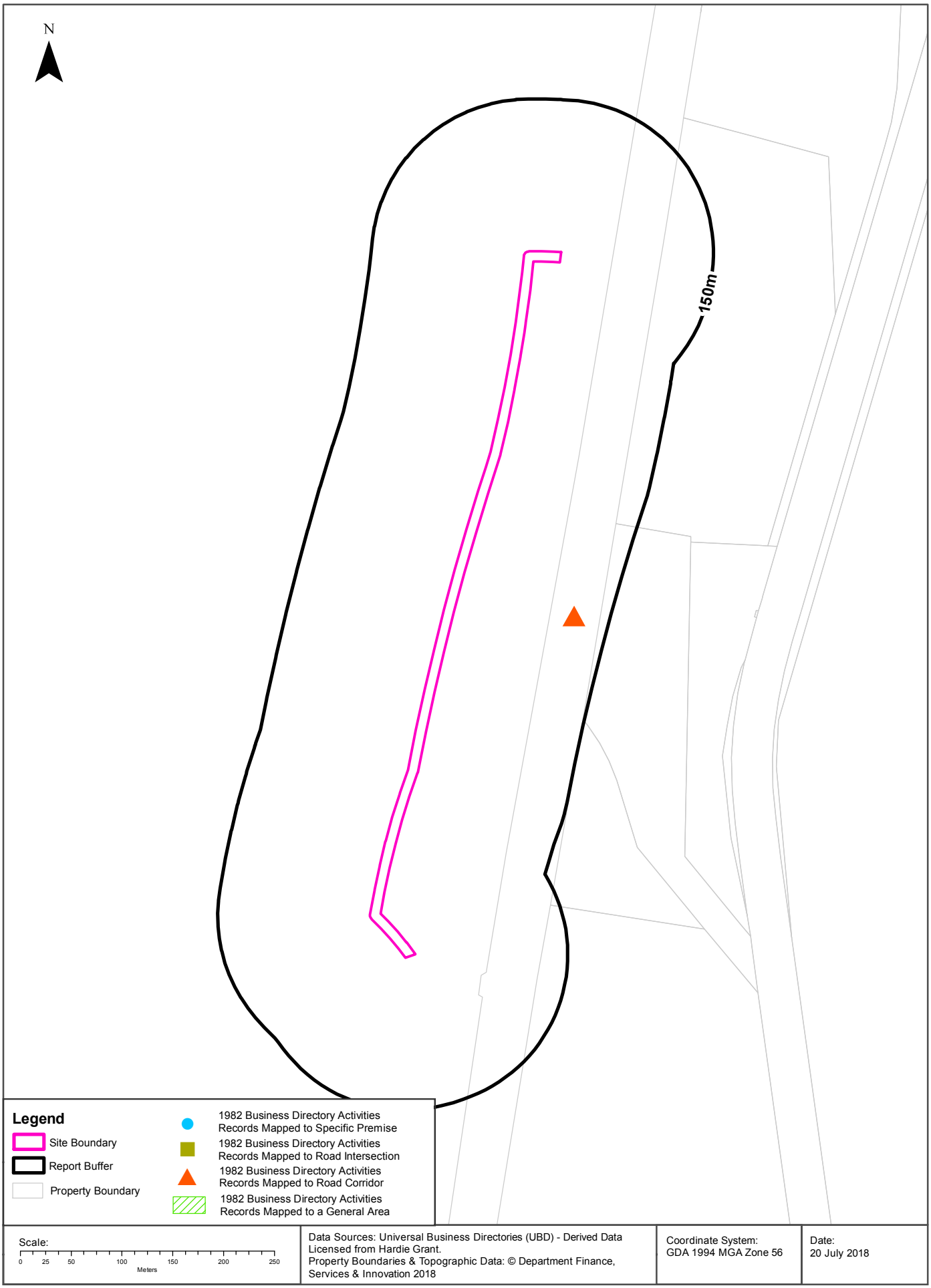
UPSS Sensitive Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



1982 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Business Directory Records
Road or Area Matches

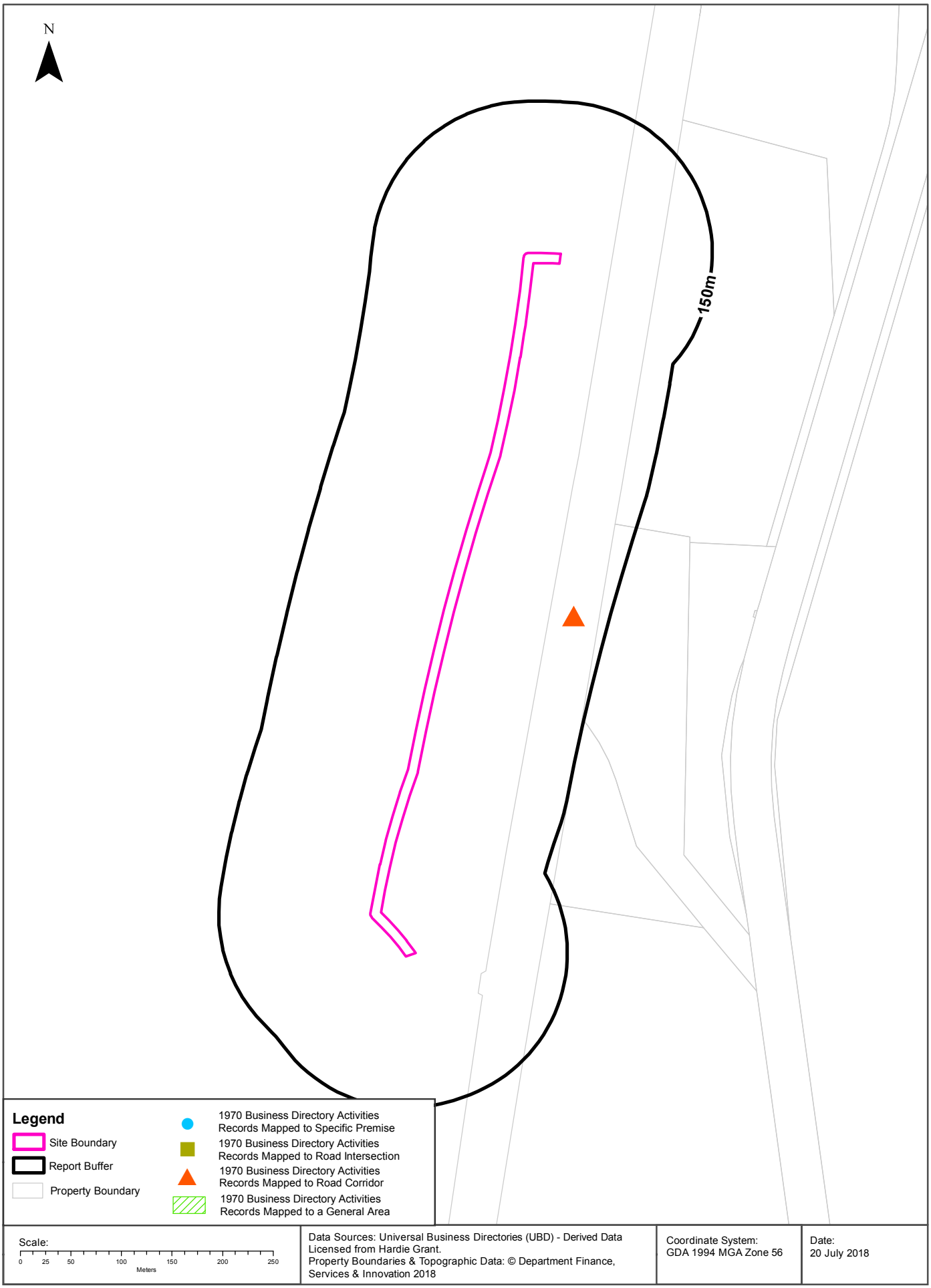
Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS - PRE-FABRICATED MFRS. &/OR DISTS	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	139433	Road Match	50m
STEEL FABRICATORS.	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	145118	Road Match	50m
CARRIERS &/OR CARTAGE CONTRACTORS	Tex Liquid Transport Pty. Ltd., Springhill Rd., Coniston., Wollongong	139761	Road Match	50m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Business Directory Records
Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS-PREFABRICATED-MANUFACTURERS & DISTRIBUTORS	Lysaght, J. (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	560810	Road Match	50m
LAMINATED MATERIALS & PRODUCTS MFRS.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	564307	Road Match	50m
ROOFING MATERIAL MFRS.&/OR DIST.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	566944	Road Match	50m
SILO MANUFACTURERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567270	Road Match	50m
STEEL FLOORING-INDUSTRIAL-SUPPLIERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567511	Road Match	50m
TANK & TANK STAND MFRS. &/OR DISTRIBUTORS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567626	Road Match	50m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

1961 Business Directory Records
Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Business Directory Records
Road or Area Matches

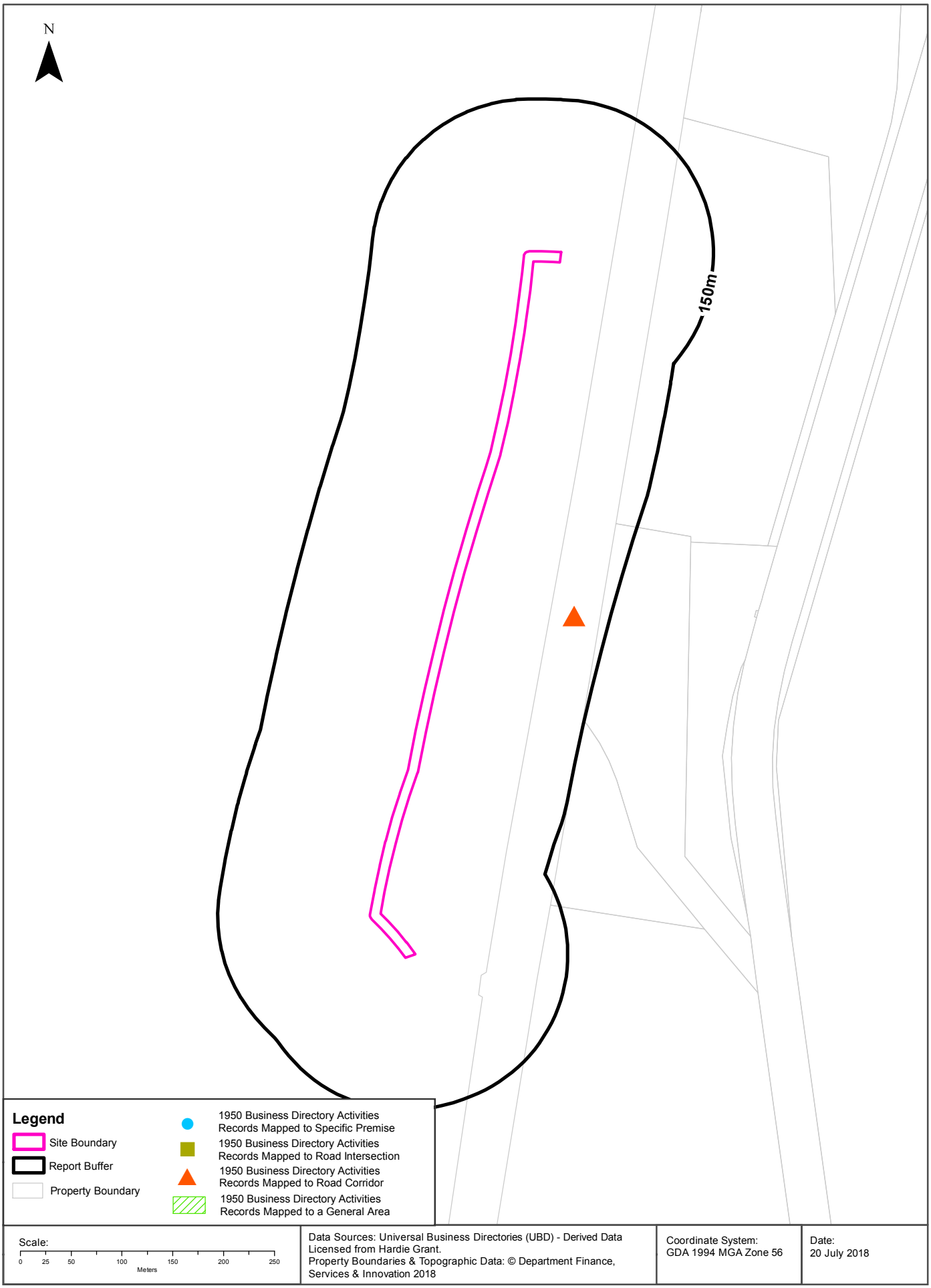
Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Business Directory Records
Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
PAINTER PAPERHANGER DECORATOR	Tomlin,L., Spring Hill Rd., Cohiston Wollongong	190382	Road Match	50m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Aerial Imagery 2016

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

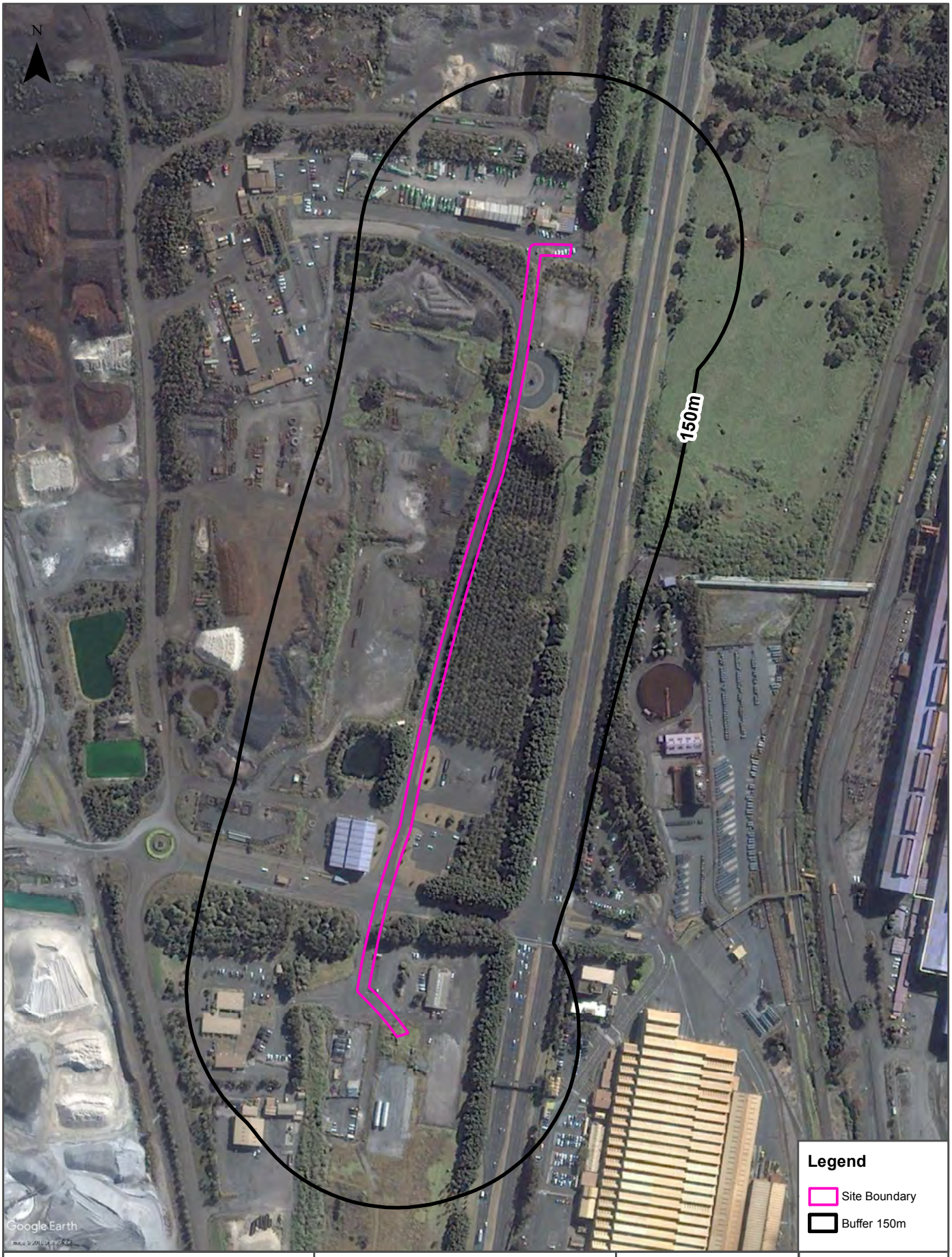


Scale:	Data Sources: Aerial Imagery © Department Finance, Services & Innovation	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

0 50 100 200
Meters

Aerial Imagery 2013

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



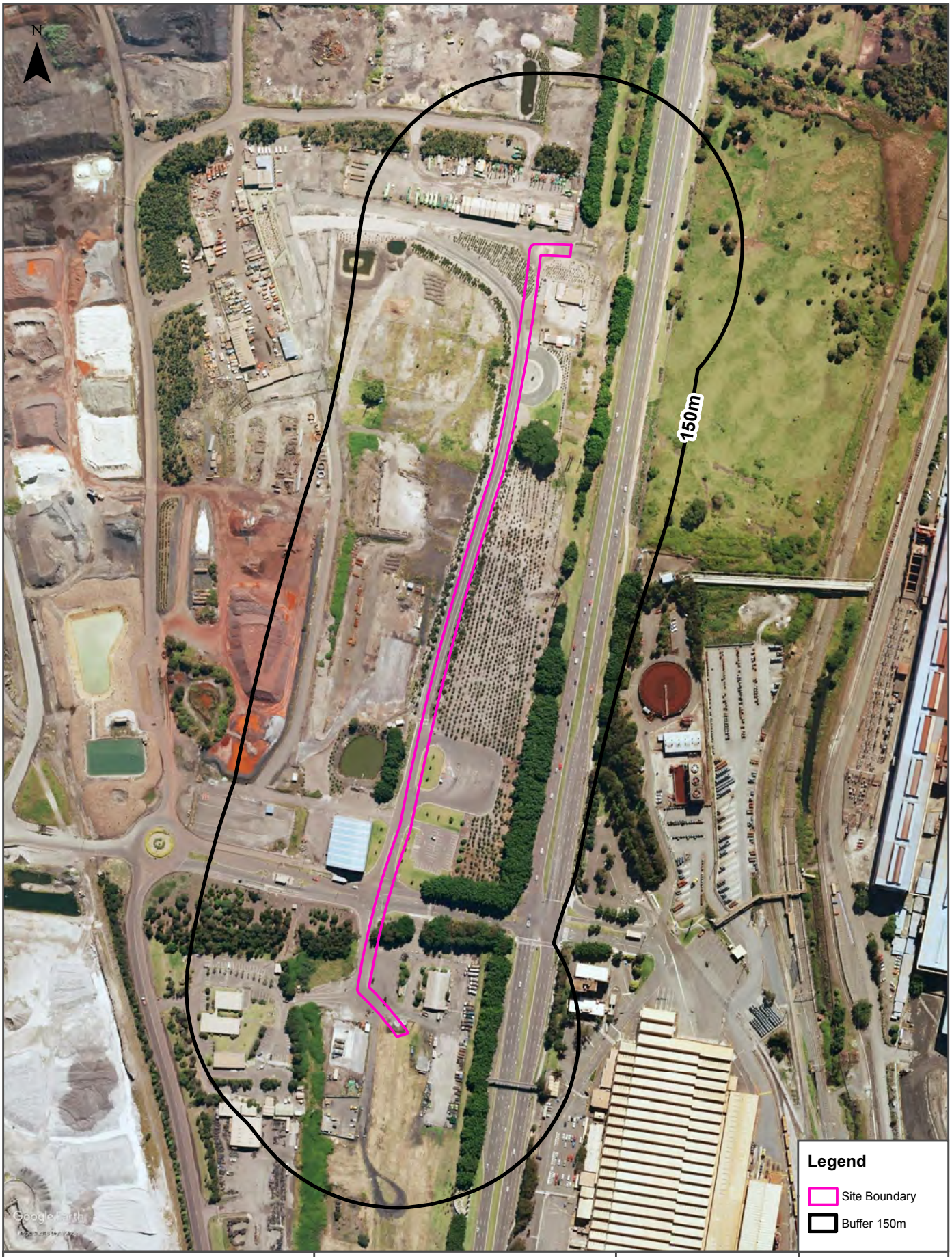
Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 17 July 2018

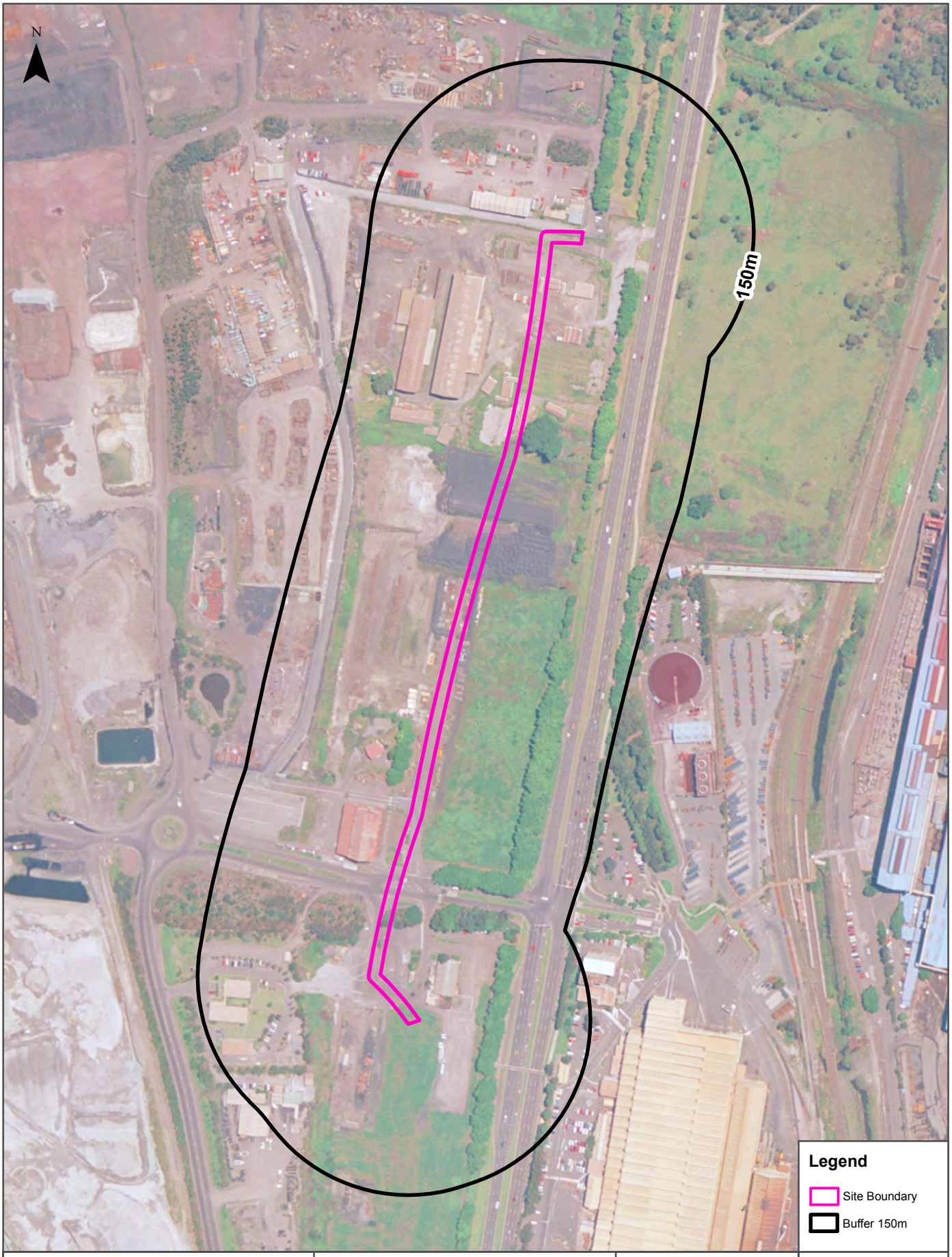
Aerial Imagery 2008

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Aerial Imagery 2002

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



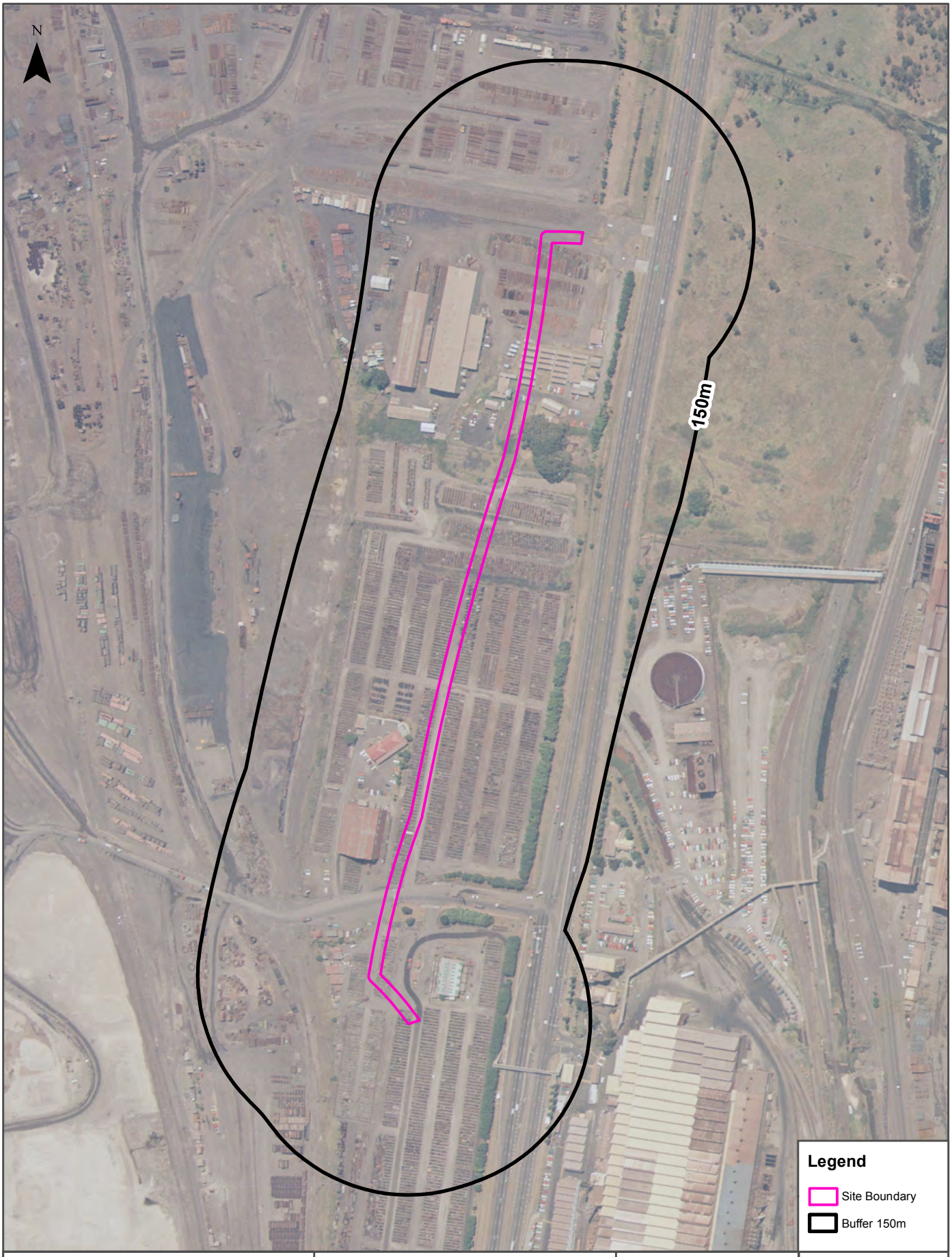
Aerial Imagery 1994

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



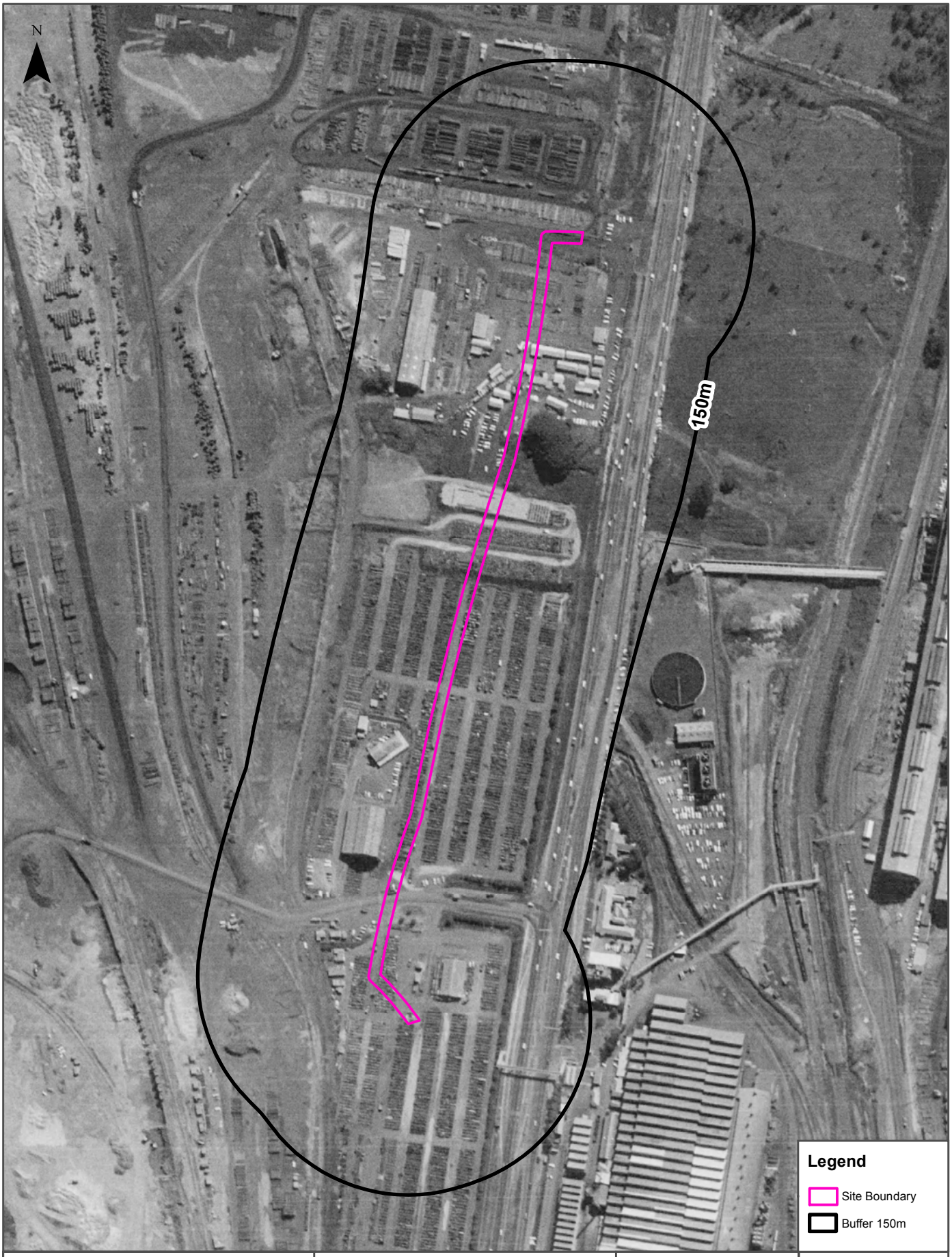
Aerial Imagery 1984

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



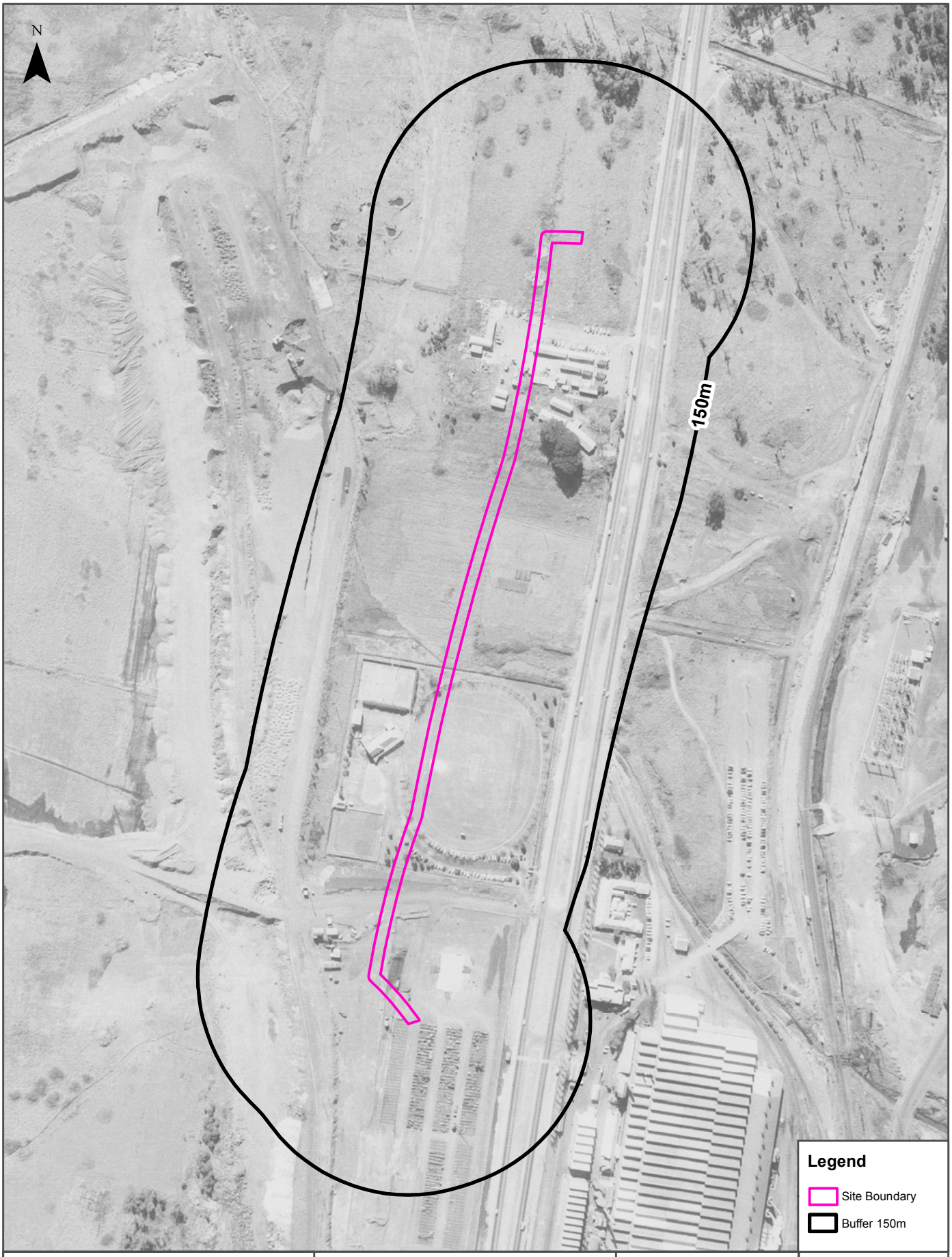
Aerial Imagery 1975

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



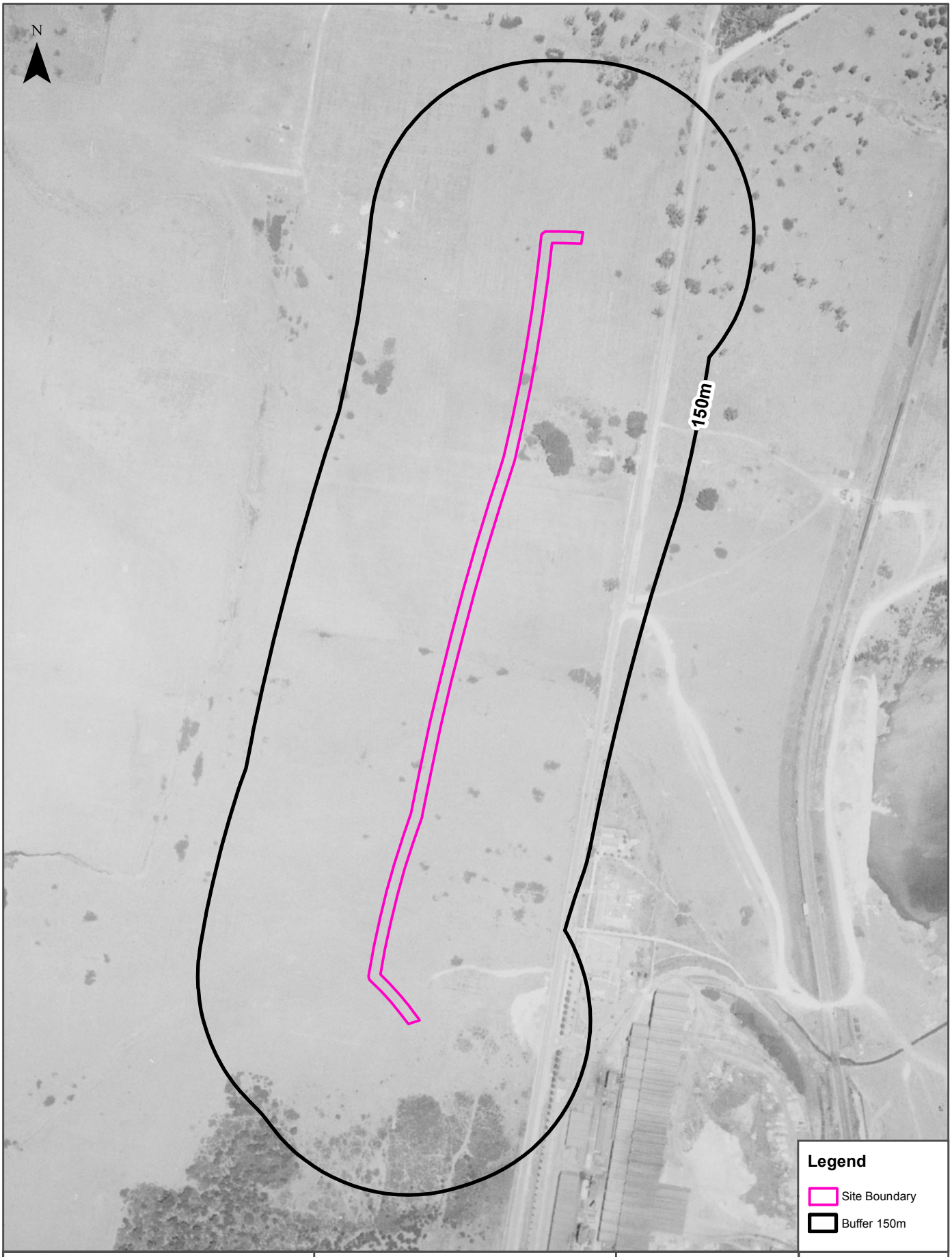
Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



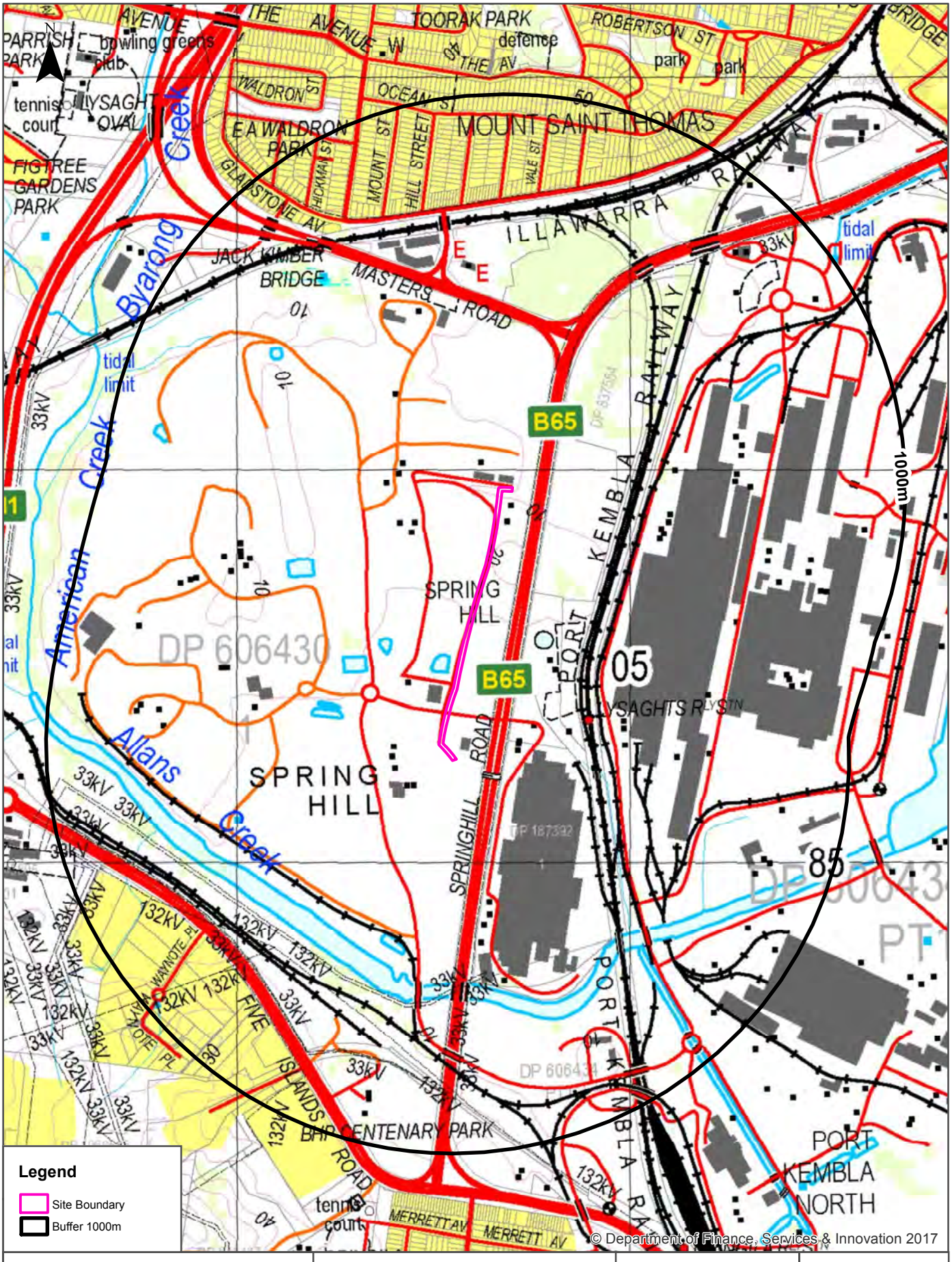
Aerial Imagery 1951

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Topographic Map 2015

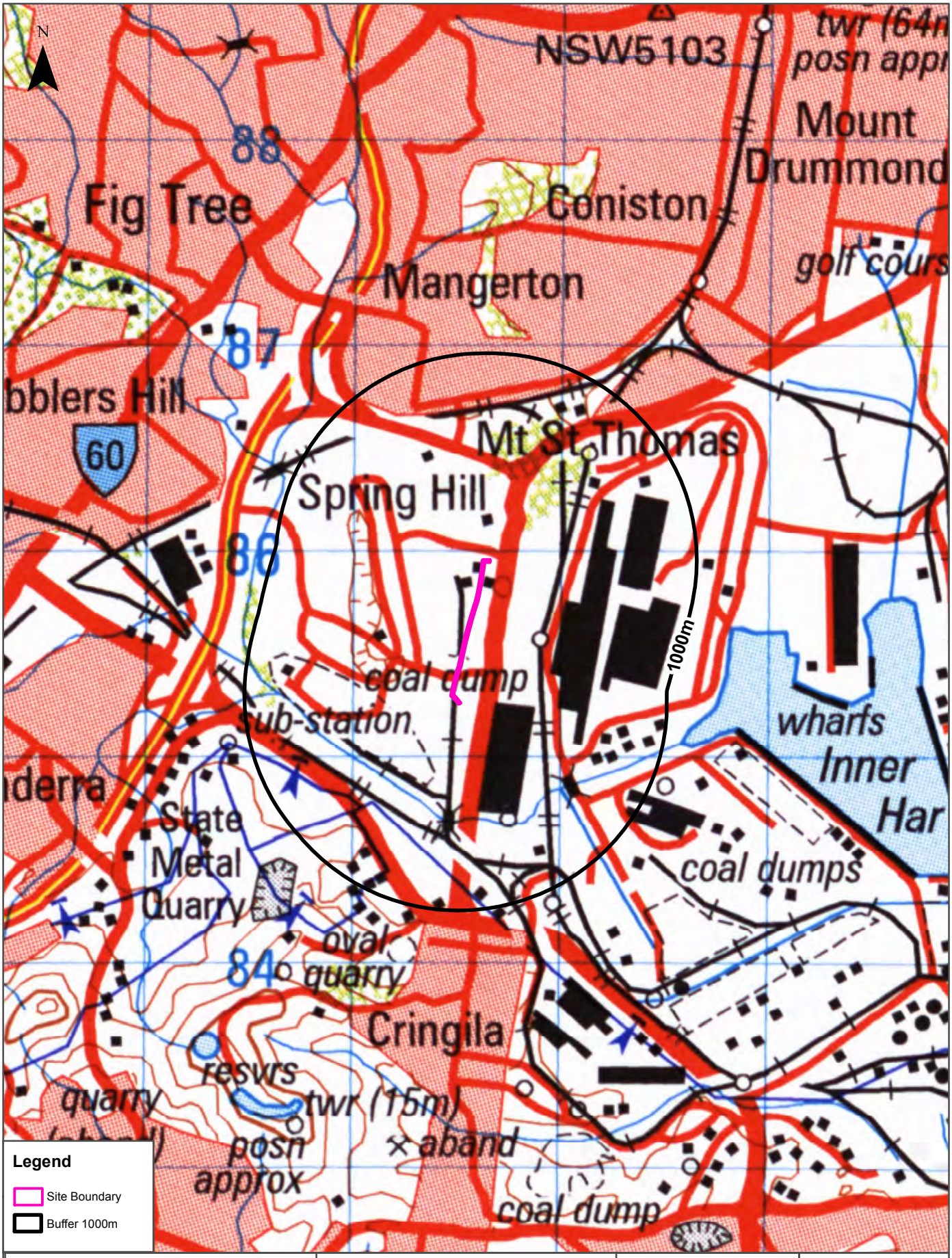
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Scale:	Data Sources: Topographic Map Data © NSW Land and Property Information	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

Historical Map 1998

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



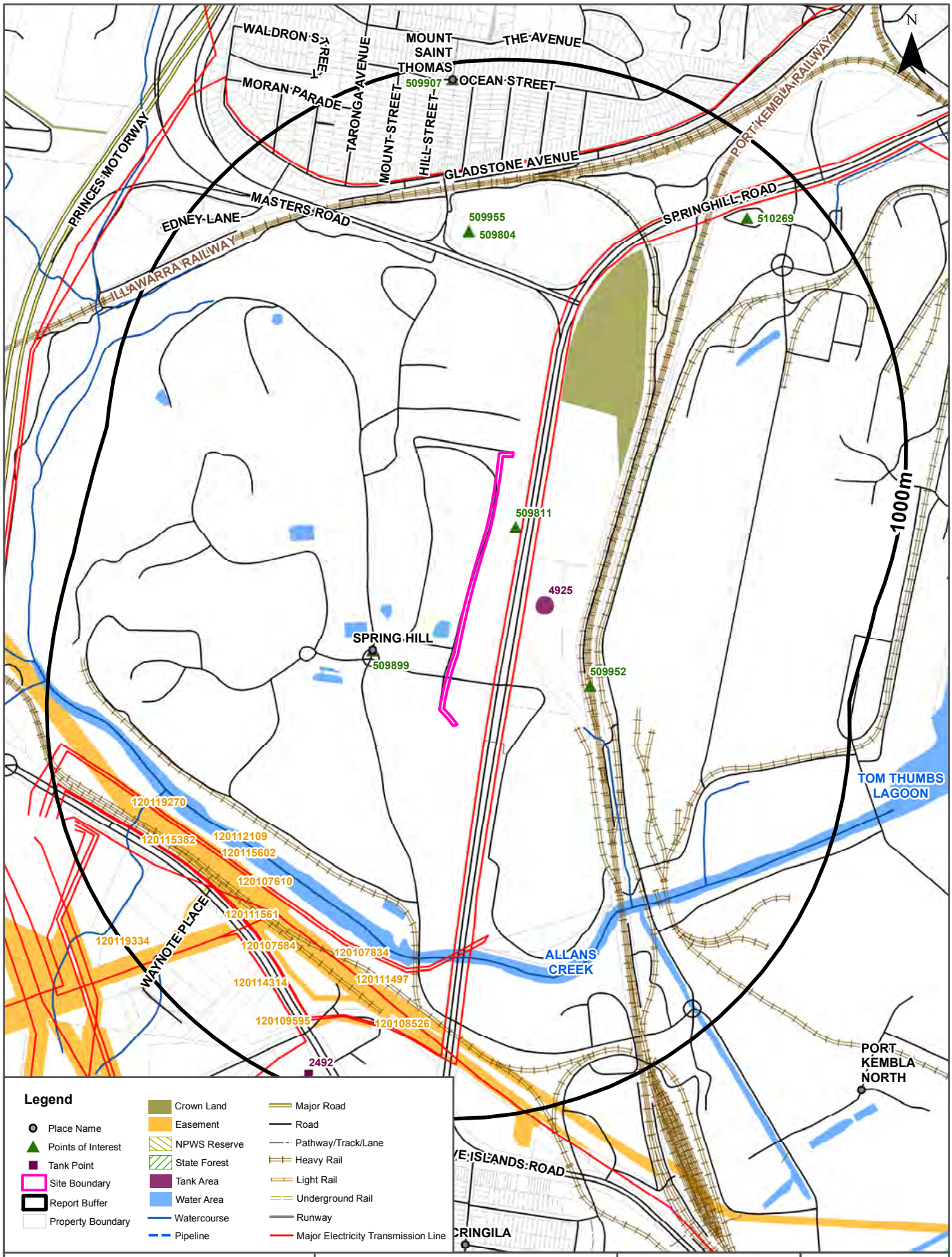
Historical Map 1942

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
509811	Mountain/Hill/Peak	SPRING HILL	62m	North East
509899	Locality	SPRING HILL	199m	South West
509952	Railway Station	LYSAGHTS RAILWAY STATION	346m	South East
509955	SES Facility	CONISTON SES	570m	North
509804	SES Facility	ILLAWARRA SOUTH COAST SES	570m	North
510269	Community Facility	BHP VISITORS CENTRE	843m	North East
509907	Suburb	MOUNT SAINT THOMAS	957m	North
509851	Park	BHP CENTENARY PARK	985m	South

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
4925	Undefined	Operational		09/04/2006	165m	East

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
2492	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	960m	South
2493	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	981m	South
7273	Undefined	Feature on Previous LPI Tank Point Supply		09/04/2006	990m	South

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120112109	Primary	Undefined		623m	South West
120115602	Primary	Undefined		636m	South
120119270	Primary	Undefined		658m	South West
120107834	Primary	Undefined		658m	South
120107610	Primary	Undefined		668m	South West
120111497	Primary	Undefined		678m	South West
120114314	Primary	Undefined		708m	South West
120115382	Primary	Undefined		728m	South West
120111561	Primary	Undefined		767m	South West
120107584	Primary	Undefined		767m	South West

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120108526	Primary	Undefined		785m	South
120109595	Primary	Undefined		785m	South
120119334	Primary	Undefined		908m	South West

Easements Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Legend

- Elevation Contour (m AHD)
- Site Boundary
- Report Buffer
- Property Boundary

Accuracy & Currency: This contour data can be up to 0.4 of the contour interval out in height and must therefore not be used for any design or engineering works, but only as a general guide to topography. Gaps may occur along contour lines due to vertical topography, obscured topography in the source photography such as buildings, dense vegetation or dead ground, or the fact that original buildings have been replaced in the intervening thirty years since the original contour capture.

Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

0 100 200 400 Meters

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Hydrogeology

Description of aquifers on-site:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Botany Groundwater Management Zones

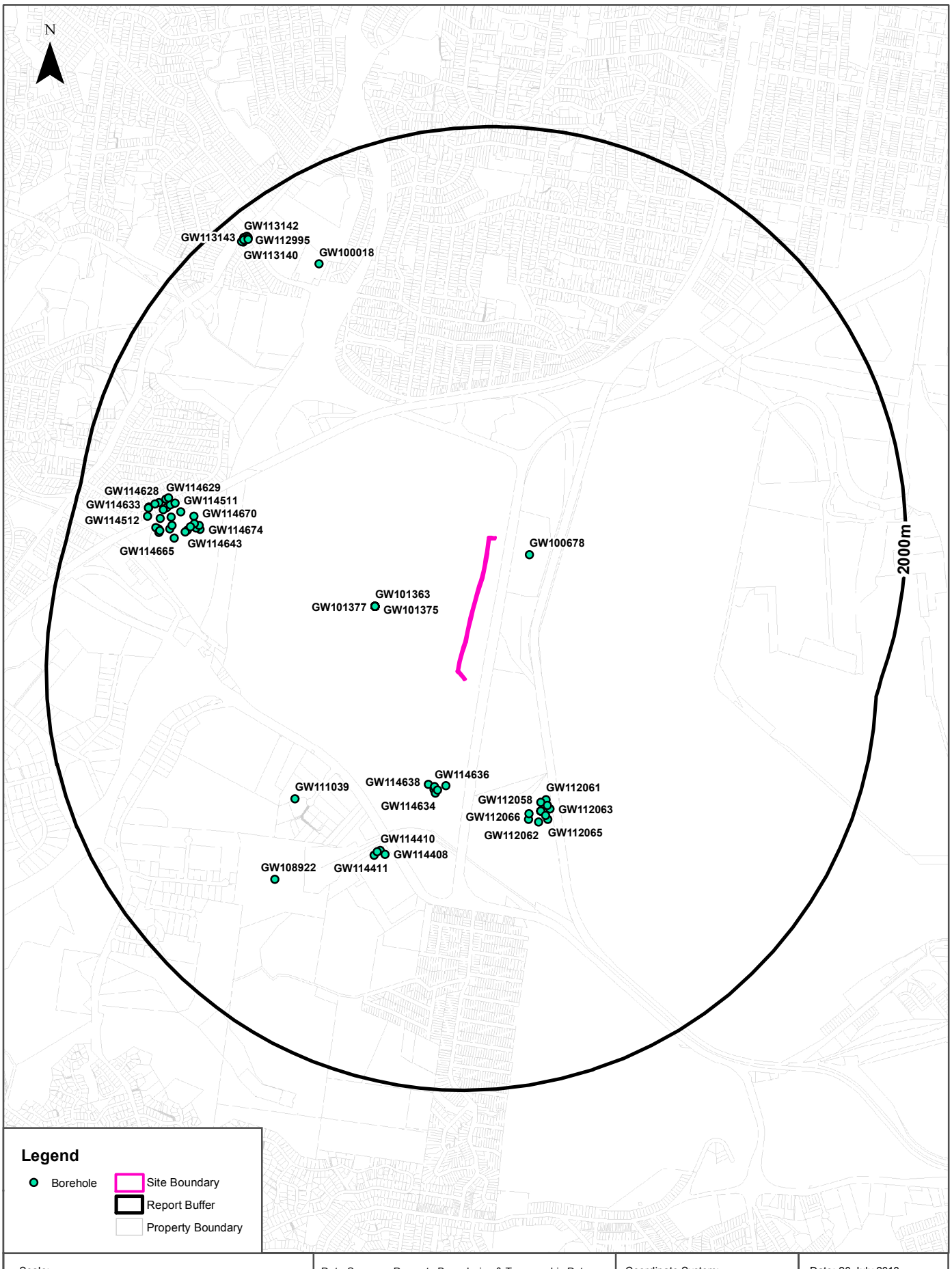
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW100678	10BL156580	Bore	Private	Monitoring	KH Adams & Sons Pty Ltd	22/03/1995	65.00	65.00	2200	8.20	7.500		185m	North East
GW101386	10BL156497	Bore	Mines	Monitoring		01/05/1992	10.10	10.10					461m	West
GW101366	10BL156497	Bore	Mines	Monitoring		28/04/1992	5.00	5.00					461m	West
GW101374	10BL156497	Bore	Mines	Monitoring		12/05/1992	38.60	38.60					461m	West
GW101368	10BL156497	Bore	Mines	Monitoring		14/05/1992	5.60	5.60					461m	West
GW101388	10BL156497	Bore	Mines	Monitoring		13/05/1992	10.00	10.00					461m	West
GW101377	10BL156497	Bore	Mines	Monitoring		09/04/1992	5.10	5.10					461m	West
GW101375	10BL156497	Bore	Mines	Monitoring		12/05/1992	11.00	11.00					461m	West
GW101363	10BL156497	Bore	Mines	Monitoring		08/04/1992	21.00	21.00					461m	West
GW101387	10BL156497	Bore	Mines	Monitoring		30/04/1992	13.00	13.00					461m	West
GW101367	10BL156497	Bore	Mines	Monitoring		04/05/1992	26.00	30.00					461m	West
GW101385	10BL156497	Bore	Mines	Monitoring		29/04/1992	6.00	6.00					461m	West
GW101365	10BL156497	Bore	Mines	Monitoring		28/04/1992	17.50	17.60					461m	West
GW101372	10BL156497	Bore	Mines	Monitoring		15/04/1992	26.70	26.70					461m	West
GW101370	10BL156497	Bore	Mines	Monitoring		23/04/1992	40.00	40.00					461m	West
GW101382	10BL156497	Bore	Mines	Monitoring		14/04/1992	13.50	13.50					461m	West
GW101551	10BL156497	Bore		Monitoring		18/05/1992	6.00	6.00					461m	West
GW101378	10BL156497	Bore	Mines	Monitoring		10/04/1992	19.60	19.60					461m	West
GW101392	10BL156497	Bore	Mines	Monitoring		15/05/1992	13.00	13.00					461m	West
GW101364	10BL156497	Bore	Mines	Monitoring		08/04/1992	7.90	7.90					461m	West
GW101369	10BL156497	Bore	Private	Monitoring		08/05/1992	6.50	6.60					461m	West
GW101384	10BL156497	Bore	Mines	Monitoring		29/04/1992	22.00	22.00					461m	West
GW101376	10BL156497	Bore	Mines	Monitoring		08/04/1992	11.80	11.80					461m	West
GW101390	10BL156497	Bore	Mines	Monitoring		18/05/1992	12.00	12.00					461m	West
GW101381	10BL156497	Bore	Mines	Monitoring		13/04/1992	32.50	32.50					461m	West
GW101373	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.00	8.00					461m	West
GW101379	10BL156497	Bore	Mines	Monitoring		01/04/1992	9.60	9.60					461m	West
GW101383	10BL156497	Bore	Mines	Monitoring		22/04/1992	9.00	9.00					461m	West
GW101371	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.60	8.60					461m	West
GW101391	10BL156497	Bore	Mines	Monitoring		18/05/1992	6.50	6.50					461m	West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW101380	10BL156497	Bore	Mines	Monitoring		14/05/1992	15.00	15.00					461m	West
GW101389	10BL156497	Bore	Mines	Monitoring		13/05/1992	4.00	4.00					461m	West
GW114817	10BL605478	Bore	Private	Monitoring bore	ENVIRODRILL	11/12/2014	3.00	3.00					523m	South
GW114636	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					539m	South
GW114638	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					539m	South
GW114637	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					552m	South
GW114635	10BL605432	Bore	Private	Monitoring bore		07/01/2013	3.00	3.00					555m	South
GW114634	10BL605432	Bore	Private	Monitoring bore	ENVIRODRILL	21/03/2014	2.40	2.40					569m	South
GW112058	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					702m	South
GW112061	10BL157702	Bore	Private	Monitoring		03/08/1994	1.20	1.20					706m	South
GW112059	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					725m	South
GW112064	10BL157702	Bore	Private	Monitoring		03/08/1994	1.70	1.70					733m	South
GW112057	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					739m	South
GW100524	10BL156496	Bore	Private	Monitoring		14/10/1993	11.21	11.21					740m	South
GW100526	10BL156496	Bore	Private	Monitoring		14/10/1993	12.38	12.38					740m	South
GW100525	10BL156496	Bore	Private	Monitoring		14/10/1993	13.48	13.48					740m	South
GW112066	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					749m	South
GW112063	10BL157702	Bore	Private	Monitoring		03/08/1994	1.50	1.50					755m	South
GW112060	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					771m	South
GW112062	10BL157702	Bore	Private	Monitoring		03/08/1994	3.00	3.00					781m	South
GW112065	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					792m	South
GW114410	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					926m	South
GW114408	10BL605157	Bore	Private	Monitoring		06/03/2012	7.20	7.20					933m	South
GW114409	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					939m	South
GW114411	10BL605157	Bore	Private	Monitoring		06/03/2012	4.60	4.60					960m	South
GW111039	10BL604123	Well	Private	Monitoring	Macquarie Drilling	16/07/2010	3.50	3.50		1.00			1003 m	South West
GW108922	10BL601914, 10BL602135, 10WA106720	Bore	Private	Industrial	Southern Tablelands Drilling	17/06/2008	31.00	31.00	384	7.00	0.080		1339 m	South West
GW114674	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	19/03/2014	5.00	5.00					1378 m	West
GW114672	10BL605474	Bore	Private	Monitoring bore		06/11/2013	5.50	5.50					1387 m	West
GW114673	10BL605474	Bore	Private	Monitoring bore		04/11/2013	5.50	5.50					1399 m	West
GW114671	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1414 m	West
GW114670	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1425 m	West
GW114644	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1427 m	West
GW114643	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	19/05/2014	5.00	5.00					1437 m	West
GW114642	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1446 m	West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114665	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1489 m	West
GW114668	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1493 m	West
GW114669	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1514 m	West
GW114666	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1521 m	West
GW114511	10BL605524	Bore	Private	Monitoring	ENVIRODRILL	28/03/2014	8.60	8.60					1530 m	West
GW114667	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.20	7.20					1531 m	West
GW114557	10BL605526	Bore	Private	Monitoring bore	ENVIRODRILL	28/03/2014	6.40	6.40					1540 m	West
GW114509	10BL605535	Bore	Private	Monitoring		28/03/2014	6.80	6.80					1550 m	West
GW114508	10BL605525	Spear	Private	Monitoring	ENVIRODRILL	21/03/2014	6.50	6.50					1563 m	West
GW114641	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	17/03/2014	5.00	5.00					1566 m	West
GW100018	10BL156571, 10WA107737	Bore	Private	Recreation	Windley's Water Wells Pty Ltd	16/03/1995	36.00	36.00	Good	4.00	3.500		1566 m	North West
GW114631	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.80	6.80					1567 m	West
GW114640	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1568 m	West
GW114513	10BL605522	Bore	Private	Monitoring	ENVIRODRILL	21/03/2014	6.80	6.80					1576 m	West
GW114823	10BL605533	Bore	Private	Monitoring bore		27/11/2013	7.30	7.30		6.00			1576 m	West
GW114629	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	8.60	8.60					1578 m	West
GW114822	10BL605516	Bore	Private	Monitoring bore	Total Drilling	16/02/2014	5.40	5.40		3.00			1580 m	West
GW114639	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1589 m	West
GW114628	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.30	7.30					1608 m	West
GW114632	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.00	6.00					1622 m	West
GW114512	10BL605534	Bore	Other Govt	Monitoring	ENVIRODRILL	28/03/2014	6.00	6.00					1642 m	West
GW114633	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.80	7.80					1648 m	West
GW114630	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.10	6.10					1648 m	West
GW113139	10BL164478	Bore	Private	Monitoring	TERRATEST	14/04/2004	6.10	6.10					1863 m	North West
GW113140	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1868 m	North West
GW113138	10BL164478	Bore	Private	Monitoring	TERRATEST	14/10/2004	6.10	6.10					1872 m	North West
GW113141	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1874 m	North West
GW113143	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1876 m	North West
GW112995	10BL164478	Bore	Private	Monitoring	TERRATEST	14/10/2004	6.10	6.10					1879 m	North West
GW113142	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1885 m	North West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW100678	0.00m-0.60m TOPSOIL 0.60m-3.80m WEATHERED BASALT 3.80m-9.00m BASALT 9.00m-16.00m INDURATED SHALE 16.00m-65.00m SANDSTONE	185m	North East
GW101363	0.00m-7.00m FILL. Dark slag fill range from 300mm near surface to 10mm and fines increase at depth 7.00m-10.00m CLAYS.Esturine. Dark brown to grey stiff esturine clays 10.00m-16.60m SANDSTONE.Weathered grey to light yellow.Drilled to refusal. 16.60m-21.00m SANDSTONE. Fresh grey sandstone. Water loss high.	461m	West
GW101364	0.00m-6.80m FILL Dark slag fill size range from 300mm near surface to 10 mm and fines at increased depth 6.80m-7.90m CLAYS.Esturine. Dark brown to grey stiff esturine clays	461m	West
GW101365	0.00m-2.00m FILL. Compacted coal wash reject 2.00m-12.60m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays 12.60m-15.60m SANDSTONE.H.W. Sandstone becomming fresher with increasing depth 15.60m-17.60m SANDSTONE. Fresh grey sandstone	461m	West
GW101366	0.00m-2.00m FILL. Compacted coalwash reject. 2.00m-5.00m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays.	461m	West
GW101367	1.80m-5.20m FILL. Compacted coal wash reject 5.20m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays 6.40m-13.00m WEATHERED SANDSTONE.Green to grey weathered sandstone with minor gravels 13.00m-30.00m SANDSTONE.Fine grained grey fresh sandstone	461m	West
GW101368	0.00m-1.40m FILL. Dark slag fill with fines and some clay> 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt 3.20m-4.40m SAND. Grey to lighbrown silty sand> 4.40m-5.60m CLAY. Stiff grey clay.	461m	West
GW101369	0.00m-0.60m TOP SOIL.Dark top soil 0.60m-1.80m FILL. Grey slag fill 1.80m-5.00m FILL. Compacted coal wash reject. 5.00m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. 6.40m-6.60m CLAY. Very silty clay.	461m	West
GW101370	0.00m-5.40m FILL.Dark grey slag fill> Some brown slags present> 5.40m-7.60m ESTURINE CLAY. Firm to stiff orange brown clay becoming grey with increasing depth. Some gravels. 7.60m-20.00m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. At 15.8 m Grey stiff clays.At 17.9m Interbedded sands and clays. 20.00m-22.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays interbedded with sands> 22.40m-23.40m RESIDUAL CLAY. Light green clays> 23.40m-31.20m WEATHERED SANDSTONE.Fine grained highly weathered green sandstone 31.20m-40.00m SANDSTONE.Fine grained fresh grey sandstone.	461m	West
GW101371	0.00m-5.40m FILL.Dark slag fill.Some brown slags present. 5.40m-7.60m CLAY,ESTURINE. Firm to stiff orange brown clay becoming grey with increasing depth.Some gravels 7.60m-8.60m CLAY, ESTURINE.Dark brown to grey stiff esturine clays>	461m	West
GW101372	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present. 3.40m-6.40m CLAY. Light brown to bright orange wet clay. Possibly of filter cake or flue dust origin 6.40m-19.20m CLAY, ESTURINE. Dark brown to grey stiff esturine clays. 19.20m-22.40m SANDSTONE. E.W. Light brown sandstone. 22.40m-26.70m SANDSTONE. Fresh grey fine grained sandstone.	461m	West
GW101373	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present 3.40m-6.40m CLAY.Light brown to bright orange wet clay.Possibly of filter cake or flue dust origin. 6.40m-8.00m CLAY,ESTURINE.Dark brown to grey stiff esturine clays.	461m	West
GW101374	0.00m-0.60m CLAY. Loose sandy clay. 0.60m-9.00m CLAY. Firm sandy grey to brown clay. 9.00m-10.00m CLAY, ESTURINE. Sandy clay esturine clays> 10.00m-21.00m CLAYS, ESTURINE. Sandy esturine clays with some fine gravels. 21.00m-38.60m SANDSTONE.Fine to medium grained fresh grey sandstone.	461m	West

Groundwater No	Drillers Log	Distance	Direction
GW101375	0.00m-0.60m CLAY. Loose sandy clay 0.60m-9.00m CLAY. Firm sandy grey to brownclay> 9.00m-11.00m CLAYS,ESTURINE.Sandy clay. esturine clays,	461m	West
GW101376	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-4.80m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone. 4.80m-8.20m SANDSTONE.EW toW light brown sandstone becoming harder with increased depth. 8.20m-11.80m SANDSTONE.Fresh fine grained grey sandstone.	461m	West
GW101377	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-5.10m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone.	461m	West
GW101378	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm & fines at increased depth. 8.60m-16.20m CLAY,ESTURINE.Dark grey stiff esturine clay. 16.20m-17.40m CLAY,ESTURINE.Dark grey stiff esturine clays with some minor sandstone particles. 17.40m-19.60m SANDSTONE.Fresh hard grey sandstone.	461m	West
GW101379	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm& fines at increased depth. 8.60m-9.60m CLAY,ESTURINE.Dark grey stiff esturine clay.	461m	West
GW101380	0.00m-1.40m FILL.Dark slag fill with fines and some clay 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt. 3.20m-4.40m SAND.Grey to light brown silty sand. 4.40m-6.00m CLAY.Stiff grey clay. 6.00m-6.80m SAND.Light brown silty sand. 6.80m-7.00m CLAY. Stiff grey to brown clay. 7.00m-9.00m SANDSTONE.Gravelly residual brown to yellow sandstone. 9.00m-12.40m SANDSTONE.Moderately weathered yellow sandstone. 12.40m-15.00m SANDSTONE.Fresh light brown to yellow Budgong sandstone.	461m	West
GW101381	0.00m-11.40m FILL. Mixed fill consisting of slag< filter cake and coalwash reject> Nodifinite bands-generally mixed. 11.40m-19.20m CLAY,ESTURINE:Grey esturine clay with some thin sand bands. Organic material< wood and root fragments. 19.20m-27.40m SANDSTONE.Weathered soft sandstone.Becomes less weathered with increasing depth. 27.40m-30.00m SANDSTONE.Brown to yellow slightly weathered sandstone. 30.00m-32.50m SANDSTONE.Fresh hard grey sandstone.	461m	West
GW101382	0.00m-12.00m FILL.Mixed fill consisting of slag,Filter cake and coal wash reject. No difinite bands-generally mixed. 12.00m-13.50m CLAYS, ESTURINE.Firm dark esturine clays.	461m	West
GW101383	0.00m-7.60m FILL.Dark slag fill size range from 300mm near surface to 10mm and fines at increased depth. 7.60m-9.00m CLAY,ESTURINE.Dark grey stiff esturine clay.	461m	West
GW101384	0.00m-3.00m FILL, Compacted coal wash reject with brown clays and gravels. 3.00m-15.00m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 15.00m-20.00m SAND. Light brown to yellow sands. 20.00m-20.80m SANDSTONE. Extremely to weathered sandstone. 20.80m-22.00m SANDSTONE. Fresh hard light brown sandstone.	461m	West
GW101385	0.00m-3.00m FILL.Compacted coal wash reject with brown clays and gravels. 3.00m-6.00m CLAYS,ESTURINE Dark brown to grey stiff esturine clays.	461m	West
GW101386	0.00m-9.00m FILL.Hard coal wash reject with slag possibly of open hearth furnace origin 9.00m-10.10m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays.	461m	West
GW101387	0.00m-7.20m FILL. Hard coal wash reject with slag possibly of open hearth furnace origin 7.20m-8.20m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 8.20m-13.00m SANDSTONE.E.W. Sandstone with sandy clay.	461m	West
GW101388	0.00m-1.40m FILL.Dark brown to grey soils with some clay.May be from North Wall construction.Becomes brown clay with incr. depth. 1.40m-5.00m CLAY.Red to brown stiff clay> Some silty sand and pebbles up to20mm. 5.00m-6.00m SANDSTONE.Light brown weathered sandstone. 6.00m-10.00m SANDSTONE.Fresh hard grey sandstone.	461m	West
GW101389	0.00m-1.40m FILL. Dark brown to grey soils with some clay.May be from North Wall construction. Becomes brown clay with incrs.depth. 1.40m-4.00m CLAY.Red to brown stiff clay.Some silt.	461m	West
GW101390	0.00m-2.00m TOP SOIL.Dark topsoil turning to soft brown clays. 2.00m-3.00m CLAY.Firm brown to light brown clay. 3.00m-7.00m CLAY.Red to brown stiff clay.Some silt. 7.00m-8.00m SANDSTONE.Extremely to weathered light brown sandstone. 8.00m-12.00m SANDSTONE. Fresh hard yellow to grey sandstone	461m	West
GW101391	0.00m-0.40m TOP SOIL.Dark topsoil 0.40m-5.20m CLAY.Firm brown to light brown clay. 5.20m-6.50m CLAY.Red to brown stiff clay.Some silt	461m	West

Groundwater No	Drillers Log	Distance	Direction
GW101392	0.00m-0.40m TOP SOIL.Dark topsopil 0.40m-5.20m CLAY.Firm brown to light brown clay 5.20m-7.00m CLAY.Red to brown stiff clay. Some silt 7.00m-7.60m CLAY.Stiff grey sandy clay. 7.60m-8.40m SANDSTONE.Extremely weathered light brown sandstone 8.40m-9.40m SANDSTONE.Weathered light brown to grey sandstone 9.40m-13.00m SANDSTONE.Fresh grey sandstone.	461m	West
GW101551	0.00m-2.00m TOP SOIL. Dark topsoil turning to soft brown clays 2.00m-3.00m CLAY. Firm brown to light brown clay. 3.00m-6.00m CLAY. Red to brown stiff clay. Some silt	461m	West
GW114817	0.00m-1.00m GRAVEL FILL 1.00m-3.00m SANDY CLAY DARK GREY FILL	523m	South
GW114636	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	539m	South
GW114638	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL, METAL BLACK 1.20m-3.00m CLAY DARK GREY	539m	South
GW114637	0.00m-0.50m FILL,CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	552m	South
GW114635	0.00m-0.50m FILL ,CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	555m	South
GW114634	0.00m-0.50m FILL CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-2.40m CLAY DARK GREY	569m	South
GW100524	0.00m-4.00m GREY SLAG FILL 4.00m-5.00m GREY SAND 5.00m-11.21m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	740m	South
GW100525	0.00m-3.50m GREY SLAG FILL 3.50m-5.00m GREY SAND 5.00m-7.00m DARK BROWN TO GREY STIFF ESTUARINE CLAYS. SOME BANDS OF SAND. 7.00m-13.48m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	740m	South
GW100526	0.00m-5.00m GREY SLAG FILL 5.00m-6.80m DARK GREY SLIGHTLY SANDY FIRM ESTUARINE CLAYS. 6.80m-12.38m DARK BROWN TO GREY STIFF ESTUARINE CLAYS.	740m	South
GW114410	0.00m-0.25m CONCRETE SLAB AND MINOR FILL 0.25m-0.70m FILL, GRAVELLY SILTY 0.70m-3.00m FILL GRAVELLY SANDY CLAY 3.00m-6.00m SILTY CLAY MED.BROWN/GREY	926m	South
GW114408	0.00m-0.25m CONCRETE SLABAND MINOR SUB BASE 0.25m-3.00m FILL SILTY CLAY BROWN MINOR GRAVEL 3.00m-7.20m SILTY CLAY M/BROWN,GREY,STIFF	933m	South
GW114409	0.00m-0.25m CONCRETE SLAB AND MINOR SUB BASE 0.25m-2.10m FILL GRAVELLY CLAY 2.10m-5.00m SILTY CLAY FIRM M/BROWN,MOIST 5.00m-6.00m SILTY CLAY,M/GREY BROWN STIFF NO ODOUR	939m	South
GW114411	0.00m-0.25m CONCRETE SLAB,FILL,SANDY CLAY 0.25m-2.10m FILL SANDY CLAY 2.10m-2.40m FILL SANDY CLAY AND GRAVEL 2.40m-4.00m SILTY CLAY DARK GREY 4.00m-4.60m SILTY CLAY DARK GREY MOIST	960m	South
GW111039	0.00m-1.50m CLAY, GREY AND YELLOW BROWN 1.50m-1.70m CLAY SANDY,BROWN AND GREY 1.70m-3.50m GRAVEL CLAYEY,BROWN,ORANGE AND YELLOW ,SANDY	1003m	South West
GW108922	0.00m-5.00m CLAY,TOPSOIL 5.00m-31.00m VOLCANIC BASALT	1339m	South West
GW114674	0.00m-0.80m FILL.COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.00m SANDSTONE / GRAVELS	1378m	West

Groundwater No	Drillers Log	Distance	Direction
GW114672	0.00m-0.80m FILL,CEMENTED SLAG,COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-4.00m CLAY LIGHT BROWN 4.00m-5.50m SANDSTONE, GRAVELS	1387m	West
GW114673	0.00m-0.80m FILL SLAG COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY BROWN 3.00m-4.50m CLAY LIGHT BROWN 4.50m-5.50m SANDSTONE / GRAVELS	1399m	West
GW114671	0.00m-1.00m FILL CEMENTED SLAG COMPACTED 1.00m-1.50m CLAY DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE , GRAVELS	1414m	West
GW114670	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1425m	West
GW114644	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.50m SANDSTONE GRAVELS	1427m	West
GW114643	0.00m-0.80m FILL, COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BRO;WN 4.80m-5.00m SANDSTONE GRAVELS	1437m	West
GW114642	0.00m-1.00m FILL,CEMENTED SLAG, COMPACTED 1.00m-3.50m CLAY DARK GREY 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE, GRAVELS	1446m	West
GW114665	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.50m CLAY BROWN/GREY , SILTSTONE,GRAVELS	1489m	West
GW114668	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.30m CLAY GREY/BROWN,SILTSTONE,GRAVEL	1493m	West
GW114669	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.30m CLAY BROWN/GREY,SILTSTONE,GRAVELS	1514m	West
GW114666	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.50m CLAY BROWN/GREY ,SILTSTONE,GRAVELS	1521m	West
GW114511	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.40m BLUESTONE, GRAVEL 0.40m-1.00m CLAY BLACK 1.00m-1.80m BROWN SANDY CLAY 1.80m-3.40m CLAY GREY 3.40m-4.00m GREY SAND MOIST 4.00m-6.20m BROWN SANDY CLAY COARSE 6.20m-8.60m FRACTURED SANDSTONE'GRAVELS	1530m	West
GW114667	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN/SILTY 6.00m-7.20m CLAY BROWN/GREY,SILTSTONE,GRAVEL	1531m	West

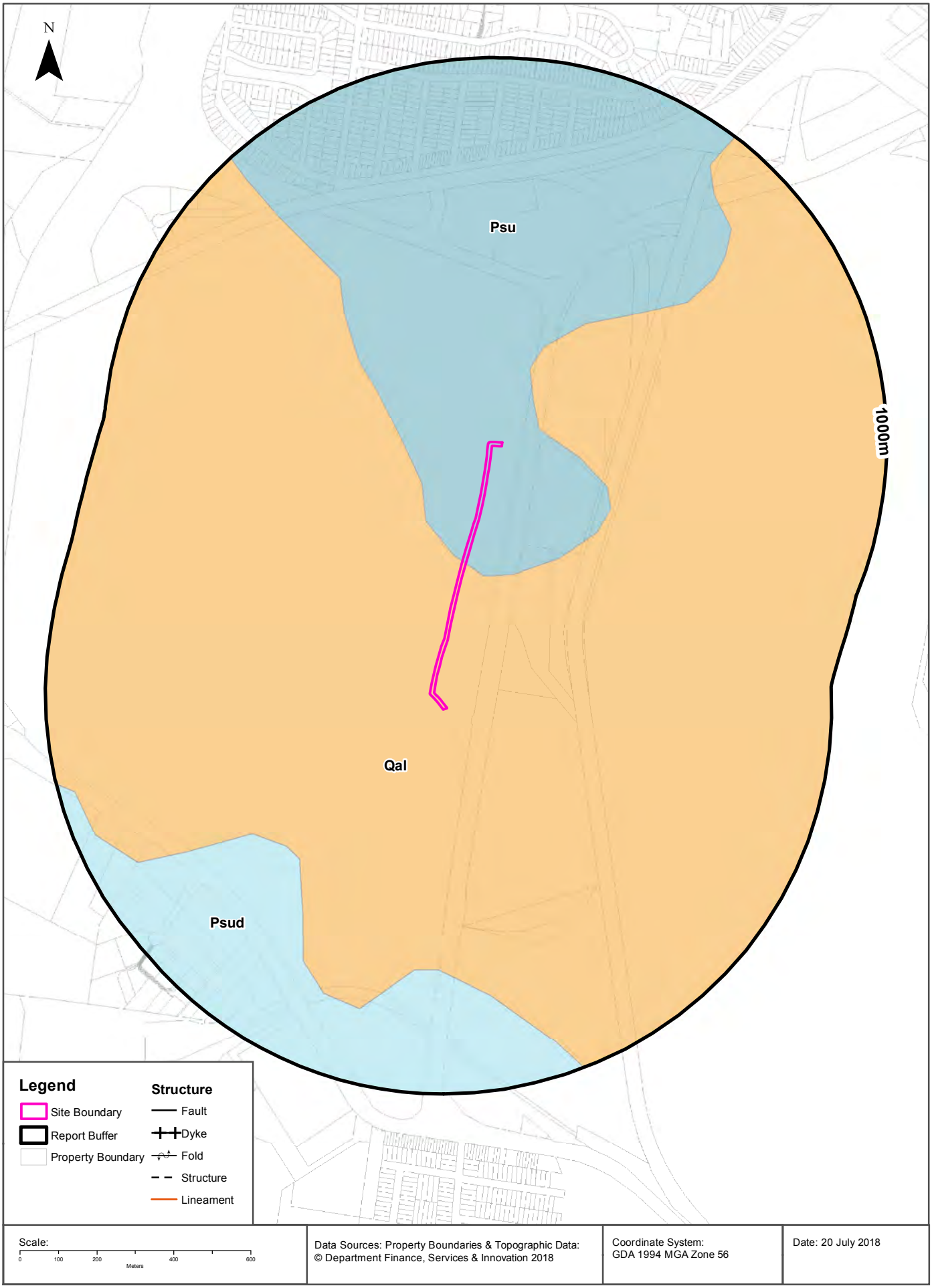
Groundwater No	Drillers Log	Distance	Direction
GW114557	0.00m-1.50m (UNKNOWN) 1.50m-1.80m IRONSTONE 1.80m-3.80m SANDY GRAVELS / CLAY 3.80m-6.40m QUARTZ / SANDY GRAVELS	1540m	West
GW114509	0.00m-0.20m BITUMEN, ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m BROWN SAND CLAY 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE 3.30m-4.60m CLAY GREY 4.60m-4.90m SATURATED SANDS GREY 4.90m-6.80m SANDY C;LAY COARSE GRAIN	1550m	West
GW114508	0.00m-1.20m SANDY CLAY 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m SANDSTONE GRAVELS W/BROWN CLAY 4.40m-6.50m BROWN SANDY CLAY	1563m	West
GW100018	0.00m-1.00m SOIL & CLAY FILL 1.00m-6.00m MUD SILT 6.00m-15.00m GRAVEL 15.00m-36.00m SANDSTONE	1566m	North West
GW114641	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.00m SANDSTONE GRAVELS	1566m	West
GW114631	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.80m SANDY CLAY COARSE GREY	1567m	West
GW114640	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1568m	West
GW114513	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m GREY CLAY 4.40m-4.60m SANDSTONE GRAVELS W/BROWN CLAY 4.60m-6.80m BROWN SANDY CLAY	1576m	West
GW114823	0.00m-2.00m FILL 2.00m-7.30m ALLUVIAL	1576m	West
GW114629	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m CLAY BLACK 2.40m-2.60m SANDS SATURATED 2.60m-4.40m CLAY GREY 4.40m-4.60m SANDSTONES,GRAVELS W/BROWN CLAY 4.60m-8.00m SANDY CLAY BROWN 8.00m-8.60m SANDSTONE FRACTURED	1578m	West
GW114822	0.00m-3.00m FILL 3.00m-5.40m ALLUVIAL	1580m	West
GW114639	0.00m-0.80m FILL COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.50m SANDSTONE / GRAVELS	1589m	West
GW114628	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED FINE GRAINED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAINED 4.90m-7.30m SANDSTONE COARSE GRAINED	1608m	West

Groundwater No	Drillers Log	Distance	Direction
GW114632	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY / FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.00m SANDY CLAY COARSE GRAIN	1622m	West
GW114512	0.00m-0.80m BLACK LOAMY SOIL 0.80m-2.40m CLAY BLACK 2.40m-3.00m BROWN SANDY CLAY 3.00m-3.20m SANDSTONE 3.20m-6.00m BROWN SANDY CLAY	1642m	West
GW114630	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.30m SILTY CLAY FILL 0.30m-1.20m SANDY CLAY BROWN 1.20m-3.00m SAND WHITE WEATHERED 3.00m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.10m SANDY CLAY COARSE GRAIN	1648m	West
GW114633	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAIN 4.90m-7.80m SANDSTONE COARSE GRAIN	1648m	West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:100,000

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Geology

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Psud	melanocratic, coarse-grained and porphyritic latite	Dapto Latite Member	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy
© State of New South Wales through the NSW Department of Industry, Resources & Energy

Naturally Occurring Asbestos Potential

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Naturally Occurring Asbestos Potential

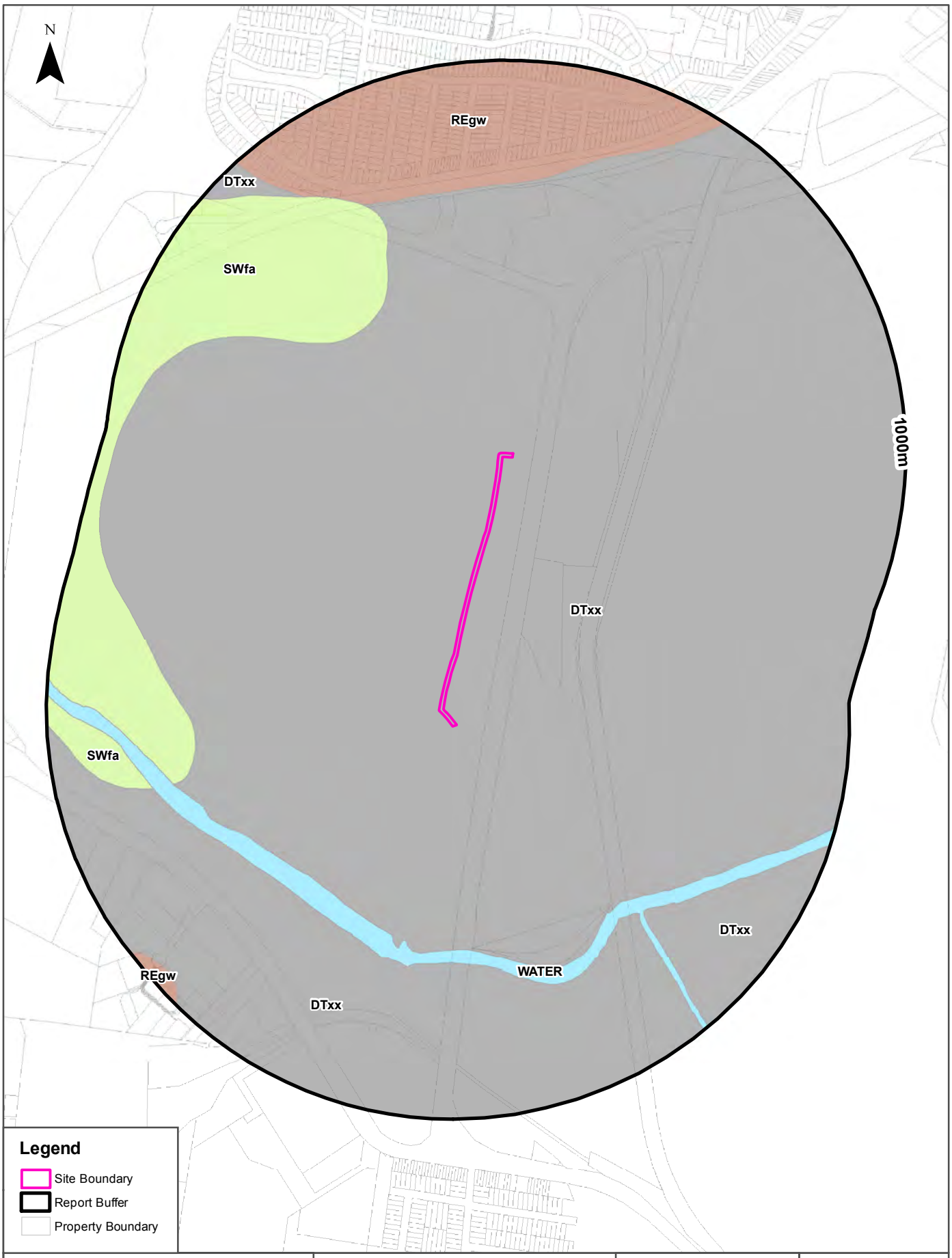
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Soil Landscapes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000

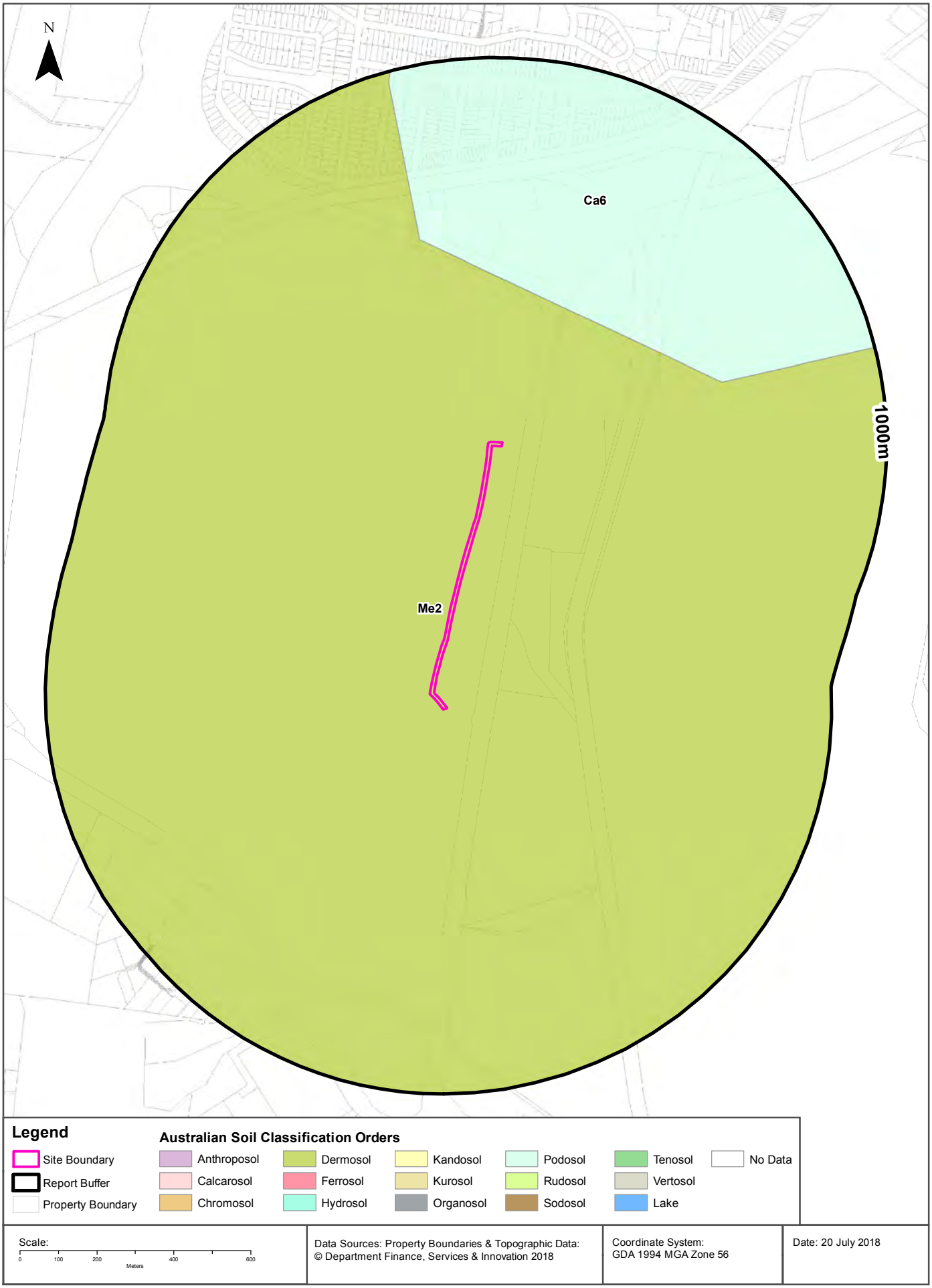
What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
REgw	GWYNNEVILLE		RESIDUAL	Wollongong & Port Hacking	1:100,000
SWfa	FAIRY MEADOW		SWAMP	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Me2	Dermosol	Steep hilly to mountainous with incised stream valleys: steep but more or less rounded hill slopes of brown friable earths (Gn3.21 and Gn3.22) and possibly some (Gn4) soils, in association with: at the higher altitudes, steep hill slopes of sandy soils (Uc4.2), loamy soils having an A2 horizon (Um4.2) with yellow-brown earths (Gn2.44), and possibly (Uc6.11) and (Um5.41) soils; and at the lower altitudes, moderate to steep slopes of hard acidic yellow mottled soils (Dy3 21 and Dy3.41), hard acidic red soils (Dr2.21), and yellow leached friable earths (Gn3.54); and narrow incised stream valleys of various soils including (Um6.11) and (Dy) soils. This unit is a broad one. In some areas the (Um4.2) and (Gn2.44) soils and in others the (Dy) and (Dr) soils rather than the (Gn3 soils could be dominant.	0m
Ca6	Podosol	Dunes of leached sands (Uc2.2) with some areas of (Uc2.3) soils in low-lying situations, also (Dy5.41) soils in some localities, and flanked by some dunes of calcareous sands (Uc1.11) along the coast.	385m

Atlas of Australian Soils Data Source: CSIRO
Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Standard Local Environmental Plan Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	LEP
N/A		

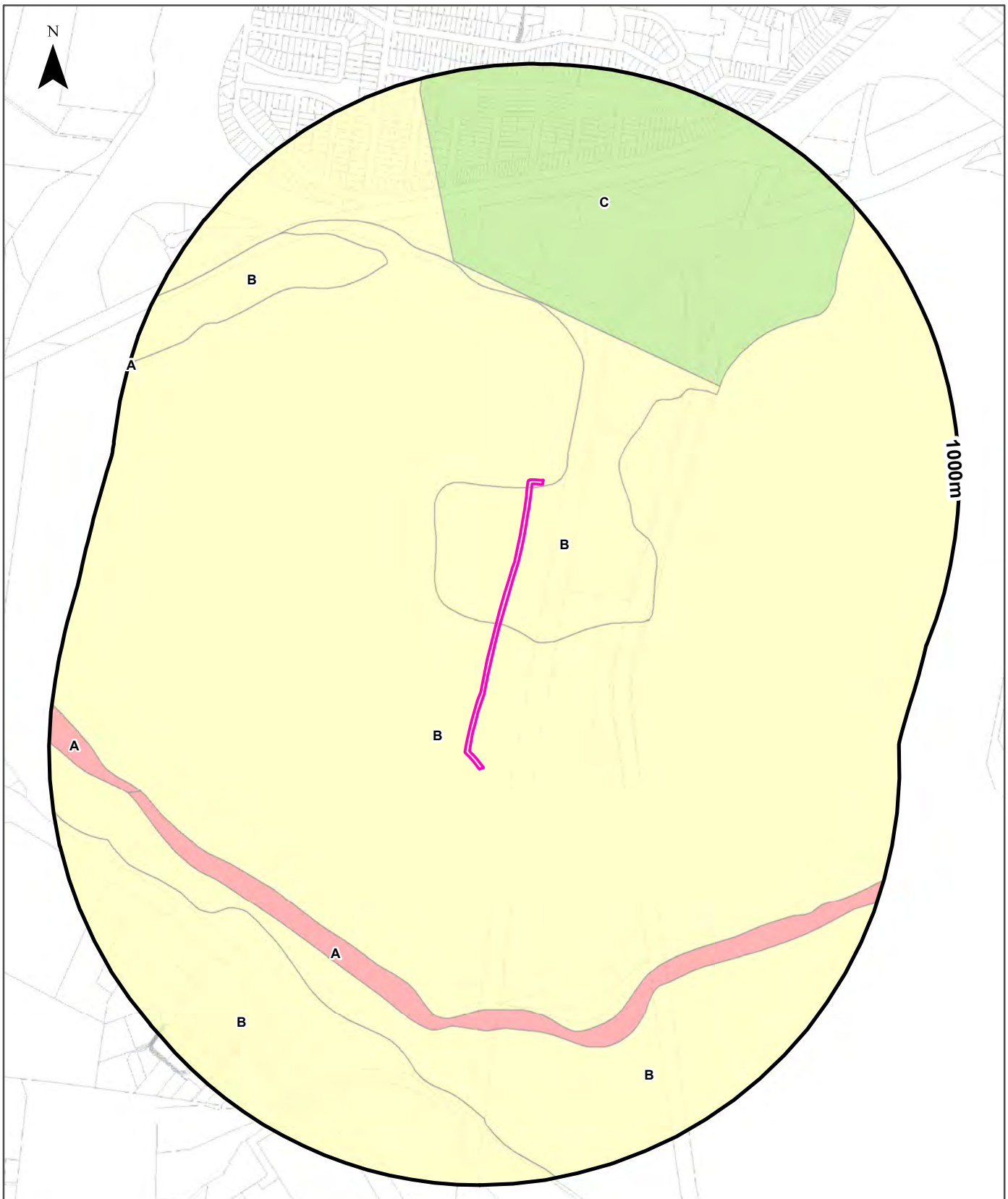
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	LEP	Distance	Direction
N/A				

Acid Sulfate Data Source Accessed 07/10/2016: NSW Crown Copyright - Planning and Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	385m
A	High Probability of occurrence. >70% chance of occurrence.	524m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Dryland Salinity

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining Subsidence Districts

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Mining Subsidence Districts

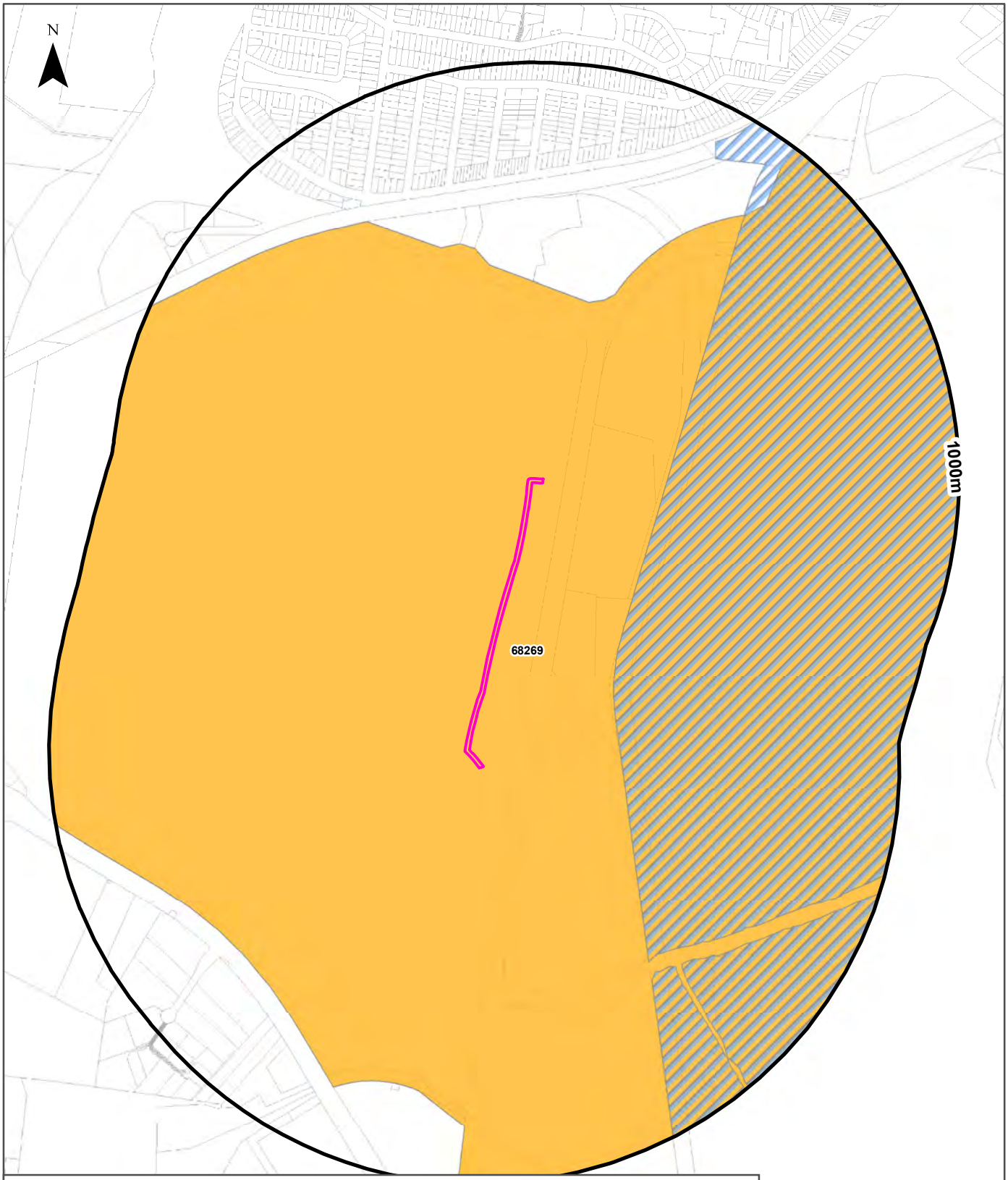
Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Legend

- Site Boundary
- Report Buffer
- Property Boundary
- SEPP 14 - Coastal Wetlands
- SEPP 26 - Littoral Rainforests
- SEPP 71 - Coastal Protection
- SEPP Major Developments 2005
- Strategic Land Use - Future Residential Growth Areas
- Strategic Land Use - Additional Rural Village Land
- Strategic Land Use -Biophysical Strategic Agricultural Land
- Strategic Land Use -Critical Industry Cluster (Equine)
- Strategic Land Use -Critical Industry Cluster (Viticulture)

Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

Scale: 0 100 200 400 600 Meters

Environmental Zoning

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

State Environmental Planning Policy Protected Areas

Are there any State Environmental Planning Policy Protected Areas onsite or within the dataset buffer?

Dataset	Onsite	Within Site Buffer	Distance
SEPP14 - Coastal Wetlands	No	No	N/A
SEPP26 - Littoral Rainforests	No	No	N/A
SEPP71 - Coastal Protection Zone	No	Yes	285m

SEPP Protected Areas Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Major Developments (2005)

State Environmental Planning Policy Major Developments within the dataset buffer:

Map Id	Feature	Effective Date	Distance	Direction
68269	Three Ports - Port Kembla	24/07/2009	0m	Onsite

SEPP Major Development Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Strategic Land Use Areas

State Environmental Planning Policy Strategic Land Use Areas onsite or within the dataset buffer:

Strategic Land Use	SEPPNo	Effective Date	Amendment	Amendment Year	Distance	Direction
No records within buffer						

SEPP Strategic Land Use Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

LEP Planning Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018
Planning: NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 July 2018

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Land Zoning

What Local Environmental Plan Land Zones exist within the dataset buffer?

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		439m	North
IN1	General Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		474m	North
SP2	Infrastructure	Railway	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		641m	North
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		708m	North
SP2	Infrastructure	Road	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		722m	North
IN3	Heavy Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		767m	South West
RE2	Private Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		783m	South
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		850m	North West
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		981m	North

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Minimum Subdivision Lot Size

What are the onsite Local Environmental Plan Minimum Subdivision Lot Sizes?

Symbol	Minimum Lot Size	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Maximum Height of Building

What are the onsite Local Environmental Plan Maximum Height of Buildings?

Symbol	Maximum Height of Building	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Floor Space Ratio

What are the onsite Local Environmental Plan Floor Space Ratios?

Symbol	Floor Space Ratio	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Land Application

What are the onsite Local Environmental Plan Land Applications?

Application Type	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data						

Land Reservation Acquisition

What are the onsite Local Environmental Plan Land Reservation Acquisitions?

Reservation	LEP	Published Date	Commenced Date	Currency Date	Amendment	Comments	Percentage of Site Area
No Data							

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Heritage

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

State Heritage Items

What are the State Heritage Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Heritage Items

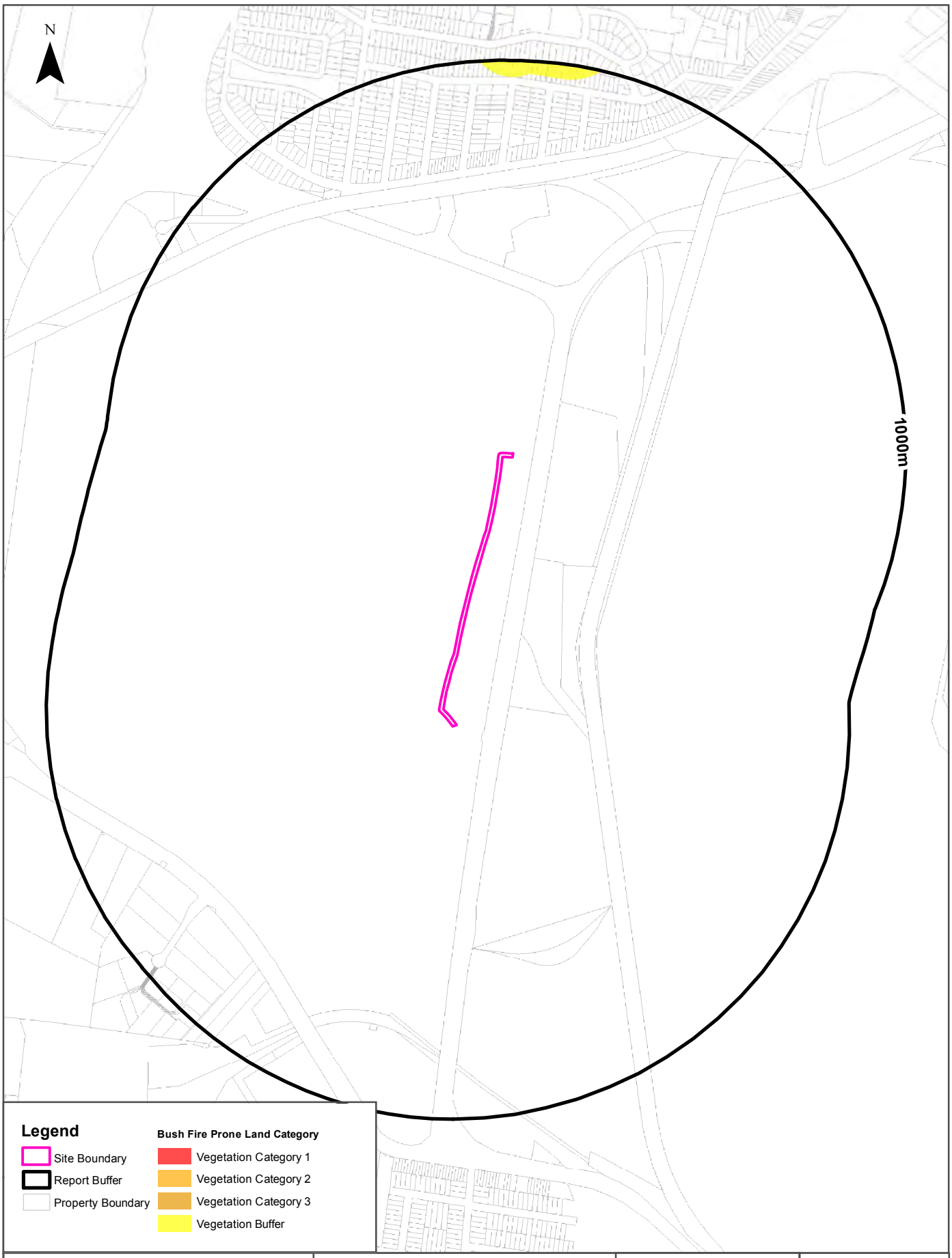
What are the Local Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	LEP or Act	Published Date	Commenced Date	Currency Date	Distance	Direction
N/A	No records in buffer								

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Natural Hazards - Bush Fire Prone Land

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Data Sources: Bush Fire Prone Land: © NSW Rural Fire Service 2018. Property Boundaries: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 July 2018

Natural Hazards

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Buffer	957m	North

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & RAMSAR Wetlands

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Native Vegetation of the Illawarra Escarpment & Coastal Plain

What Native Vegetation of the Illawarra Escarpment & Coastal Plain exists within the dataset buffer?

Veg Code	Vegetation Community	Disturbance Class	Disturbance Type	Understorey	Broad Vegetation Type	Endangered Ecological Community	Distance	Direction
MU56e	Modified Lands	Weeds and Exotics			Cleared		0m	Onsite
MU57f	Fig Trees	Scattered Trees			Scattered Trees		0m	Onsite
MU56c	Weeds and Exotics	Weeds and Exotics			Weeds and Exotics		7m	South
MU24	Lowland Woollybutt-Melaleuca Forest	Scattered Trees			Scattered Trees	Illawarra Coastal Grassy Woodlands	84m	North East
MU24	Lowland Woollybutt-Melaleuca Forest	Moderate Disturbance	Weeds	Melaleuca Dominant	Native Vegetation	Illawarra Coastal Grassy Woodlands	221m	North East
MU57a	Artificial Wetlands	Unassessed			Wetlands		239m	North East
MU16	Escarpment Blackbutt Forest	Moderate Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		402m	North East
MU16	Escarpment Blackbutt Forest	Scattered Trees			Scattered Trees		545m	North East
MU57e	Estuarine Lagoons and Channels	Unassessed			Wetlands		554m	South
MU55a	Seagrass Meadows and Estuarine Flats	Unassessed			Seagrass		578m	South West
MU53	Estuarine Alluvial Wetland	Unassessed			Native Vegetation	Sydney Coastal Estuary Swamp Complex	628m	South West
MU25	Spotted Gum Open Forest	High Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		662m	North
MU25	Spotted Gum Open Forest	Scattered Trees			Scattered Trees		951m	North

Native Vegetation of the Illawarra Escarpment & Coastal Plain : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

RAMSAR Wetlands

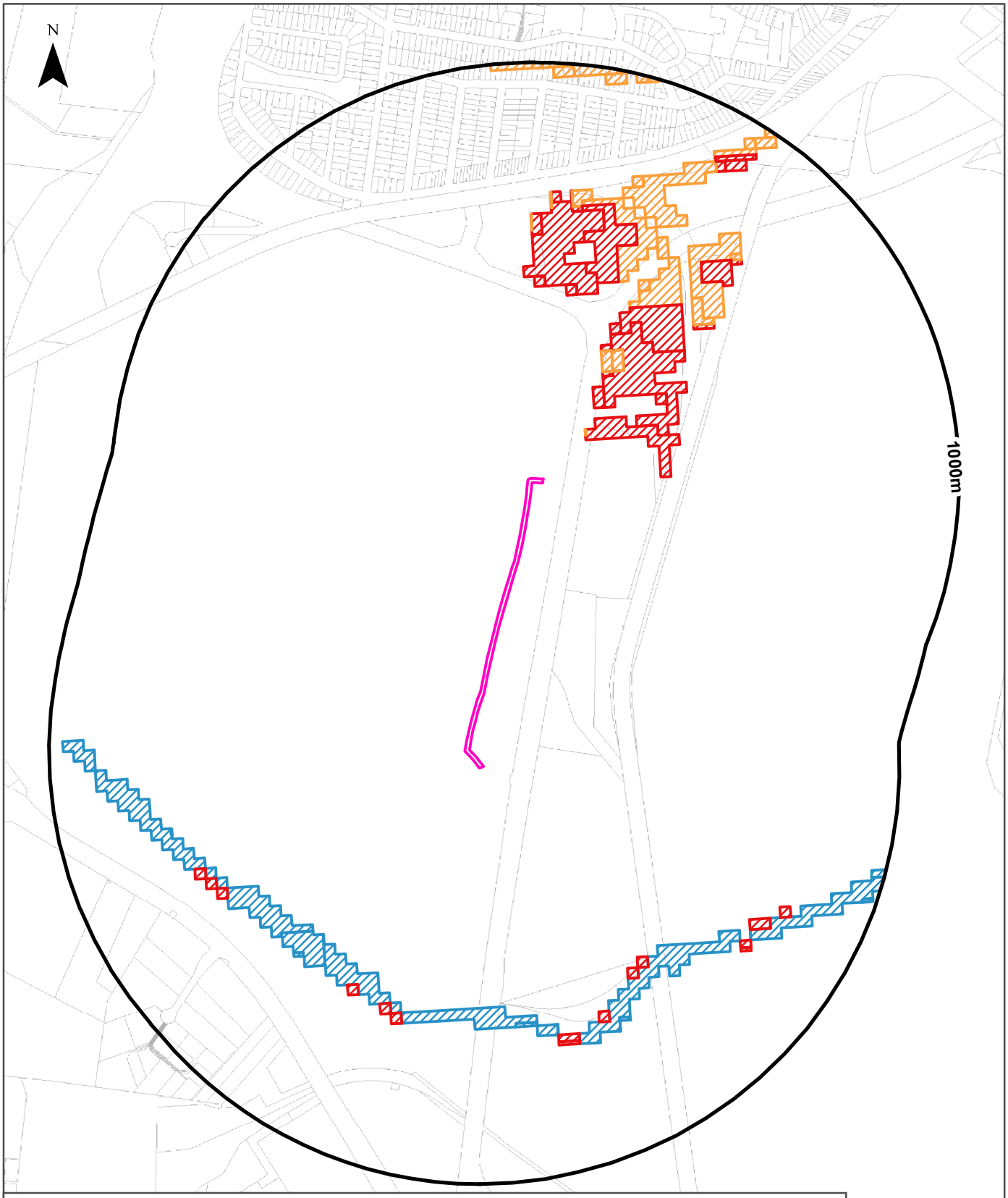
What RAMSAR Wetland areas exist within the dataset buffer?

Map Id	RAMSAR Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

RAMSAR Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Legend

- Site Boundary
- Report Buffer
- Property Boundaries
- High potential GDE - from national assessment
- High potential GDE - from regional studies
- Moderate potential GDE - from national assessment
- Moderate potential GDE - from regional studies
- Low potential GDE - from national assessment
- Low potential GDE - from regional studies
- Known GDE - from regional studies
- Unclassified potential GDE - from national assessment
- Unclassified potential GDE - from regional studies

Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 July 2018

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

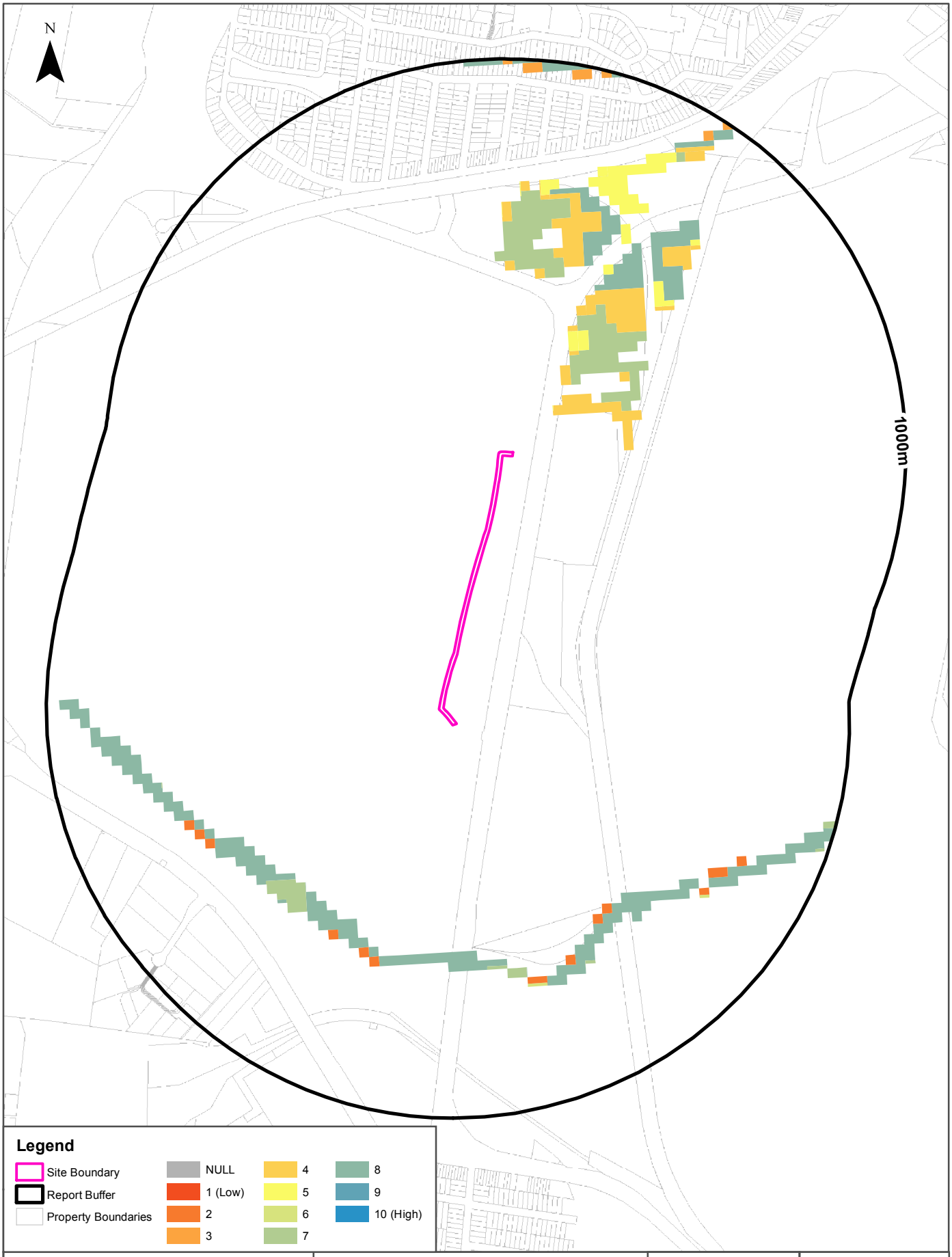
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	High potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		138m
Terrestrial	Moderate potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		145m
Terrestrial	Low potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		547m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation		138m
Terrestrial	5	Deeply dissected sandstone plateaus.	Vegetation		145m
Terrestrial	7	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		225m
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation		460m
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation		587m
Terrestrial	6	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		684m
Terrestrial	3	Deeply dissected sandstone plateaus.	Vegetation		928m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 2)

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria littlejohni	Littlejohn's Tree Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calonectris leucomelas	Streaked Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Charadrius mongolus	Lesser Sand-plover	Vulnerable	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Coracina lineata	Barred Cuckoo-shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Diomedea gibsoni	Gibson's Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Stercorarius pomarinus	Pomarine Jaeger	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Sula leucogaster	Brown Booby	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Thalassarche impavida	Campbell Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Miniopterus australis	Little Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Mormopterus norfolkensis	Eastern Freetail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Physeter macrocephalus	Sperm Whale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Arthropteris palisotii	Lesser Creeping Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Chorizema parviflorum	Eastern Flame Pea	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Epacris purpurascens subsp. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus largeana	Craven Grey Box	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Gossia acmenoides	Scrub Ironwood	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Parsonsia dorrigoensis	Milky Silkpod	Vulnerable	Not Sensitive	Endangered	
Plantae	Flora	Persoonia glaucescens	Mittagong Geebung	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Solanum celatum		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Zieria granulata	Illawarra Zieria	Endangered	Not Sensitive	Endangered	

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage
Data obtained 19/07/2018

USE OF REPORT – APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report. The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available (**Third Party Content Suppliers**);
      (j) content which is derived from content described in paragraph (i);
   (b) Lotsearch does not take any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**);
   (d) Lotsearch has not undertaken any physical inspection of the property;
   (e) Lotsearch does not warrant that all land uses or features whether past or current are identified in the Report;
   (f) the Report does not include any information relating to the actual state or condition of the Property;
   (g) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of a Property for any particular purpose;
   (h) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (i) the End User should undertake its own inspection s of the Property to satisfy itself that there are no defects or failures.
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
5. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
6. To the extent permitted by law and subject to paragraph 7, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these terms other than as expressly set out in these terms are excluded.
7. Subject to paragraph 8, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
8. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
9. Subject to paragraph 7, neither Lotsearch nor the End User is liable to the other for any indirect, incidental,consequential, special or exemplary damages arising out of or in relation to these terms.
10. These terms are subject to New South Wales law.

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 20 Jul 2018 10:38:55

Reference: LS003866

Address: Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Table of Contents

Location Confidences 2
Dataset Listings 3
Site Location Aerial 5
Contaminated Land & Waste Management Facilities 6
EPA PFAS Investigation Program 10
EPA Other Sites with Contamination Issues 11
EPA Current Licensed Activities 12
EPA Delicensed & Former Licensed Activities 15
UPSS Sensitive Zones 18
Historical Business Activities 19
Historical Aerial Imagery & Maps 29
Topographic Features 42
Elevation Contours 46
Hydrogeology & Groundwater 47
Geology 59
Naturally Occurring Asbestos Potential 61
Soils 62
Acid Sulfate Soils 66
Dryland Salinity 69
Mining Subsidence Districts 70
State Environmental Planning 71
Local Environmental Planning 73
Heritage 77
Natural Hazards 79
Ecological Constraints 81
Terms & Conditions 91

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

Dataset Listing

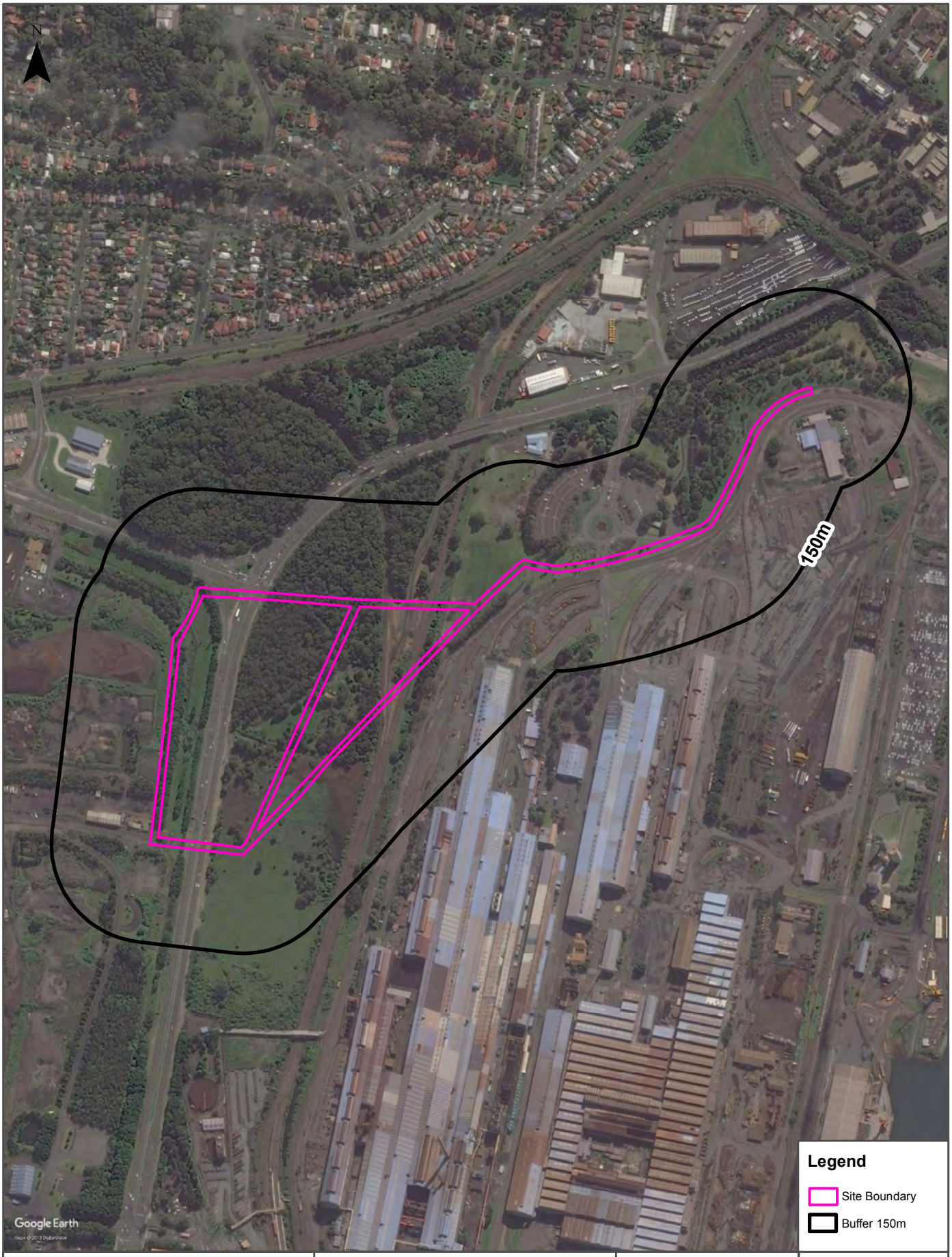
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	Dept. Finance, Services & Innovation	20/07/2018	20/07/2018	Daily	-	-	-	-
Topographic Data	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	06/07/2018	02/07/2018	Monthly	1000	3	3	5
Contaminated Land Records of Notice	Environment Protection Authority	06/07/2018	06/07/2018	Monthly	1000	2	2	3
Former Gasworks	Environment Protection Authority	04/07/2018	11/10/2017	Monthly	1000	0	0	0
National Waste Management Site Database	Geoscience Australia	04/07/2018	07/03/2017	Quarterly	1000	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	04/07/2018	04/07/2018	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	11/01/2018	11/01/2018	Quarterly	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	20	20	29
Delicensed POEO Activities still Regulated by the EPA	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	1	1	3
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	0	3	11
UPSS Environmentally Sensitive Zones	Environment Protection Authority	14/04/2015	12/01/2010	As required	1000	1	1	1
UBD Business Directory 1982 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1982 (Road & Area Matches)	Hardie Grant			Not required	150	-	9	9
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	8	8
UBD Business Directory 1961 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1961 (Road & Area Matches)	Hardie Grant			Not required	150	-	16	16
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	1	1
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	0	2
Points of Interest	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	26
Tanks (Areas)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	1
Tanks (Points)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	2
Major Easements	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	1000	0	0	1
State Forest	Dept. Finance, Services & Innovation	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	18/01/2018	30/09/2017	Annually	1000	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Botany Groundwater Management Zones	NSW Department of Primary Industries	15/03/2018	01/10/2005	As required	1000	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	21/03/2016	01/12/2015	Annually	2000	0	1	98
Geological Units 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	2	-	3
Geological Structures 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Soil Landscapes	NSW Office of Environment & Heritage	12/08/2014		None planned	1000	1	-	4
Atlas of Australian Soils	CSIRO	19/05/2017	17/02/2011	As required	1000	2	2	2
Standard Local Environmental Plan Acid Sulfate Soils	NSW Planning and Environment	07/10/2016	07/10/2016	As required	500	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	2	2	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Office of Environment & Heritage	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	Dept. Finance, Services & Innovation	13/07/2017	01/07/2017	As required	1000	0	0	0
SEPP 14 - Coastal Wetlands	NSW Planning and Environment	17/12/2015	24/10/2008	Annually	1000	0	0	0
SEPP 26 - Littoral Rainforest	NSW Planning and Environment	17/12/2015	05/02/1988	Annually	1000	0	0	0
SEPP 71 - Coastal Protection	NSW Planning and Environment	17/12/2015	01/08/2003	Annually	1000	1	1	1
SEPP Major Developments 2005	NSW Planning and Environment	09/03/2013	25/05/2005	Under Review	1000	1	1	1
SEPP Strategic Land Use Areas	NSW Planning and Environment	01/08/2017	28/01/2014	Annually	1000	0	0	0
LEP - Land Zoning	NSW Planning and Environment	11/04/2018	16/03/2018	Quarterly	1000	0	1	31
LEP - Minimum Subdivision Lot Size	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Height of Building	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Floor Space Ratio	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Application	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Reservation Acquisition	NSW Planning and Environment	04/04/2018	09/03/2018	Quarterly	0	0	-	-
State Heritage Items	NSW Office of Environment & Heritage	04/04/2018	30/09/2016	Quarterly	1000	0	0	0
Local Heritage Items	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	1000	0	0	5
Bush Fire Prone Land	NSW Rural Fire Service	10/05/2018	23/01/2018	Quarterly	1000	0	0	2
Native Vegetation of the Illawarra Escarpment & Coastal Plain	NSW Office of Environment & Heritage	20/05/2015	04/08/2011	Unknown	1000	6	7	15
RAMSAR Wetlands	Commonwealth of Australia Department of the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	2	3	4
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	2	4	7
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	19/07/2018	19/07/2018	Daily	10000	-	-	-

Aerial Imagery 2017

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Scale:	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1086	No 2 Steelworks	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1079	BHP Area 21	Springhill Road	Port Kembla	Metal Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	0m	Onsite
7186	Port Kembla Steelworks Recycling Area	Springhill Road	Port Kembla	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1474	Greenhouse Park	Springhill Road	Wollongong	Landfill	Regulation being finalised	Current EPA List	Premise Match	441m	North East
1091	Port Kembla Springhill Works	Springhill Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	444m	South

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.

EPA site management class	Explanation
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
181	No 2 Steelworks	Five Islands Road	Port Kembla	4 former	3337	Premise Match	0m	Onsite
180	BHP Area 21	Springhill Road	Port Kembla	1 former	3121	Premise Match	0m	Onsite
387	Greenhouse Park	Springhill Road	Wollongong	1 current	3415	Premise Match	441m	North East

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

EPA PFAS Investigation Program

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

EPA Other Sites with Contamination Issues

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

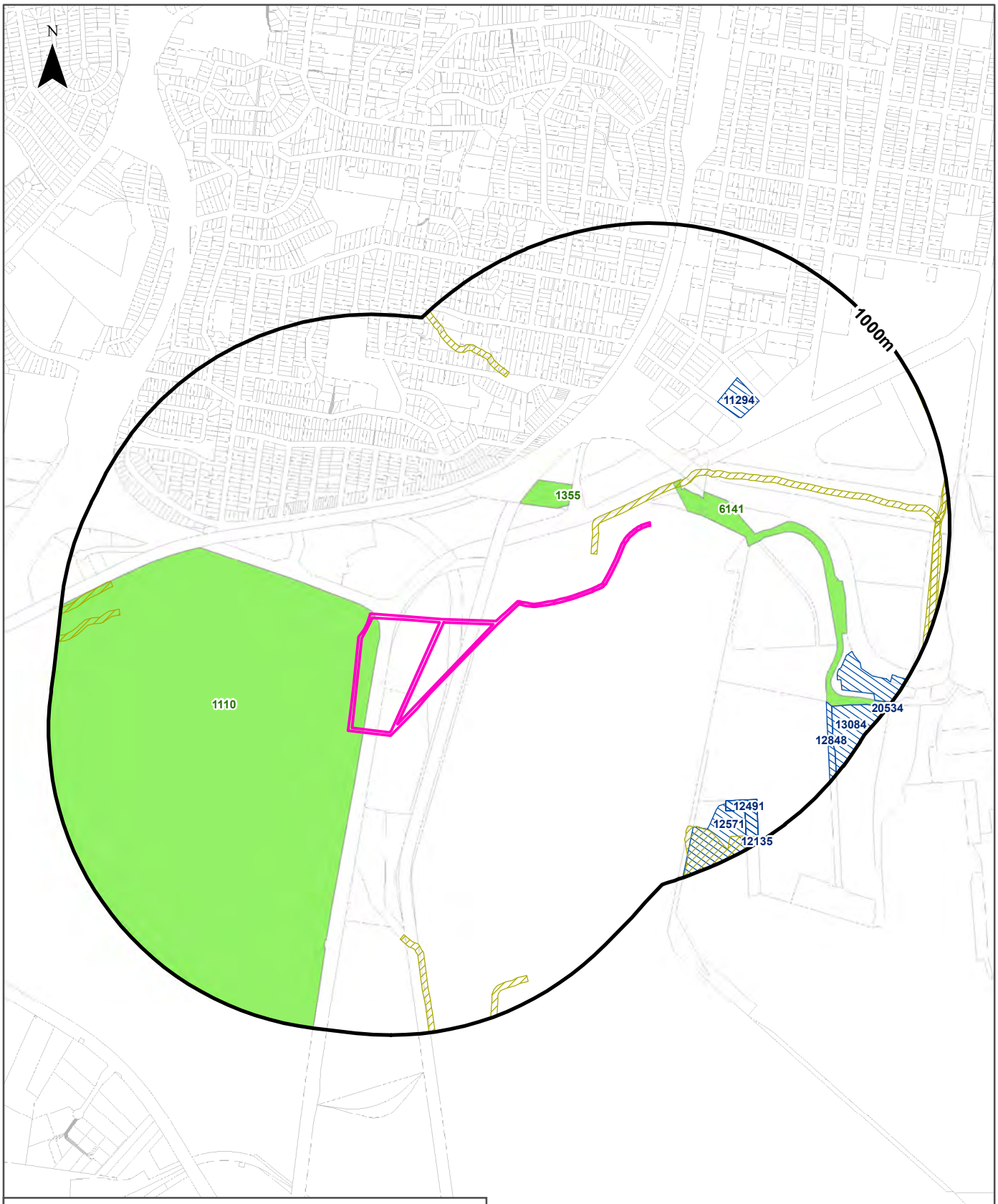
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Agricultural fertiliser (inorganic) production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime handling	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coal works	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coke production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Crushing, grinding or separating	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Dangerous goods production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	General chemicals storage	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Generation of electrical power from gas	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Iron or steel production (iron ore)	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Mineral processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Railway systems activities	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of general waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of waste tyres	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Scrap metal processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - other types of waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - waste tyres	Premise Match	0m	Onsite
3142	AUSTRALIAN RAIL TRACK CORPORATION LIMITED		GPO BOX 14, SYDNEY, NSW 2001		Railway systems activities	Network of Features	0m	Onsite

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
13421	JOHN HOLLAND RAIL PTY LTD		PO Box 215 , PARRAMATTA, NSW 2124		Railway systems activities	Road Match	0m	Onsite
20532	Quattro P RE Services Pty Ltd		Tom Thumb Road, PORT KEMBLA, NSW 2505		Other activities	Premise Match	173m	East
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Chemical storage waste generation	Premise Match	444m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal coating	Premise Match	444m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Metal processing	Premise Match	444m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Non-thermal treatment of hazardous and other waste	Premise Match	444m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Recovery of waste oil	Premise Match	444m	South
571	BLUESCOPE STEEL LIMITED	BLUESCOPE AUSTRALIA AND NEW ZEALAND - SPRINGHILL WORKS	SPRINGHILL ROAD	PORT KEMBLA	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	444m	South
3578	AUSTRALIAN AMALGAMATED TERMINALS PTY LIMITED	AAT FACILITY	FARRER ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	495m	South East
3693	GRAINCORP OPERATIONS LIMITED	PORT KEMBLA GRAIN TERMINAL	MORTON WAY	PORT KEMBLA	Shipping in bulk	Premise Match	785m	East

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Legend

- Site Boundary
- Report Buffer
- Property Boundary
- Delicensed Activities still Regulated by EPA
- Former Licensed/Regulated Activities (revoked or surrendered)
- Surrendered Licences related to Other Activities on Waterways incl. Application of Herbicides

Scale:	Property Boundary Data Source:	Coordinate System:	Date: 20 July 2018
0 100 200 400 600 800 Meters	© Department Finance, Services & Innovation 2018	GDA 1994 MGA Zone 56	

EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
1110	BITUPAVE LTD	BORAL ASPHALT	SPRINGHILL ROAD	PORT KEMBLA	Bitumen mixing	Premise Match	0m	Onsite
6141	PACIFIC NATIONAL (NSW) PTY LTD	ILLAWARRA BULK TERMINAL	TOM THUMB ROAD	PORT KEMBLA	Hazardous, Industrial or Group A Waste Generation or Storage	Road Match	129m	East
1355	CLEARY BROS (BOMBO) PTY LTD	CLEARY BROS CONCRETE	8 JOHN CLEARY PLACE	CONISTON	Concrete works	Premise Match	219m	North East

Delicensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

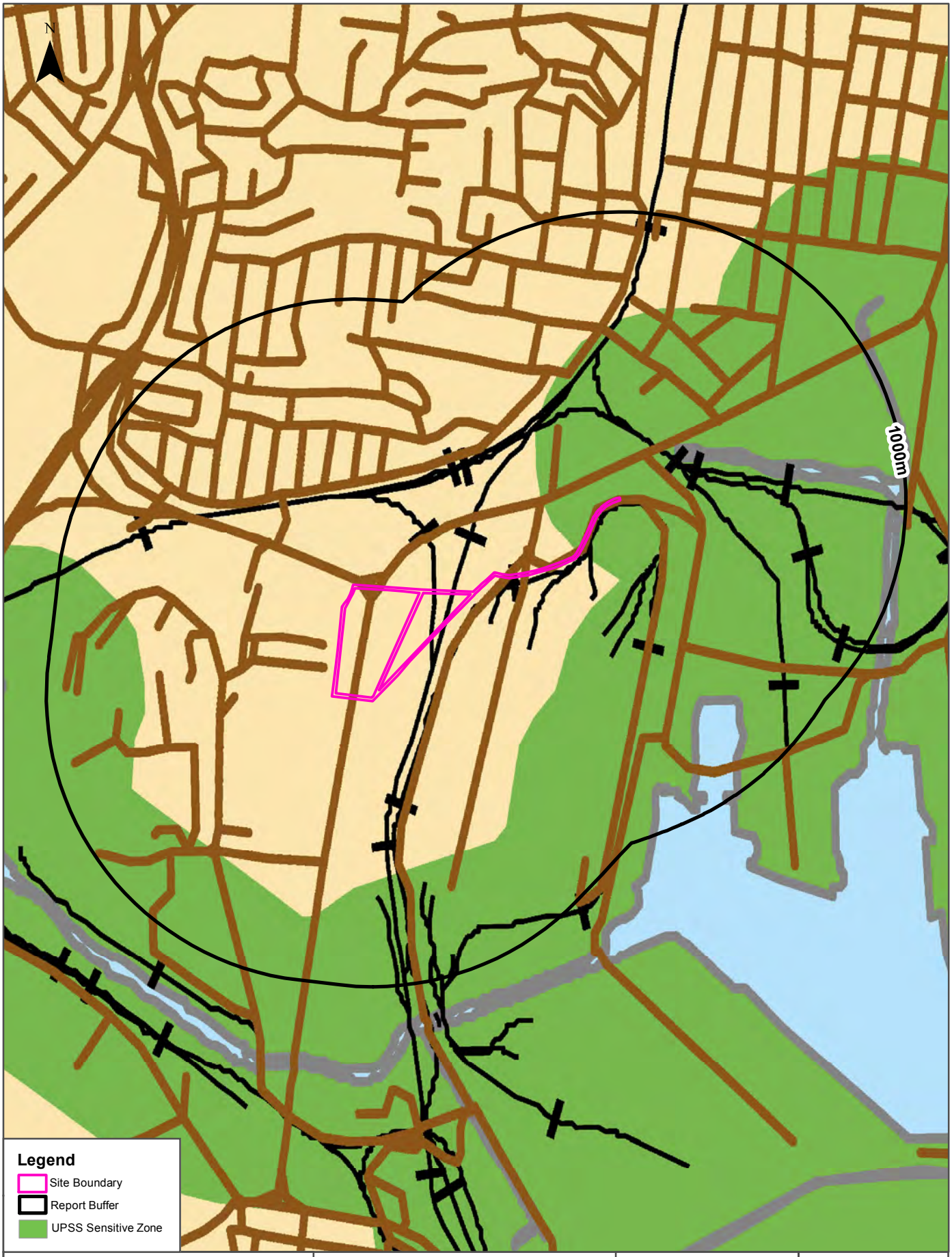
Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	62m	-
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	62m	-
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	62m	-
11294	ENDEAVOUR ENERGY	BRIDGE STREET, CONISTON, NSW 2500	Surrendered	03/01/2001	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	459m	North East
13084	DONNELLEY CIVIL PTY LIMITED	Morton Way and Tom Thumb Road, PORT KEMBLA, NSW 2505	Surrendered	05/05/2009	Other activities	Premise Match	785m	East
12135	AUSTRAL CONSTRUCTION PTY. LTD.	Farrer Road, PORT KEMBLA, NSW 2505	Surrendered	26/05/2004	Coal Washery Reject or Slag Landfilling	Premise Match	824m	South East
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Coal Washery Reject or Slag Landfilling	Premise Match	824m	South East
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Land-based extractive activity	Premise Match	824m	South East
12571	BOSKALIS AUSTRALIA PTY LIMITED	Five Islands Road, PORT KEMBLA, NSW 0	Surrendered	30/01/2007	Water-based extractive activity	General Area/ Suburb Match	828m	South East
12848	WATERWAY CONSTRUCTIONS PTY LTD	FARRER ROAD, PORT KEMBLA, NSW 2505	Surrendered	01/02/2008	Miscellaneous licensed discharge to waters (at any time)	Road Match	832m	East

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
20534	WATERWAY CONSTRUCTIONS PTY LTD	, Inner Harbour, PORT KEMBLA, NSW 2505,	Surrendered	20/11/2014	Other activities	Premise Match	997m	East

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

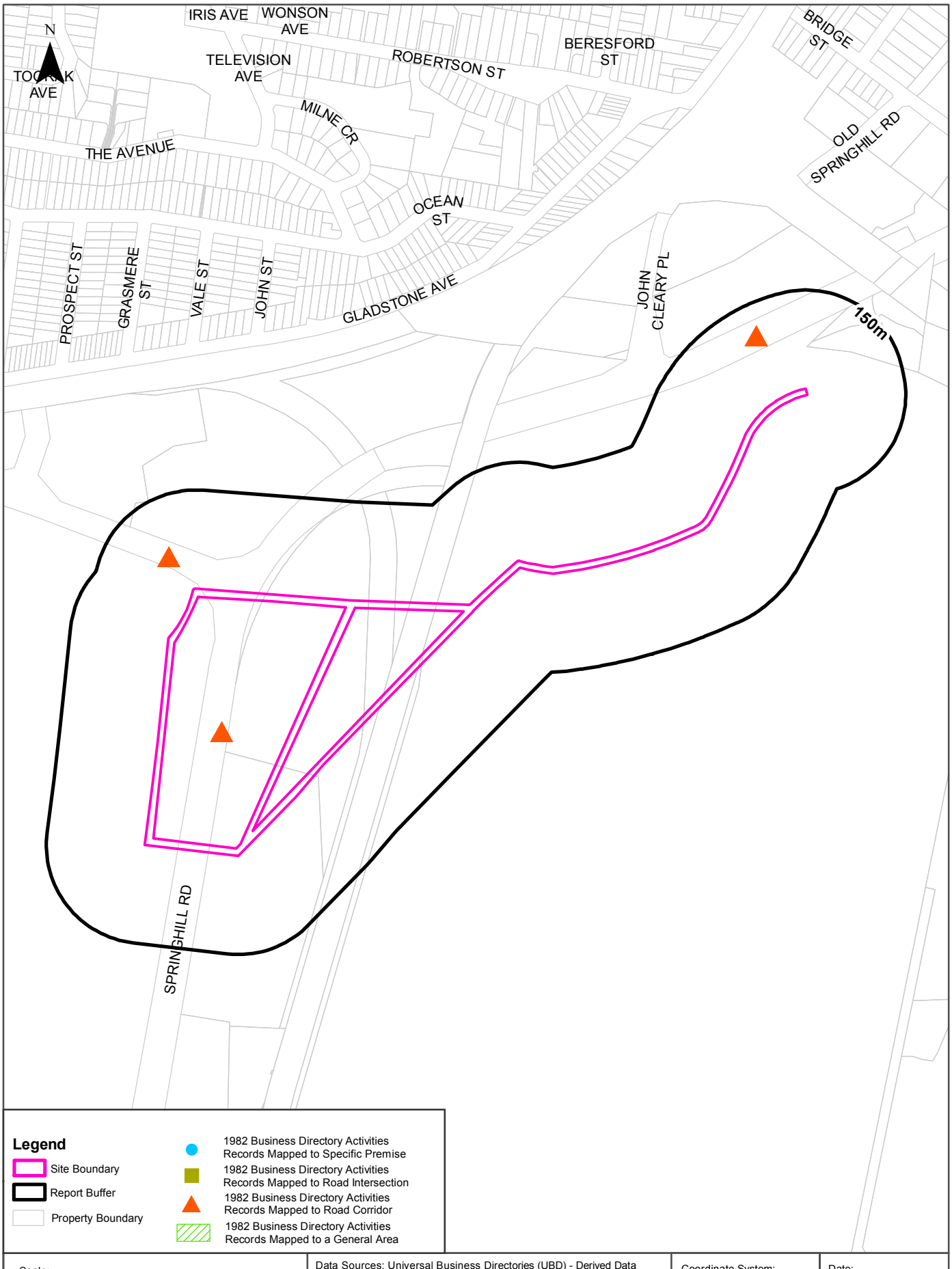
UPSS Sensitive Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



1982 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Business Directory Records
Road or Area Matches

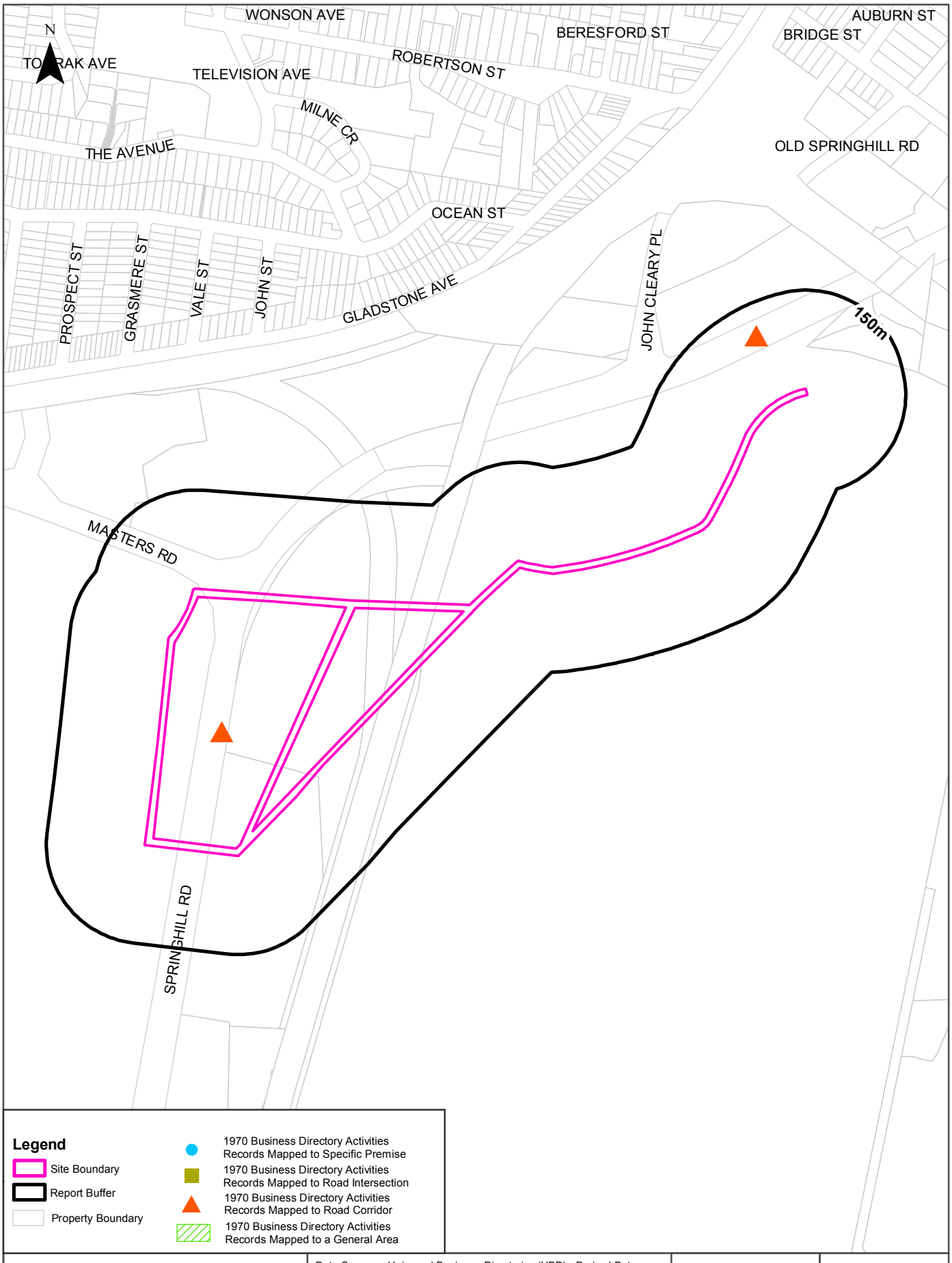
Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS - PRE-FABRICATED MFRS. &/OR DISTS	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	139433	Road Match	0m
STEEL FABRICATORS.	Lysaght, John Limited, Springhill Rd., Port Kembla., Wollongong	145118	Road Match	0m
CARRIERS &/OR CARTAGE CONTRACTORS	South Coast Equipment Co. Pty. Ltd., Masters Rd., Mt. St. Thomas., Wollongong	139757	Road Match	0m
CONTRACTORS GENERAL	South Coast Equipment Co. Pty. Ltd., Masters Rd., Mt. St. Thomas., Wollongong	140216	Road Match	0m
EARTH MOVING &/OR ROADMAKING CONTRACTORS	South Coast Equipment Co. Pty. Ltd., Masters Rd., Mt. St. Thomas., Wollongong	140519	Road Match	0m
HAULAGE CONTRACTORS	South Coast Equipment Co. Pty. Ltd., Masters Rd., Mt. St. Thomas., Wollongong	141996	Road Match	0m
CARRIERS &/OR CARTAGE CONTRACTORS	Tex Liquid Transport Pty. Ltd., Springhill Rd., Coniston., Wollongong	139761	Road Match	0m
STEEL ROLLING MILLS	Australian Iron & Steel Pty. Ltd., Springhill Rd., Port Kembla., Wollongong	145157	Road Match	79m
CONCRETE - READY MIXED - SUPPLIERS	Cleary Bros. Concrete, Springhill Rd.. Coniston., Wollongong	140192	Road Match	79m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Business Directory Records
Road or Area Matches

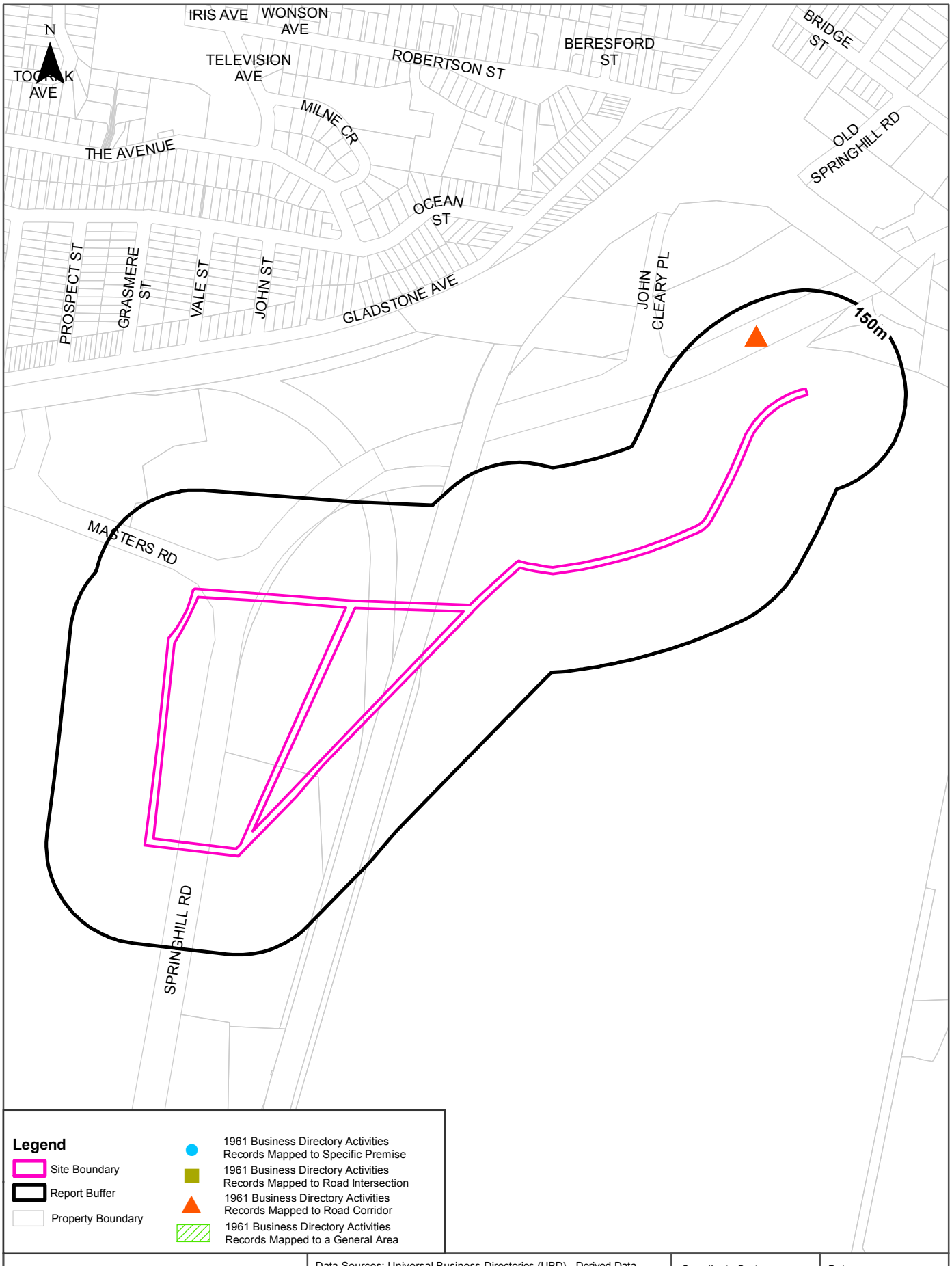
Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
BUILDINGS-PREFABRICATED-MANUFACTURERS & DISTRIBUTORS	Lysaght, J. (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	560810	Road Match	0m
LAMINATED MATERIALS & PRODUCTS MFRS.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	564307	Road Match	0m
ROOFING MATERIAL MFRS.&/OR DIST.	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	566944	Road Match	0m
SILO MANUFACTURERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567270	Road Match	0m
STEEL FLOORING-INDUSTRIAL-SUPPLIERS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567511	Road Match	0m
TANK & TANK STAND MFRS. &/OR DISTRIBUTORS	Lysaght, John (Aust.) Ltd., Springhill Rd., Port Kembla Wollongong	567626	Road Match	0m
ELECTRICAL CONTRACTORS-LICENSED	Transfield Pty. Ltd., Springhill Rd., Port Kembla Wollongong	562249	Road Match	79m
ENGINEERS-ELECTRICAL	Transfield Pty. Ltd., Springhill Rd., Port Kembla Wollongong	562484	Road Match	79m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

1961 Business Directory Records
Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Business Directory Records
Road or Area Matches

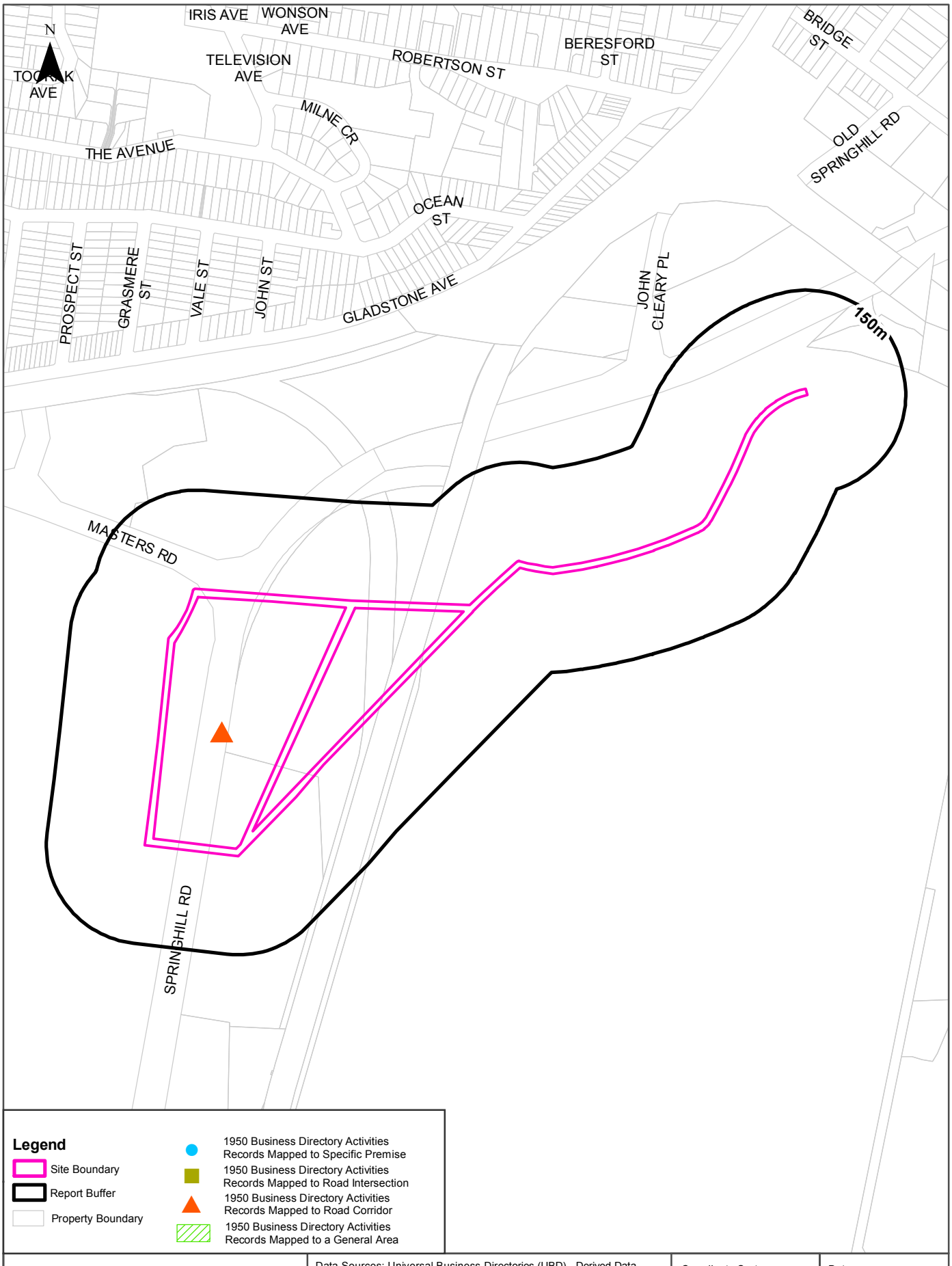
Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
GALVANIZED IRON MANUFACTURERS	Stewarts & Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston, Wollongong	237099	Road Match	79m
STEEL MERCHANTS-GENERAL	Stewarts & Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston. , Wollongong	241112	Road Match	79m
COPPER TUBING DISTRIBUTORS	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	235429	Road Match	79m
PIPE & PIPE FITTINGS MFRS./DISTS.	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	240132	Road Match	79m
STEEL TUBING MFRS. &/OR DISTRIBUTORS	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	241129	Road Match	79m
TUBE BENDERS	Stewarts & Lloyds Distributors Pty. Ltd., Springhill Rd., Coniston, Wollongong	241493	Road Match	79m
COPPER TUBING DISTRIBUTORS	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	235421	Road Match	79m
PIPE & PIPE FITTINGS MFRS./DISTS.	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	240127	Road Match	79m
PLASTIC PIPE MANUFACTURERS	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	240174	Road Match	79m
STEEL TUBING MFRS. &/OR DISTRIBUTORS	Stewarts and Lloyds (distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	241127	Road Match	79m
WELDING EQUIPMENT & SUPPLIES MFRS. & DISTRIBUTORS	Stewarts and Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston, Wollongong	241730	Road Match	79m
PLUMBERS, GASFITTERS & DRAINLAYERS	Stewarts and Lloyds (Distributors) Pty. Ltd., Spring Hill Rd., Coniston, Wollongong	240220	Road Match	79m
ENGINEERS-FABRICATING	Stewarts and Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	236275	Road Match	79m
HARDWARE DEALERS & IRONMONGERS	Stewarts and Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	237634	Road Match	79m
ELECTRICAL CONTRACTORS-LICENSED	Transfield Pty. Ltd., Springhill Rd., Port Kembla, Wollongong	236004	Road Match	79m
ENGINEERS-ELECTRICAL	Transfield Pty. Ltd., Springhill Rd., Port Kembla, Wollongong	236233	Road Match	79m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Business Directory Records
Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
PAINTER PAPERHANGER DECORATOR	Tomlin,L., Spring Hill Rd., Coniston Wollongong	190382	Road Match	0m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

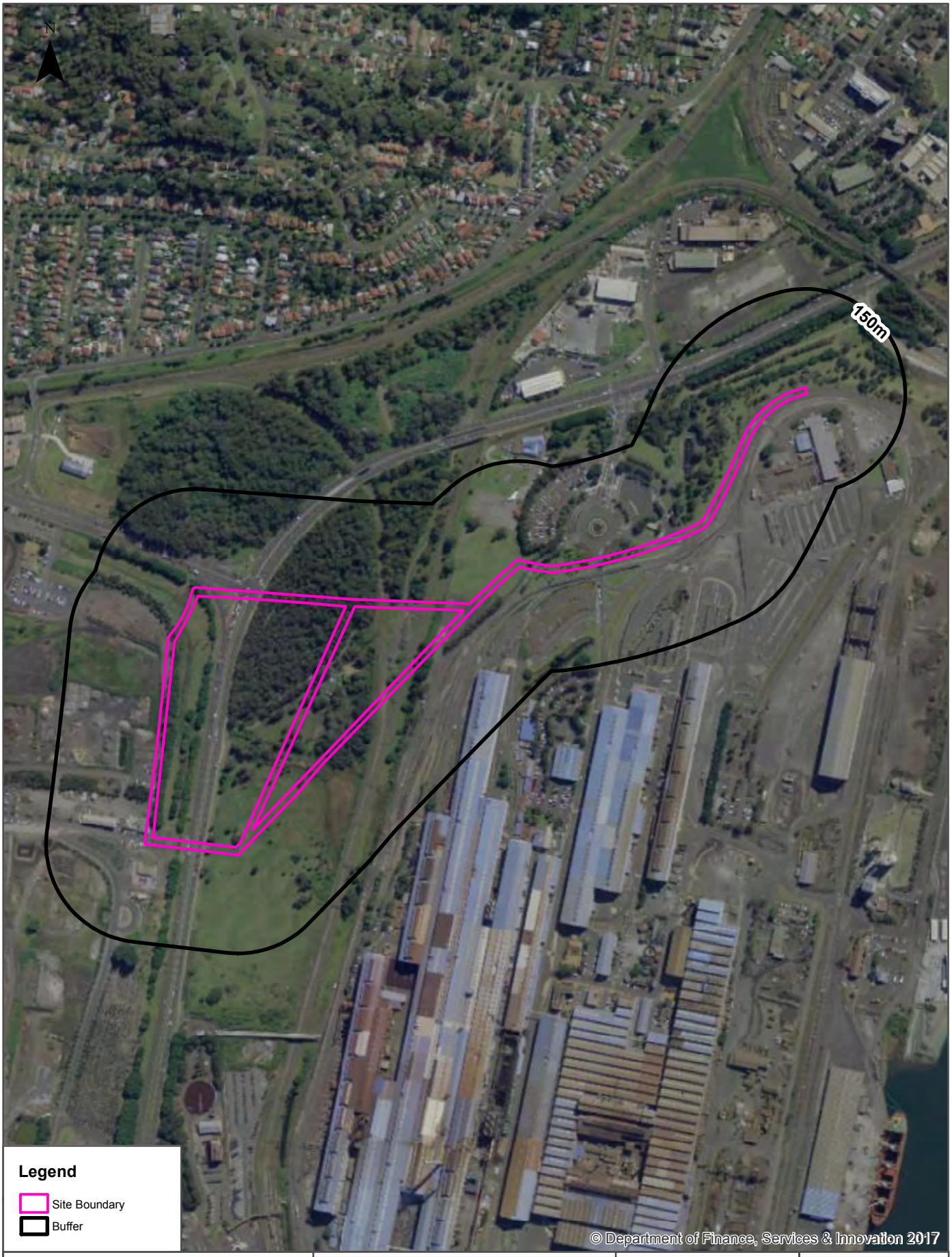
Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
MOTOR GARAGES &/OR ENGINEERS	BP Coniston Service Station, Gladstone Ave., Coniston Wollongong	565463	**1970**	Road Match	378m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	BP Coniston Service Station, Gladstone Ave., Coniston Wollongong	565736	**1970**	Road Match	378m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Aerial Imagery 2016

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

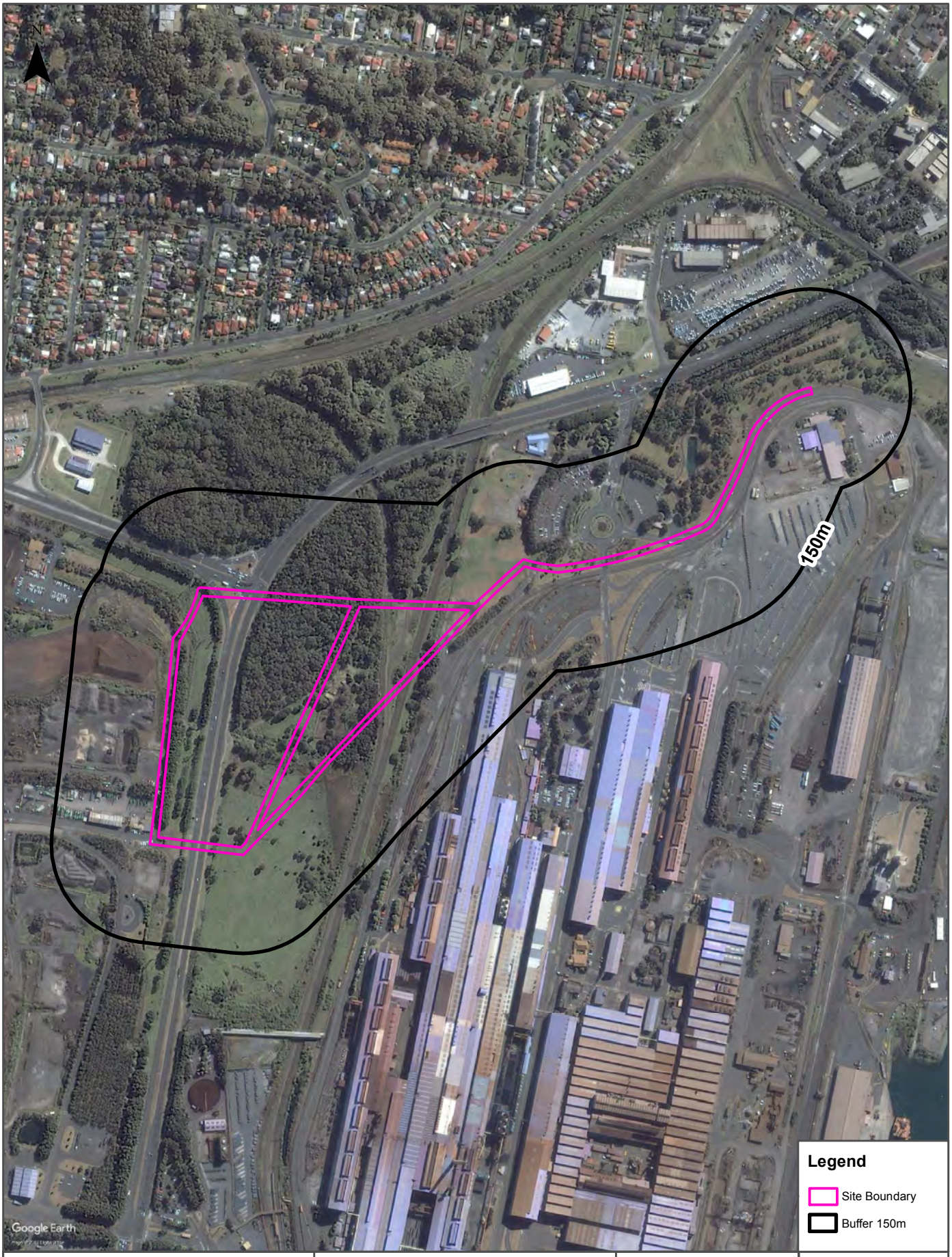


Scale:	Data Sources: Aerial Imagery © Department Finance, Services & Innovation	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

0 50 100 200 300 400
Meters

Aerial Imagery 2013

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

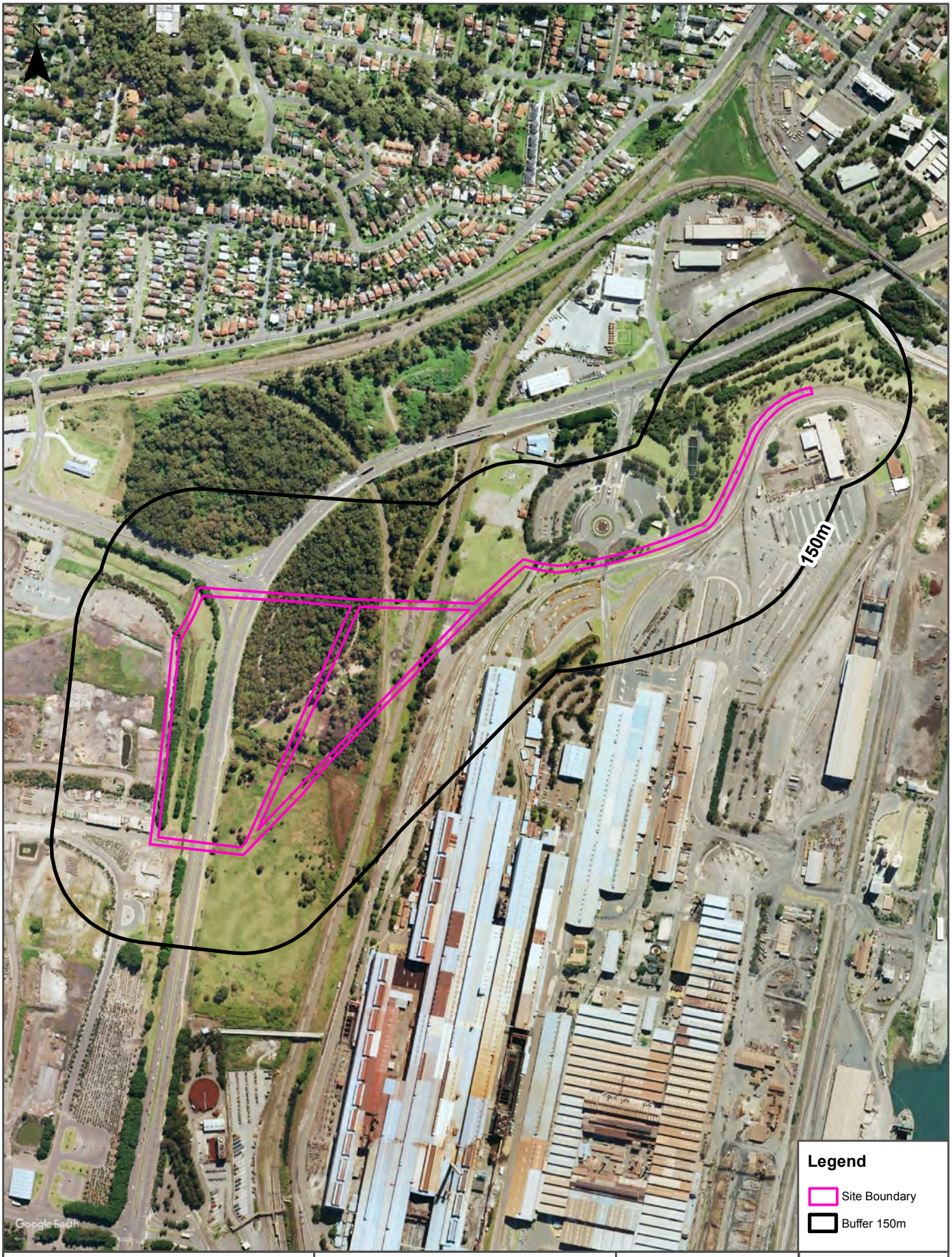


Scale:	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

0 100 200 400 Meters

Aerial Imagery 2008

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

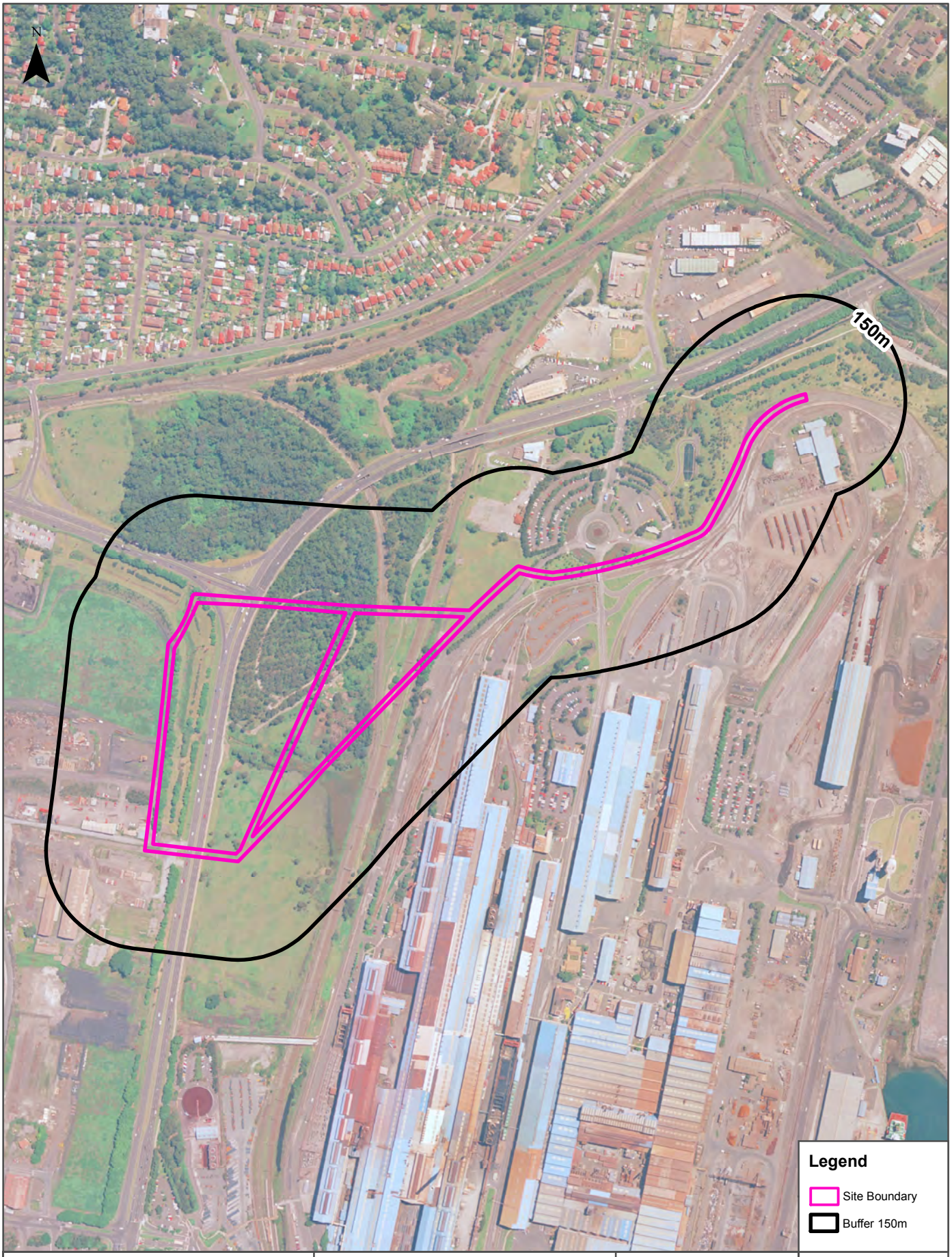


Scale:	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

0 100 200 400 Meters

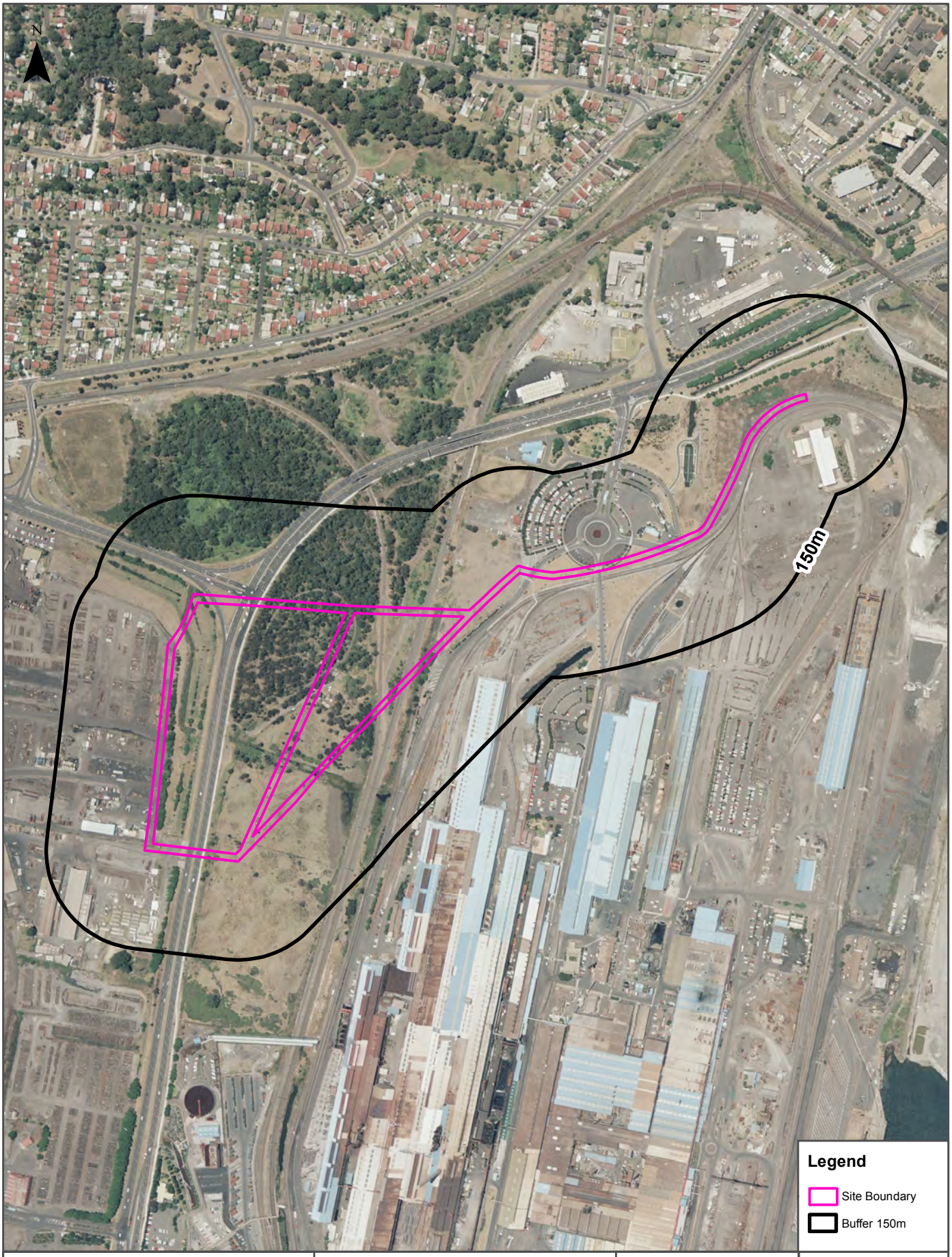
Aerial Imagery 2002

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



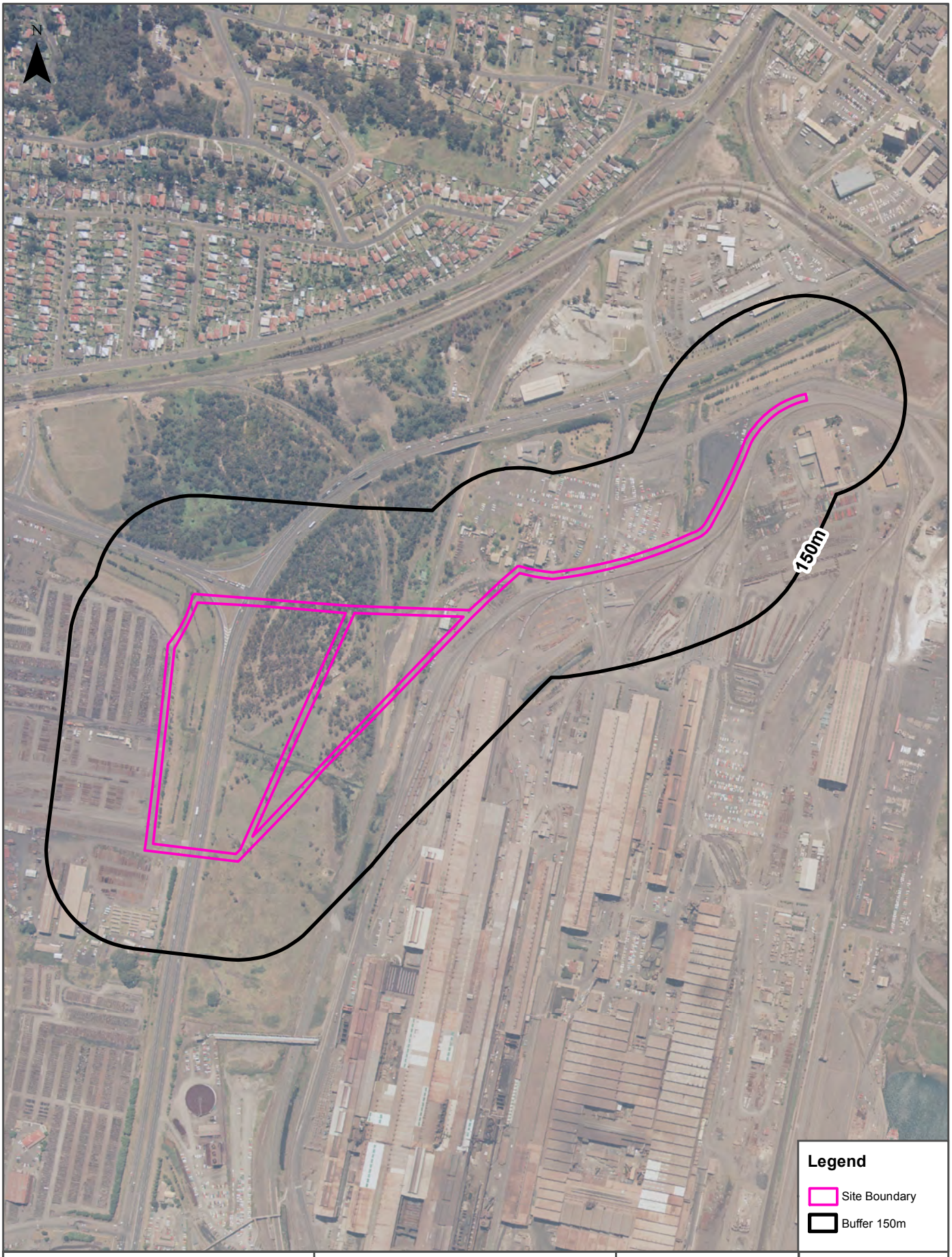
Aerial Imagery 1994

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



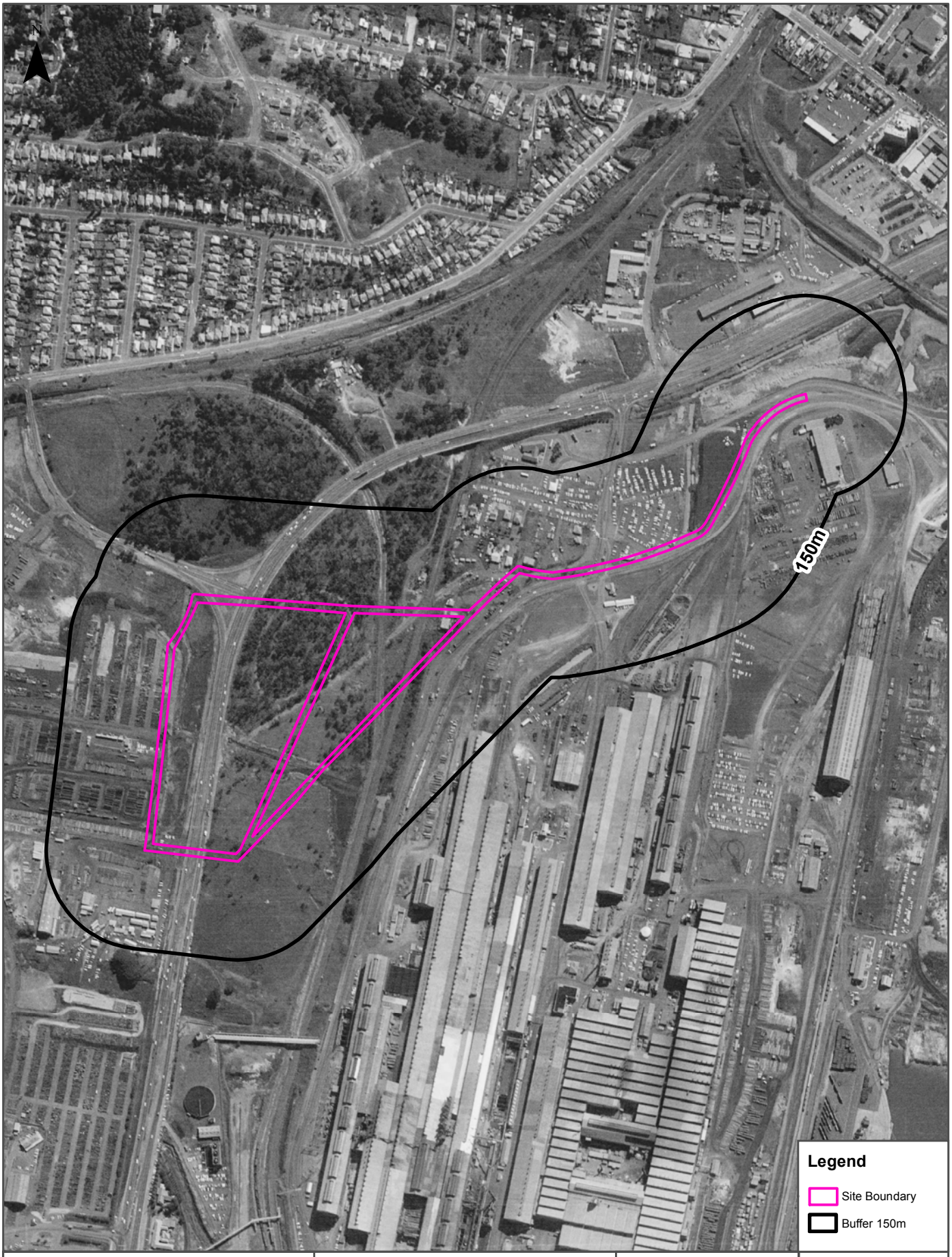
Aerial Imagery 1984

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



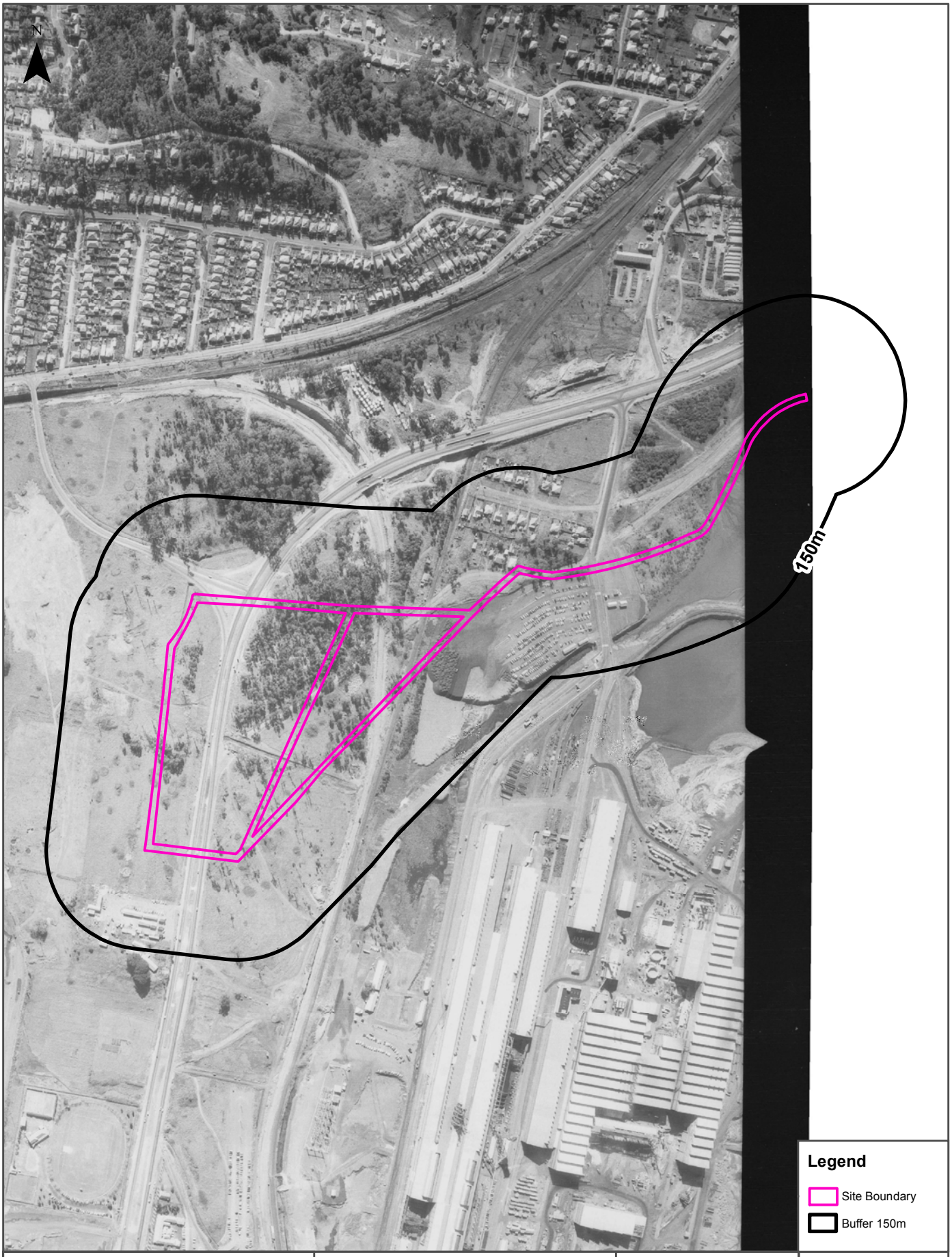
Aerial Imagery 1975

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



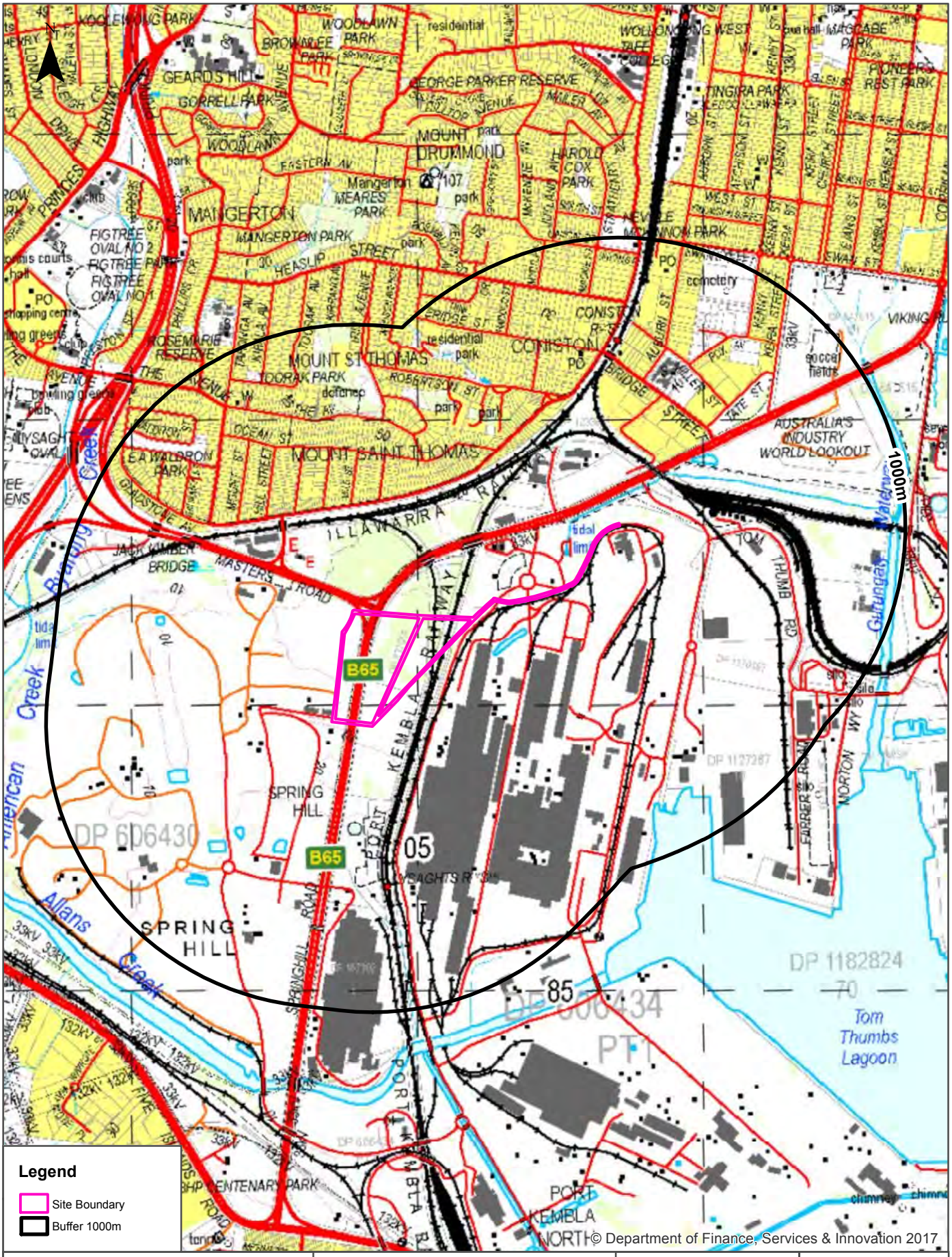
Aerial Imagery 1951

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Topographic Map 2015

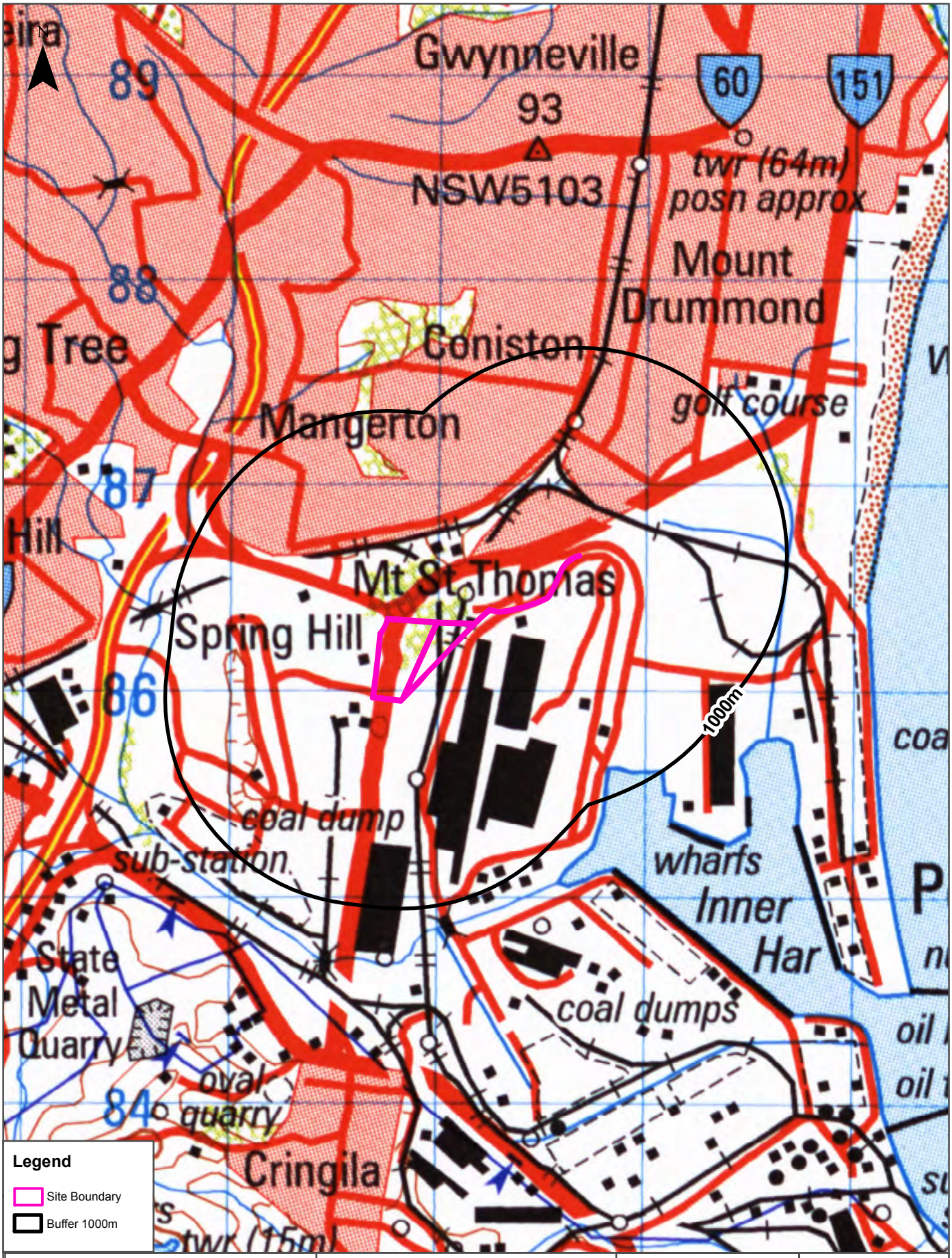
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Scale: 0 100 200 400 600 800 Meters	Data Sources: Topographic Map Data © NSW Land and Property Information	Coordinate System: GDA 1994 MGA Zone 56	Date: 20 July 2018

Historical Map 1998

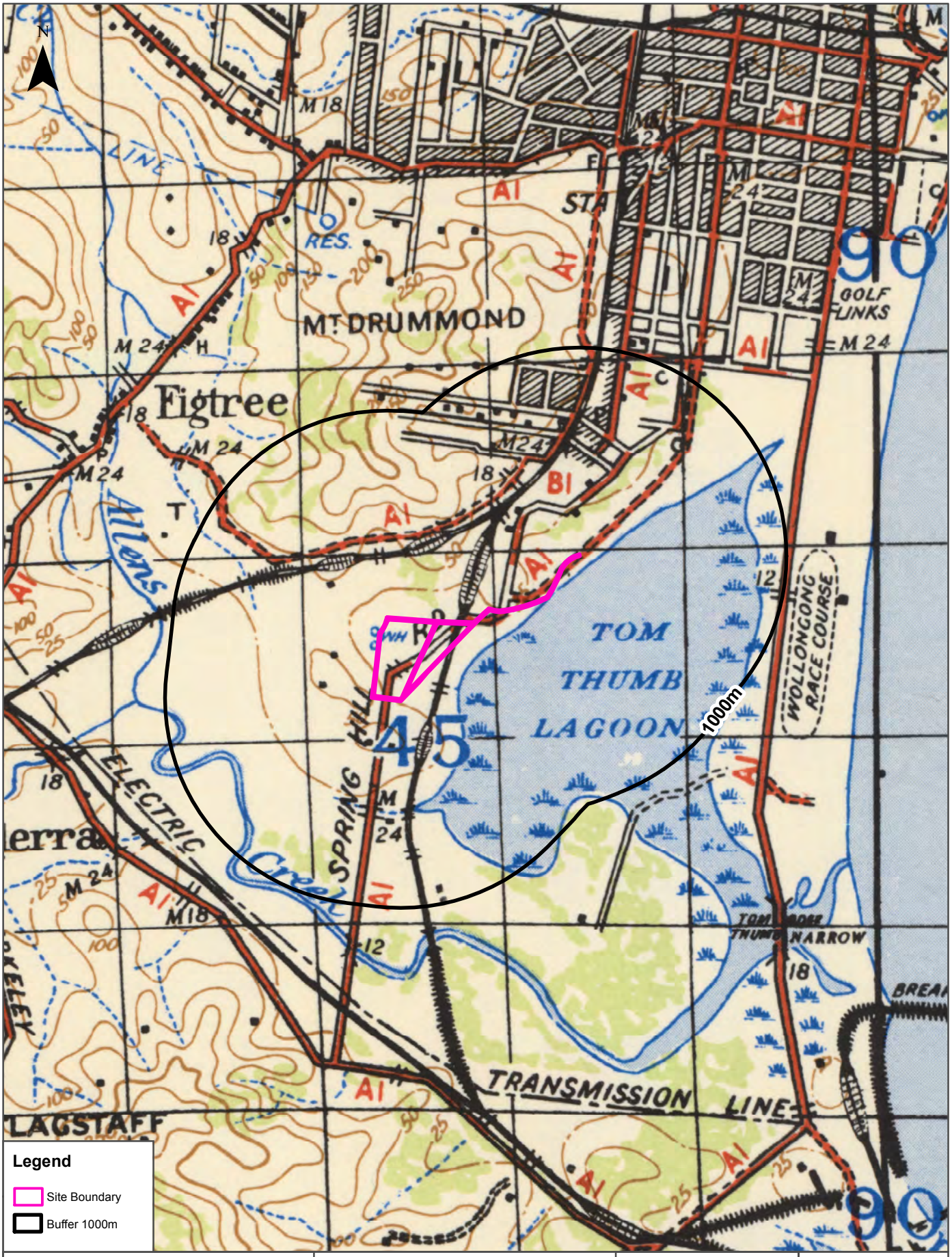
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Scale: 0 200 400 800 Meters	Data Sources: Sheet 9029, Edition 2, Wollongong, NSW NATMAP 1:100,000 Topographic Maps Geoscience Australia	Coordinate System: GDA 1994 MGA Zone 56	Date: 18 July 2018

Historical Map 1942

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



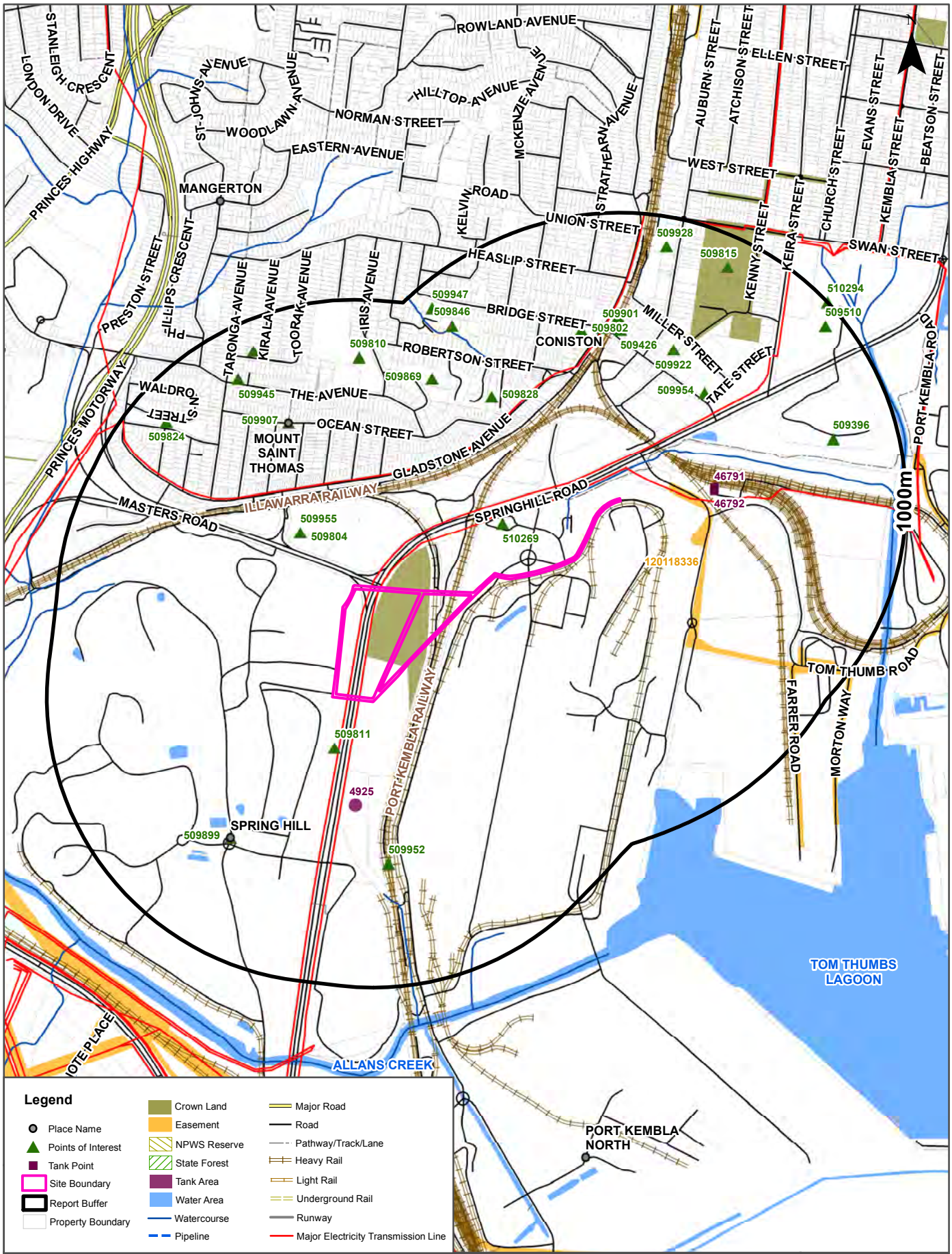
Data Sources: Australia 1:63360, Sheet 434, Wollongong, NSW. Prepared by Australian Section Imperial General Staff

Coordinate System: GDA 1994 MGA Zone 56

Date: 18 July 2018

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
509811	Mountain/Hill/Peak	SPRING HILL	176m	South West
510269	Community Facility	BHP VISITORS CENTRE	176m	North East
509955	SES Facility	CONISTON SES	262m	North West
509804	SES Facility	ILLAWARRA SOUTH COAST SES	262m	North West
509954	Medical Centre	CONISTON MENTAL HEALTH SERVICES	473m	North East
509828	Park	Park	547m	North
509922	Primary School	CONISTON PUBLIC SCHOOL	552m	North East
509952	Railway Station	LYSAGHTS RAILWAY STATION	569m	South
509426	Community Facility	CONISTON COMMUNITY CENTRE	591m	North East
509901	Suburb	CONISTON	600m	North East
509802	Post Office	CONISTON POST OFFICE	603m	North East
509899	Locality	SPRING HILL	609m	South West
509907	Suburb	MOUNT SAINT THOMAS	614m	North West
509951	Railway Station	CONISTON RAILWAY STATION	637m	North East
509869	Park	Park	715m	North
509396	Lookout	AUSTRALIA'S INDUSTRY WORLD LOOKOUT	775m	North East
509810	Mountain/Hill/Peak	MOUNT ST THOMAS	796m	North
509846	Park	Park	825m	North
509945	Place Of Worship	ASSEMBLIES OF GOD SLAVIC CHURCH	828m	North West
509824	Park	E A WALDRON PARK	871m	North West
509830	Park	TOORAK PARK	892m	North West
509815	Cemetery	WOLLONGONG CEMETERY	892m	North East
509928	Post Office	WOLLONGONG POST BUSINESS CENTRE	895m	North East
509947	Community Home	WARRIGAL CARE CONISTON	917m	North
509510	Sports Field	SOCCER FIELDS	937m	North East
510294	Community Facility	CONISTON LIONS UNITED SOCCER CLUB	998m	North East

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
4925	Undefined	Operational		09/04/2006	343m	South

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
46792	Undefined	Operational		09/04/2006	331m	North East
46791	Undefined	Operational		09/04/2006	332m	North East

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120118336	Primary	Undefined		173m	East

Easements Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

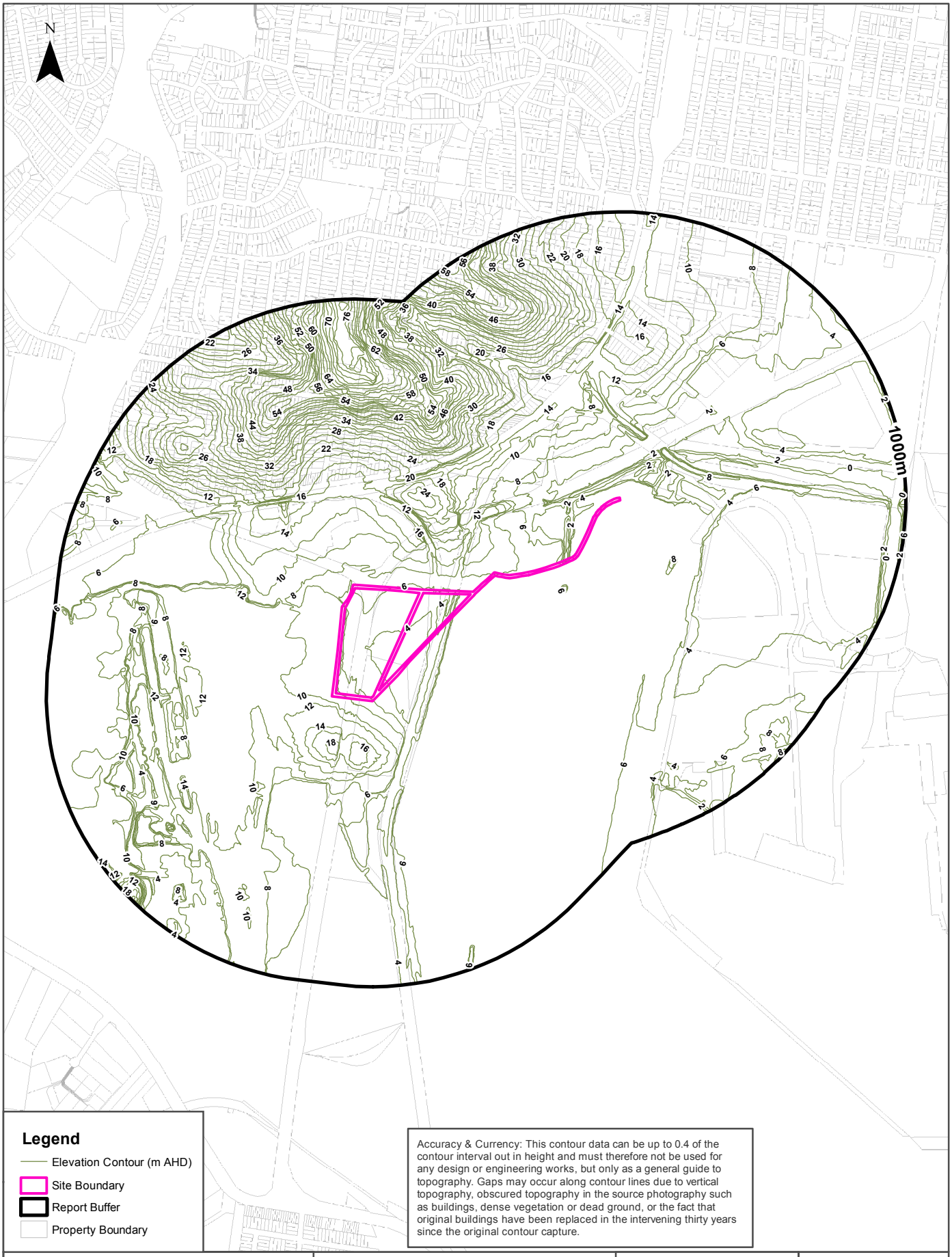
What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Hydrogeology

Description of aquifers on-site:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Botany Groundwater Management Zones

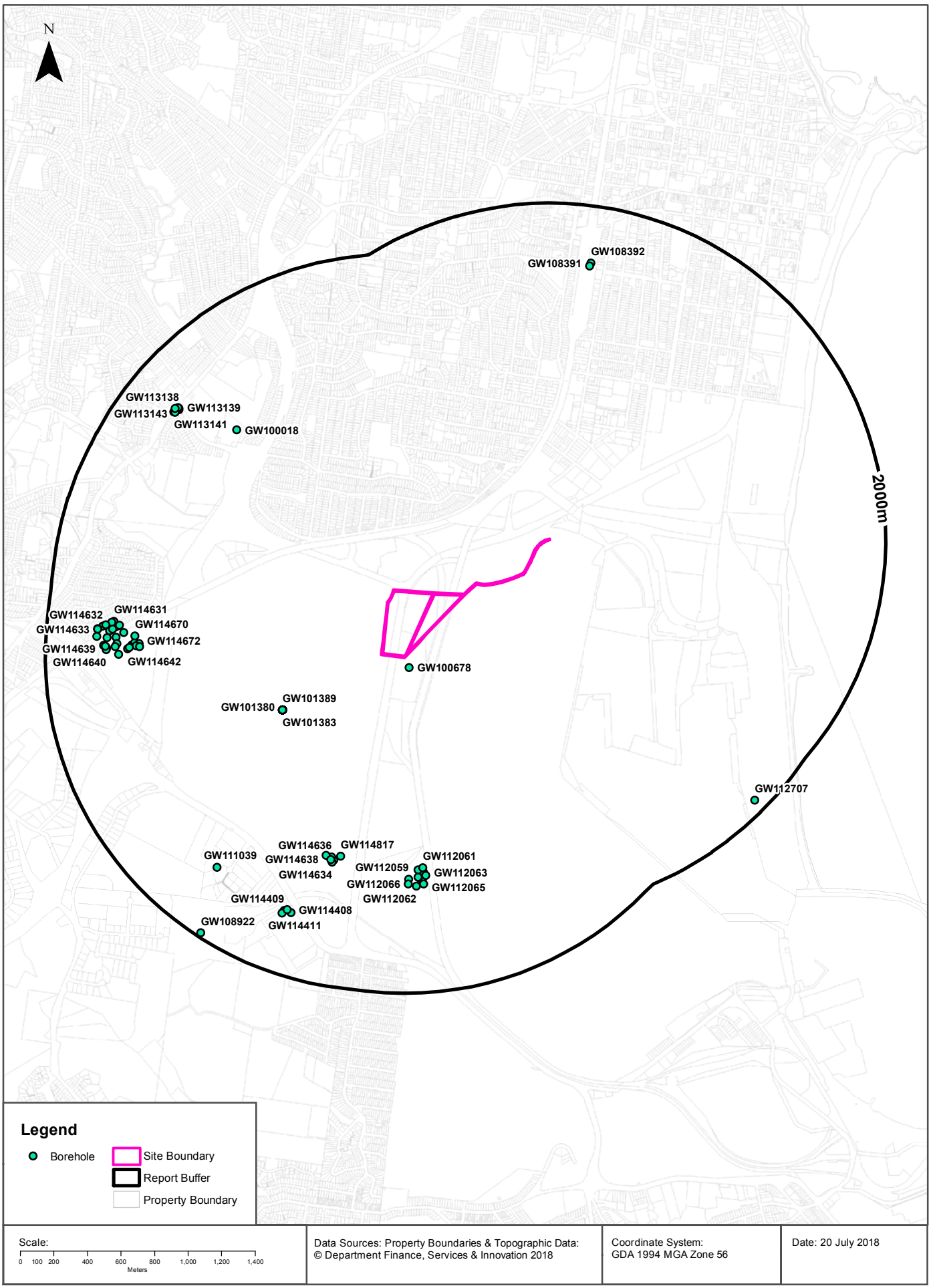
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW100678	10BL156580	Bore	Private	Monitoring	KH Adams & Sons Pty Ltd	22/03/1995	65.00	65.00	2200	8.20	7.500		64m	South West
GW101391	10BL156497	Bore	Mines	Monitoring		18/05/1992	6.50	6.50					669m	South West
GW101383	10BL156497	Bore	Mines	Monitoring		22/04/1992	9.00	9.00					670m	South West
GW101379	10BL156497	Bore	Mines	Monitoring		01/04/1992	9.60	9.60					670m	South West
GW101390	10BL156497	Bore	Mines	Monitoring		18/05/1992	12.00	12.00					670m	South West
GW101381	10BL156497	Bore	Mines	Monitoring		13/04/1992	32.50	32.50					670m	South West
GW101373	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.00	8.00					670m	South West
GW101380	10BL156497	Bore	Mines	Monitoring		14/05/1992	15.00	15.00					670m	South West
GW101371	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.60	8.60					670m	South West
GW101389	10BL156497	Bore	Mines	Monitoring		13/05/1992	4.00	4.00					670m	South West
GW101366	10BL156497	Bore	Mines	Monitoring		28/04/1992	5.00	5.00					670m	South West
GW101386	10BL156497	Bore	Mines	Monitoring		01/05/1992	10.10	10.10					670m	South West
GW101374	10BL156497	Bore	Mines	Monitoring		12/05/1992	38.60	38.60					670m	South West
GW101368	10BL156497	Bore	Mines	Monitoring		14/05/1992	5.60	5.60					670m	South West
GW101388	10BL156497	Bore	Mines	Monitoring		13/05/1992	10.00	10.00					670m	South West
GW101377	10BL156497	Bore	Mines	Monitoring		09/04/1992	5.10	5.10					670m	South West
GW101375	10BL156497	Bore	Mines	Monitoring		12/05/1992	11.00	11.00					670m	South West
GW101363	10BL156497	Bore	Mines	Monitoring		08/04/1992	21.00	21.00					670m	South West
GW101387	10BL156497	Bore	Mines	Monitoring		30/04/1992	13.00	13.00					670m	South West
GW101367	10BL156497	Bore	Mines	Monitoring		04/05/1992	26.00	30.00					670m	South West
GW101385	10BL156497	Bore	Mines	Monitoring		29/04/1992	6.00	6.00					670m	South West
GW101370	10BL156497	Bore	Mines	Monitoring		23/04/1992	40.00	40.00					670m	South West
GW101382	10BL156497	Bore	Mines	Monitoring		14/04/1992	13.50	13.50					670m	South West
GW101365	10BL156497	Bore	Mines	Monitoring		28/04/1992	17.50	17.60					670m	South West
GW101372	10BL156497	Bore	Mines	Monitoring		15/04/1992	26.70	26.70					670m	South West
GW101551	10BL156497	Bore		Monitoring		18/05/1992	6.00	6.00					670m	South West
GW101378	10BL156497	Bore	Mines	Monitoring		10/04/1992	19.60	19.60					670m	South West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW101392	10BL156497	Bore	Mines	Monitoring		15/05/1992	13.00	13.00					670m	South West
GW101364	10BL156497	Bore	Mines	Monitoring		08/04/1992	7.90	7.90					670m	South West
GW101369	10BL156497	Bore	Private	Monitoring		08/05/1992	6.50	6.60					670m	South West
GW101384	10BL156497	Bore	Mines	Monitoring		29/04/1992	22.00	22.00					670m	South West
GW101376	10BL156497	Bore	Mines	Monitoring		08/04/1992	11.80	11.80					670m	South West
GW114817	10BL605478	Bore	Private	Monitoring bore	ENVIRODRILL	11/12/2014	3.00	3.00					1224 m	South
GW114638	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					1239 m	South West
GW114636	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					1240 m	South West
GW114637	10BL605432	Bore	Private	Monitoring bore		07/11/2013	3.00	3.00					1254 m	South West
GW112061	10BL157702	Bore	Private	Monitoring		03/08/1994	1.20	1.20					1256 m	South
GW114635	10BL605432	Bore	Private	Monitoring bore		07/01/2013	3.00	3.00					1256 m	South West
GW112058	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					1267 m	South
GW114634	10BL605432	Bore	Private	Monitoring bore	ENVIRODRILL	21/03/2014	2.40	2.40					1270 m	South West
GW112064	10BL157702	Bore	Private	Monitoring		03/08/1994	1.70	1.70					1285 m	South
GW112063	10BL157702	Bore	Private	Monitoring		03/08/1994	1.50	1.50					1304 m	South
GW100524	10BL156496	Bore	Private	Monitoring		14/10/1993	11.21	11.21					1310 m	South
GW112057	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					1310 m	South
GW100526	10BL156496	Bore	Private	Monitoring		14/10/1993	12.38	12.38					1310 m	South
GW100525	10BL156496	Bore	Private	Monitoring		14/10/1993	13.48	13.48					1311 m	South
GW112059	10BL157702	Bore	Private	Monitoring		03/08/1994	1.00	1.00					1321 m	South
GW100018	10BL156571, 10WA107737	Bore	Private	Recreation	Windley's Water Wells Pty Ltd	16/03/1995	36.00	36.00	Good	4.00	3.500		1332 m	North West
GW112060	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					1334 m	South
GW112066	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					1348 m	South
GW112065	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					1354 m	South
GW112062	10BL157702	Bore	Private	Monitoring		03/08/1994	3.00	3.00					1363 m	South
GW114674	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	19/03/2014	5.00	5.00					1437 m	West
GW114672	10BL605474	Bore	Private	Monitoring bore		06/11/2013	5.50	5.50					1442 m	West
GW114673	10BL605474	Bore	Private	Monitoring bore		04/11/2013	5.50	5.50					1457 m	West
GW114671	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1467 m	West
GW114670	10BL605474	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1471 m	West
GW114644	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1484 m	West
GW114643	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	19/05/2014	5.00	5.00					1499 m	West
GW114642	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1510 m	West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114668	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1537 m	West
GW114665	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1562 m	West
GW114511	10BL605524	Bore	Private	Monitoring	ENVIRODRILL	28/03/2014	8.60	8.60					1567 m	West
GW114669	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.30	7.30					1574 m	West
GW114557	10BL605526	Bore	Private	Monitoring bore	ENVIRODRILL	28/03/2014	6.40	6.40					1579 m	West
GW114667	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.20	7.20					1582 m	West
GW114666	10BL605474	Bore	Private	Monitoring bore	ENVIRODRILL	01/02/2014	7.50	7.50					1584 m	West
GW114509	10BL605535	Bore	Private	Monitoring		28/03/2014	6.80	6.80					1590 m	West
GW111039	10BL604123	Well	Private	Monitoring	Macquarie Drilling	16/07/2010	3.50	3.50		1.00			1597 m	South West
GW114631	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.80	6.80					1603 m	West
GW114508	10BL605525	Spear	Private	Monitoring	ENVIRODRILL	21/03/2014	6.50	6.50					1605 m	West
GW114629	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	8.60	8.60					1614 m	West
GW114410	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					1617 m	South West
GW114513	10BL605522	Bore	Private	Monitoring	ENVIRODRILL	21/03/2014	6.80	6.80					1622 m	West
GW114408	10BL605157	Bore	Private	Monitoring		06/03/2012	7.20	7.20					1626 m	South West
GW114409	10BL605157	Bore	Private	Monitoring		06/03/2012	6.00	6.00					1628 m	South West
GW114822	10BL605516	Bore	Private	Monitoring bore	Total Drilling	16/02/2014	5.40	5.40		3.00			1633 m	West
GW114641	10BL605430	Bore	Private	Monitoring bore	ENVIRODRILL	17/03/2014	5.00	5.00					1633 m	West
GW114640	10BL605430	Bore	Private	Monitoring bore		05/11/2013	6.00	6.00					1637 m	West
GW114823	10BL605533	Bore	Private	Monitoring bore		27/11/2013	7.30	7.30		6.00			1641 m	West
GW108391	10BL600472	Bore				28/09/2007	6.20	6.20					1642 m	North East
GW114628	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.30	7.30					1648 m	West
GW114411	10BL605157	Bore	Private	Monitoring		06/03/2012	4.60	4.60					1648 m	South West
GW114639	10BL605430	Bore	Private	Monitoring bore		07/11/2013	5.50	5.50					1653 m	West
GW108392	10BL600472	Bore				28/09/2007	6.00	6.00		5.83			1659 m	North East
GW114632	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.00	6.00					1664 m	West
GW113139	10BL164478	Bore	Private	Monitoring	TERRATEST	14/04/2004	6.10	6.10					1666 m	North West
GW113138	10BL164478	Bore	Private	Monitoring	TERRATEST	14/10/2004	6.10	6.10					1674 m	North West
GW113140	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1677 m	North West
GW112995	10BL164478	Bore	Private	Monitoring	TERRATEST	14/10/2004	6.10	6.10					1681 m	North West
GW113143	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1682 m	North West
GW113141	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1683 m	North West
GW113142	10BL164478	Bore	Private	Monitoring	TERRATEST	15/10/2004	6.10	6.10					1690 m	North West
GW114633	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	21/03/2014	7.80	7.80					1694 m	West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114630	10BL605536	Bore	Local Govt	Monitoring bore	ENVIRODRILL	28/03/2014	6.10	6.10					1694 m	West
GW114512	10BL605534	Bore	Other Govt	Monitoring	ENVIRODRILL	28/03/2014	6.00	6.00					1696 m	West
GW112707	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	22/11/2011	6.50	6.50					1927 m	South East
GW108922	10BL601914, 10BL602135, 10WA106720	Bore	Private	Industrial	Southern Tablelands Drilling	17/06/2008	31.00	31.00	384	7.00	0.080		1974 m	South West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW100678	0.00m-0.60m TOPSOIL 0.60m-3.80m WEATHERED BASALT 3.80m-9.00m BASALT 9.00m-16.00m INDURATED SHALE 16.00m-65.00m SANDSTONE	64m	South West
GW101391	0.00m-0.40m TOP SOIL.Dark topsoil 0.40m-5.20m CLAY.Firm brown to light brown clay. 5.20m-6.50m CLAY.Red to brown stiff clay.Some silt	669m	South West
GW101363	0.00m-7.00m FILL. Dark slag fill range from 300mm near surface to 10mm and fines increase at depth 7.00m-10.00m CLAYS.Esturine. Dark brown to grey stiff esturine clays 10.00m-16.60m SANDSTONE.Weathered grey to light yellow.Drilled to refusal. 16.60m-21.00m SANDSTONE. Fresh grey sandstone. Water loss high.	670m	South West
GW101364	0.00m-6.80m FILL Dark slag fill size range from 300mm near surface to 10 mm and fines at increased depth 6.80m-7.90m CLAYS.Esturine. Dark brown to grey stiff esturine clays	670m	South West
GW101365	0.00m-2.00m FILL. Compacted coal wash reject 2.00m-12.60m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays 12.60m-15.60m SANDSTONE.H.W. Sandstone becomming fresher with increasing depth 15.60m-17.60m SANDSTONE. Fresh grey sandstone	670m	South West
GW101366	0.00m-2.00m FILL. Compacted coalwash reject. 2.00m-5.00m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays.	670m	South West
GW101367	1.80m-5.20m FILL. Compacted coal wash reject 5.20m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays 6.40m-13.00m WEATHERED SANDSTONE.Green to grey weathered sandstone with minor gravels 13.00m-30.00m SANDSTONE.Fine grained grey fresh sandstone	670m	South West
GW101368	0.00m-1.40m FILL. Dark slag fill with fines and some clay> 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt 3.20m-4.40m SAND. Grey to lighbrown silty sand> 4.40m-5.60m CLAY. Stiff grey clay.	670m	South West
GW101369	0.00m-0.60m TOP SOIL.Dark top soil 0.60m-1.80m FILL. Grey slag fill 1.80m-5.00m FILL. Compacted coal wash reject. 5.00m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. 6.40m-6.60m CLAY. Very silty clay.	670m	South West
GW101370	0.00m-5.40m FILL.Dark grey slag fill> Some brown slags present> 5.40m-7.60m ESTURINE CLAY. Firm to stiff orange brown clay becoming grey with increasing depth. Some gravels. 7.60m-20.00m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. At 15.8 m Grey stiff clays.At 17.9m Interbedded sands and clays. 20.00m-22.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays interbedded with sands> 22.40m-23.40m RESIDUAL CLAY. Light green clays> 23.40m-31.20m WEATHERED SANDSTONE.Fine grained highly weathered green sandstone 31.20m-40.00m SANDSTONE.Fine grained fresh grey sandstone.	670m	South West
GW101371	0.00m-5.40m FILL.Dark slag fill.Some brown slags present. 5.40m-7.60m CLAY,ESTURINE. Firm to stiff orange brown clay becoming grey with increasing depth.Some gravels 7.60m-8.60m CLAY, ESTURINE.Dark brown to grey stiff esturine clays>	670m	South West
GW101372	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present. 3.40m-6.40m CLAY. Light brown to bright orange wet clay. Possibly of filter cake or flue dust origin 6.40m-19.20m CLAY, ESTURINE. Dark brown to grey stiff esturine clays. 19.20m-22.40m SANDSTONE. E.W. Light brown sandstone. 22.40m-26.70m SANDSTONE. Fresh grey fine grained sandstone.	670m	South West
GW101373	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present 3.40m-6.40m CLAY.Light brown to bright orange wet clay.Possibly of filter cake or flue dust origin. 6.40m-8.00m CLAY,ESTURINE.Dark brown to grey stiff esturine clays.	670m	South West

Groundwater No	Drillers Log	Distance	Direction
GW101374	0.00m-0.60m CLAY. Loose sandy clay. 0.60m-9.00m CLAY. Firm sandy grey to brown clay. 9.00m-10.00m CLAY, ESTURINE. Sandy clay esturine clays> 10.00m-21.00m CLAYS, ESTURINE. Sandy esturine clays with some fine gravels. 21.00m-38.60m SANDSTONE.Fine to medium grained fresh grey sandstone.	670m	South West
GW101375	0.00m-0.60m CLAY. Loose sandy clay 0.60m-9.00m CLAY. Firm sandy grey to brownclay> 9.00m-11.00m CLAYS,ESTURINE.Sandy clay. esturine clays,	670m	South West
GW101376	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-4.80m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone. 4.80m-8.20m SANDSTONE.EW toW light brown sandstone becoming harder with increased depth. 8.20m-11.80m SANDSTONE.Fresh fine grained grey sandstone.	670m	South West
GW101377	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-5.10m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone.	670m	South West
GW101378	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm & fines at increased depth. 8.60m-16.20m CLAY,ESTURINE.Dark grey stiff esturine clay. 16.20m-17.40m CLAY,ESTURINE.Dark grey stiff esturine clays with some minor sandstone particles. 17.40m-19.60m SANDSTONE.Fresh hard grey sandstone.	670m	South West
GW101379	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm& fines at increased depth. 8.60m-9.60m CLAY,ESTURINE.Dark grey stiff esturine clay.	670m	South West
GW101380	0.00m-1.40m FILL.Dark slag fill with fines and some clay 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt. 3.20m-4.40m SAND.Grey to light brown silty sand. 4.40m-6.00m CLAY.Stiff grey clay. 6.00m-6.80m SAND.Light brown silty sand. 6.80m-7.00m CLAY. Stiff grey to brown clay. 7.00m-9.00m SANDSTONE.Gravelly residual brown to yellow sandstone. 9.00m-12.40m SANDSTONE.Moderately weathered yellow sandstone. 12.40m-15.00m SANDSTONE.Fresh light brown to yellow Budgong sandstone.	670m	South West
GW101381	0.00m-11.40m FILL. Mixed fill consisting of slag< filter cake and coalwash reject> Nodifinite bands-generally mixed. 11.40m-19.20m CLAY,ESTURINE:Grey esturine clay with some thin sand bands. Organic material< wood and root fragments. 19.20m-27.40m SANDSTONE.Weathered soft sandstone.Becomes less weathered with increasing depth. 27.40m-30.00m SANDSTONE.Brown to yellow slightly weathered sandstone. 30.00m-32.50m SANDSTONE.Fresh hard grey sandstone.	670m	South West
GW101382	0.00m-12.00m FILL.Mixed fill consisting of slag,Filter cake and coal wash reject. No difinite bands-generally mixed. 12.00m-13.50m CLAYS, ESTURINE.Firm dark esturine clays.	670m	South West
GW101383	0.00m-7.60m FILL.Dark slag fill size range from 300mm near surface to 10mm and fines at increased depth. 7.60m-9.00m CLAY,ESTURINE.Dark grey stiff esturine clay.	670m	South West
GW101384	0.00m-3.00m FILL, Compacted coal wash reject with brown clays and gravels. 3.00m-15.00m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 15.00m-20.00m SAND. Light brown to yellow sands. 20.00m-20.80m SANDSTONE. Extremely to weathered sandstone. 20.80m-22.00m SANDSTONE. Fresh hard light brown sandstone.	670m	South West
GW101385	0.00m-3.00m FILL.Compacted coal wash reject with brown clays and gravels. 3.00m-6.00m CLAYS,ESTURINE Dark brown to grey stiff esturine clays.	670m	South West
GW101386	0.00m-9.00m FILL.Hard coal wash reject with slag possibly of open hearth furnace origin 9.00m-10.10m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays.	670m	South West
GW101387	0.00m-7.20m FILL. Hard coal wash reject with slag possibly of open hearth furnace origin 7.20m-8.20m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 8.20m-13.00m SANDSTONE.E.W. Sandstone with sandy clay.	670m	South West
GW101388	0.00m-1.40m FILL.Dark brown to grey soils with some clay.May be from North Wall construction.Becomes brown clay with incr. depth. 1.40m-5.00m CLAY.Red to brown stiff clay> Some silty sand and pebbles up to20mm. 5.00m-6.00m SANDSTONE.Light brown weathered sandstone. 6.00m-10.00m SANDSTONE.Fresh hard grey sandstone.	670m	South West
GW101389	0.00m-1.40m FILL. Dark brown to grey soils with some clay.May be from North Wall construction. Becomes brown clay with incrs.depth. 1.40m-4.00m CLAY.Red to brown stiff clay.Some silt.	670m	South West
GW101390	0.00m-2.00m TOP SOIL.Dark topsoil turning to soft brown clays. 2.00m-3.00m CLAY.Firm brown to light brown clay. 3.00m-7.00m CLAY.Red to brown stiff clay.Some silt. 7.00m-8.00m SANDSTONE.Extremely to weathered light brown sandstone. 8.00m-12.00m SANDSTONE. Fresh hard yellow to grey sandstone	670m	South West

Groundwater No	Drillers Log	Distance	Direction
GW101392	0.00m-0.40m TOP SOIL.Dark topsopil 0.40m-5.20m CLAY.Firm brown to light brown clay 5.20m-7.00m CLAY.Red to brown stiff clay. Some silt 7.00m-7.60m CLAY.Stiff grey sandy clay. 7.60m-8.40m SANDSTONE.Extremely weathered light brown sandstone 8.40m-9.40m SANDSTONE.Weathered light brown to grey sandstone 9.40m-13.00m SANDSTONE.Fresh grey sandstone.	670m	South West
GW101551	0.00m-2.00m TOP SOIL. Dark topsoil turning to soft brown clays 2.00m-3.00m CLAY. Firm brown to light brown clay. 3.00m-6.00m CLAY. Red to brown stiff clay. Some silt	670m	South West
GW114817	0.00m-1.00m GRAVEL FILL 1.00m-3.00m SANDY CLAY DARK GREY FILL	1224m	South
GW114638	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL, METAL BLACK 1.20m-3.00m CLAY DARK GREY	1239m	South West
GW114636	0.00m-0.50m FILL CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	1240m	South West
GW114637	0.00m-0.50m FILL,CEMENTED SLAG COMPACTED 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	1254m	South West
GW114635	0.00m-0.50m FILL ,CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-3.00m CLAY DARK GREY	1256m	South West
GW114634	0.00m-0.50m FILL CEMENTED SLAG 0.50m-1.20m FILL METAL BLACK 1.20m-2.40m CLAY DARK GREY	1270m	South West
GW100524	0.00m-4.00m GREY SLAG FILL 4.00m-5.00m GREY SAND 5.00m-11.21m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	1310m	South
GW100526	0.00m-5.00m GREY SLAG FILL 5.00m-6.80m DARK GREY SLIGHTLY SANDY FIRM ESTUARINE CLAYS. 6.80m-12.38m DARK BROWN TO GREY STIFF ESTUARINE CLAYS.	1310m	South
GW100525	0.00m-3.50m GREY SLAG FILL 3.50m-5.00m GREY SAND 5.00m-7.00m DARK BROWN TO GREY STIFF ESTUARINE CLAYS. SOME BANDS OF SAND. 7.00m-13.48m DARK BROWN TO GREY STIFF ESTUARINE CLAYS	1311m	South
GW100018	0.00m-1.00m SOIL & CLAY FILL 1.00m-6.00m MUD SILT 6.00m-15.00m GRAVEL 15.00m-36.00m SANDSTONE	1332m	North West
GW114674	0.00m-0.80m FILL.COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.00m SANDSTONE / GRAVELS	1437m	West
GW114672	0.00m-0.80m FILL,CEMENTED SLAG,COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-4.00m CLAY LIGHT BROWN 4.00m-5.50m SANDSTONE, GRAVELS	1442m	West
GW114673	0.00m-0.80m FILL SLAG COMPACTED 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY BROWN 3.00m-4.50m CLAY LIGHT BROWN 4.50m-5.50m SANDSTONE / GRAVELS	1457m	West
GW114671	0.00m-1.00m FILL CEMENTED SLAG COMPACTED 1.00m-1.50m CLAY DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE , GRAVELS	1467m	West
GW114670	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1471m	West

Groundwater No	Drillers Log	Distance	Direction
GW114644	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BROWN 4.80m-5.50m SANDSTONE GRAVELS	1484m	West
GW114643	0.00m-0.80m FILL, COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY LIGHTER BRO;WN 4.80m-5.00m SANDSTONE GRAVELS	1499m	West
GW114642	0.00m-1.00m FILL,CEMENTED SLAG, COMPACTED 1.00m-3.50m CLAY DARK GREY 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE, GRAVELS	1510m	West
GW114668	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.30m CLAY GREY/BROWN,SILTSTONE,GRAVEL	1537m	West
GW114665	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.50m CLAY BROWN/GREY , SILTSTONE,GRAVELS	1562m	West
GW114511	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.40m BLUESTONE, GRAVEL 0.40m-1.00m CLAY BLACK 1.00m-1.80m BROWN SANDY CLAY 1.80m-3.40m CLAY GREY 3.40m-4.00m GREY SAND MOIST 4.00m-6.20m BROWN SANDY CLAY COARSE 6.20m-8.60m FRACTURED SANDSTONE'GRAVELS	1567m	West
GW114669	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m SILTY CLAY BROWN 6.00m-7.30m CLAY BROWN/GREY,SILTSTONE,GRAVELS	1574m	West
GW114557	0.00m-1.50m (UNKNOWN) 1.50m-1.80m IRONSTONE 1.80m-3.80m SANDY GRAVELS / CLAY 3.80m-6.40m QUARTZ / SANDY GRAVELS	1579m	West
GW114667	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN/SILTY 6.00m-7.20m CLAY BROWN/GREY,SILTSTONE,GRAVEL	1582m	West
GW114666	0.00m-1.50m SLAG COMPACTED 1.50m-2.60m CLAY BROWN 2.60m-3.60m CLAY GREY 3.60m-4.20m CLAY LIGHT BROWN 4.20m-6.00m CLAY BROWN SILTY 6.00m-7.50m CLAY BROWN/GREY ,SILTSTONE,GRAVELS	1584m	West
GW114509	0.00m-0.20m BITUMEN, ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m BROWN SAND CLAY 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE 3.30m-4.60m CLAY GREY 4.60m-4.90m SATURATED SANDS GREY 4.90m-6.80m SANDY C;LAY COARSE GRAIN	1590m	West
GW111039	0.00m-1.50m CLAY, GREY AND YELLOW BROWN 1.50m-1.70m CLAY SANDY,BROWN AND GREY 1.70m-3.50m GRAVEL CLAYEY,BROWN,ORANGE AND YELLOW ,SANDY	1597m	South West
GW114631	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.80m SANDY CLAY COARSE GREY	1603m	West

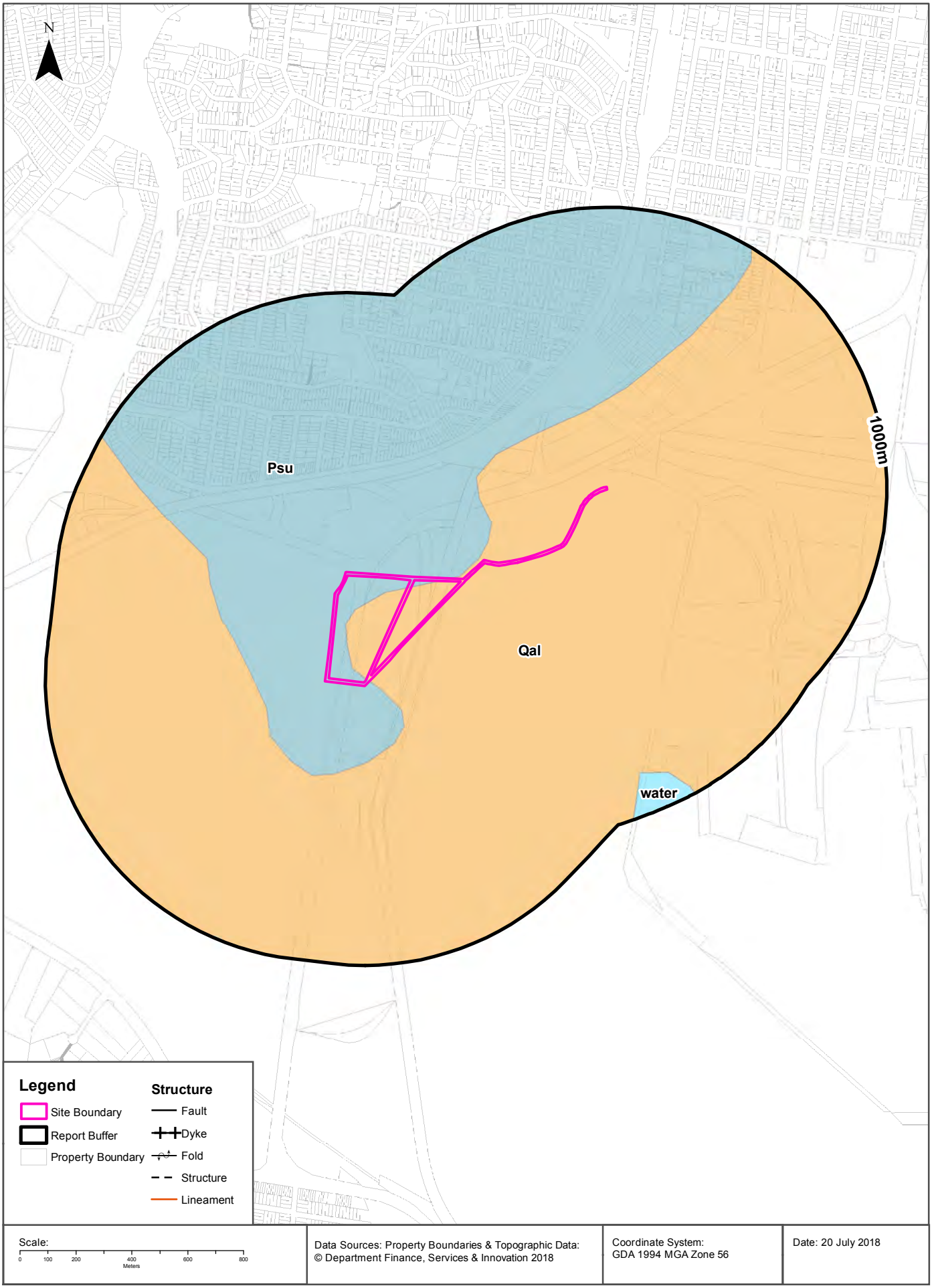
Groundwater No	Drillers Log	Distance	Direction
GW114508	0.00m-1.20m SANDY CLAY 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m SANDSTONE GRAVELS W/BROWN CLAY 4.40m-6.50m BROWN SANDY CLAY	1605m	West
GW114629	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m CLAY BLACK 2.40m-2.60m SANDS SATURATED 2.60m-4.40m CLAY GREY 4.40m-4.60m SANDSTONES,GRAVELS W/BROWN CLAY 4.60m-8.00m SANDY CLAY BROWN 8.00m-8.60m SANDSTONE FRACTURED	1614m	West
GW114410	0.00m-0.25m CONCRETE SLAB AND MINOR FILL 0.25m-0.70m FILL, GRAVELLY SILTY 0.70m-3.00m FILL GRAVELLY SANDY CLAY 3.00m-6.00m SILTY CLAY MED.BROWN/GREY	1617m	South West
GW114513	0.00m-1.20m SANDY CLAY FILL 1.20m-2.40m BLACK CLAY 2.40m-2.60m FINE SANDS SATURATED 2.60m-4.40m GREY CLAY 4.40m-4.60m SANDSTONE GRAVELS W/BROWN CLAY 4.60m-6.80m BROWN SANDY CLAY	1622m	West
GW114408	0.00m-0.25m CONCRETE SLABAND MINOR SUB BASE 0.25m-3.00m FILL SILTY CLAY BROWN MINOR GRAVEL 3.00m-7.20m SILTY CLAY M/BROWN,GREY,STIFF	1626m	South West
GW114409	0.00m-0.25m CONCRETE SLAB AND MINOR SUB BASE 0.25m-2.10m FILL GRAVELLY CLAY 2.10m-5.00m SILTY CLAY FIRM M/BROWN,MOIST 5.00m-6.00m SILTY CLAY,M/GREY BROWN STIFF NO ODOUR	1628m	South West
GW114641	0.00m-0.80m FILL,COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.00m SANDSTONE GRAVELS	1633m	West
GW114822	0.00m-3.00m FILL 3.00m-5.40m ALLUVIAL	1633m	West
GW114640	0.00m-1.00m FILL,CEMENTED SLAG,COMPACTED 1.00m-1.50m CLAY,DARK GREY 1.50m-3.50m CLAY BROWN 3.50m-5.50m CLAY LIGHT BROWN 5.50m-6.00m SANDSTONE GRAVELS	1637m	West
GW114823	0.00m-2.00m FILL 2.00m-7.30m ALLUVIAL	1641m	West
GW108391	0.00m-0.40m FILL , GRAVEL 0.40m-1.50m FILL SAND 1.50m-2.50m CLAY 2.50m-6.20m CLAY	1642m	North East
GW114411	0.00m-0.25m CONCRETE SLAB,FILL,SANDY CLAY 0.25m-2.10m FILL SANDY CLAY 2.10m-2.40m FILL SANDY CLAY AND GRAVEL 2.40m-4.00m SILTY CLAY DARK GREY 4.00m-4.60m SILTY CLAY DARK GREY MOIST	1648m	South West
GW114628	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED FINE GRAINED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAINED 4.90m-7.30m SANDSTONE COARSE GRAINED	1648m	West
GW114639	0.00m-0.80m FILL COMPACTED SLAG 0.80m-1.50m CLAY DARK GREY 1.50m-3.00m CLAY LIGHT BROWN 3.00m-4.80m CLAY WHITE BROWN 4.80m-5.50m SANDSTONE / GRAVELS	1653m	West
GW108392	0.00m-0.30m FILL,GRAVEL 0.30m-1.00m FILL. SAND 1.00m-1.90m CLAY BROWN 1.90m-6.00m CLAY DARK,BROWN	1659m	North East

Groundwater No	Drillers Log	Distance	Direction
GW114632	0.00m-0.20m BITUMEN ROAD BASE 0.20m-0.70m SILTY CLAY / FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-3.00m CLAY GREY 3.00m-3.30m SAND WHITE WEATHERED 3.30m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.00m SANDY CLAY COARSE GRAIN	1664m	West
GW114630	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.30m SILTY CLAY FILL 0.30m-1.20m SANDY CLAY BROWN 1.20m-3.00m SAND WHITE WEATHERED 3.00m-4.60m CLAY GREY 4.60m-4.90m SAND GREY SATURATED 4.90m-6.10m SANDY CLAY COARSE GRAIN	1694m	West
GW114633	0.00m-0.20m BITUMEN/ ROAD BASE 0.20m-0.70m SILTY CLAY FILL 0.70m-1.20m SANDY CLAY BROWN 1.20m-2.70m CLAY GREY 2.70m-3.00m SANDY CLAY SATURATED 3.00m-4.60m CLAY GREY 4.60m-4.90m SANDY CLAY SATURATED FINE GRAIN 4.90m-7.80m SANDSTONE COARSE GRAIN	1694m	West
GW114512	0.00m-0.80m BLACK LOAMY SOIL 0.80m-2.40m CLAY BLACK 2.40m-3.00m BROWN SANDY CLAY 3.00m-3.20m SANDSTONE 3.20m-6.00m BROWN SANDY CLAY	1696m	West
GW108922	0.00m-5.00m CLAY,TOPSOIL 5.00m-31.00m VOLCANIC BASALT	1974m	South West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:100,000

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Geology

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000
water							Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy
© State of New South Wales through the NSW Department of Industry, Resources & Energy

Naturally Occurring Asbestos Potential

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Naturally Occurring Asbestos Potential

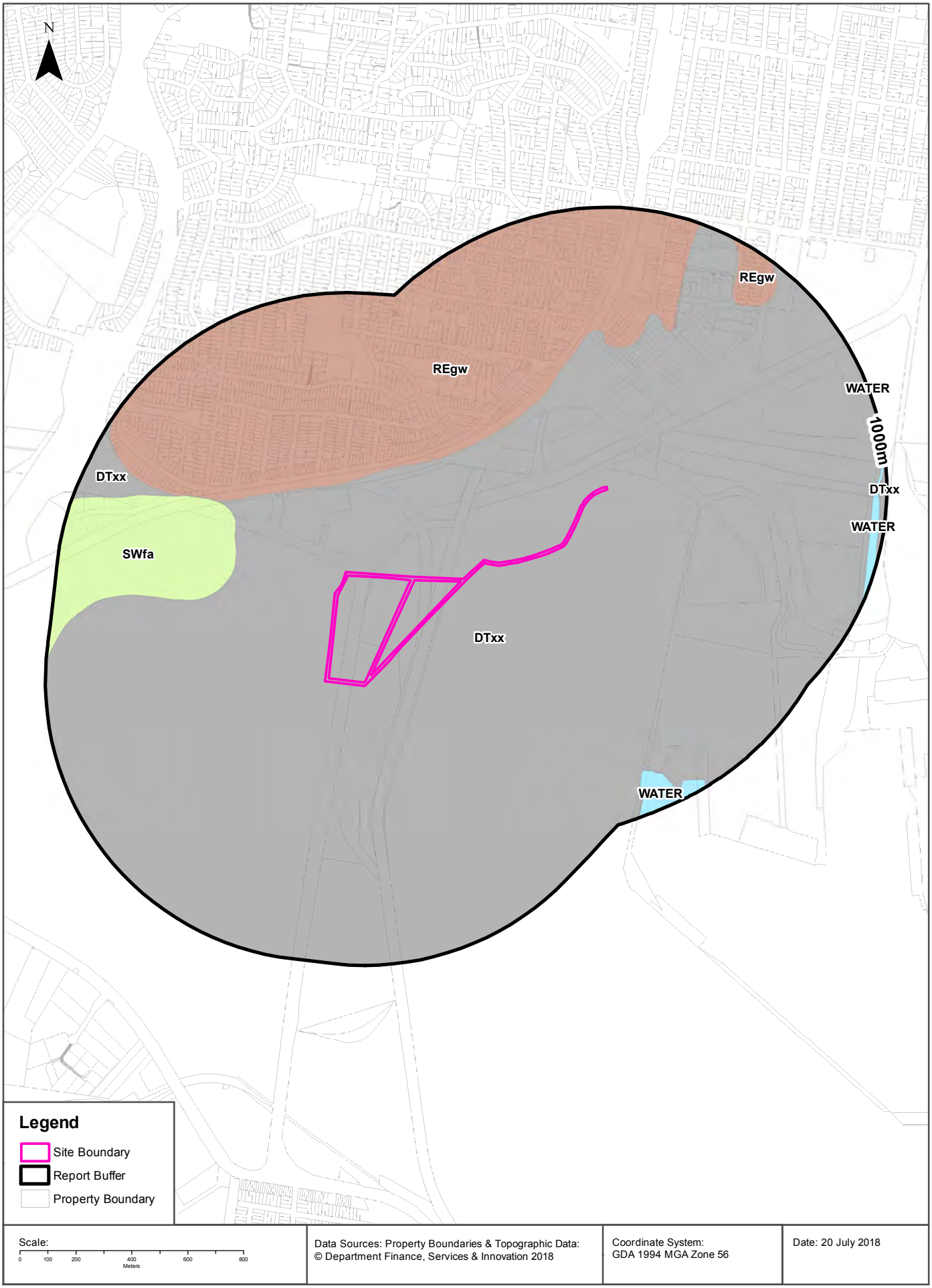
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Soil Landscapes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000

What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
REgw	GWYNNEVILLE		RESIDUAL	Wollongong & Port Hacking	1:100,000
SWfa	FAIRY MEADOW		SWAMP	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Ca6	Podosol	Dunes of leached sands (Uc2.2) with some areas of (Uc2.3) soils in low-lying situations, also (Dy5.41) soils in some localities, and flanked by some dunes of calcareous sands (Uc1.11) along the coast.	0m
Me2	Dermosol	Steep hilly to mountainous with incised stream valleys: steep but more or less rounded hill slopes of brown friable earths (Gn3.21 and Gn3.22) and possibly some (Gn4) soils, in association with: at the higher altitudes, steep hill slopes of sandy soils (Uc4.2), loamy soils having an A2 horizon (Um4.2) with yellow-brown earths (Gn2.44), and possibly (Uc6.11) and (Um5.41) soils; and at the lower altitudes, moderate to steep slopes of hard acidic yellow mottled soils (Dy3 21 and Dy3.41), hard acidic red soils (Dr2.21), and yellow leached friable earths (Gn3.54); and narrow incised stream valleys of various soils including (Um6.11) and (Dy) soils. This unit is a broad one. In some areas the (Um4.2) and (Gn2.44) soils and in others the (Dy) and (Dr) soils rather than the (Gn3 soils could be dominant.	0m

Atlas of Australian Soils Data Source: CSIRO
Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Standard Local Environmental Plan Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	LEP
N/A		

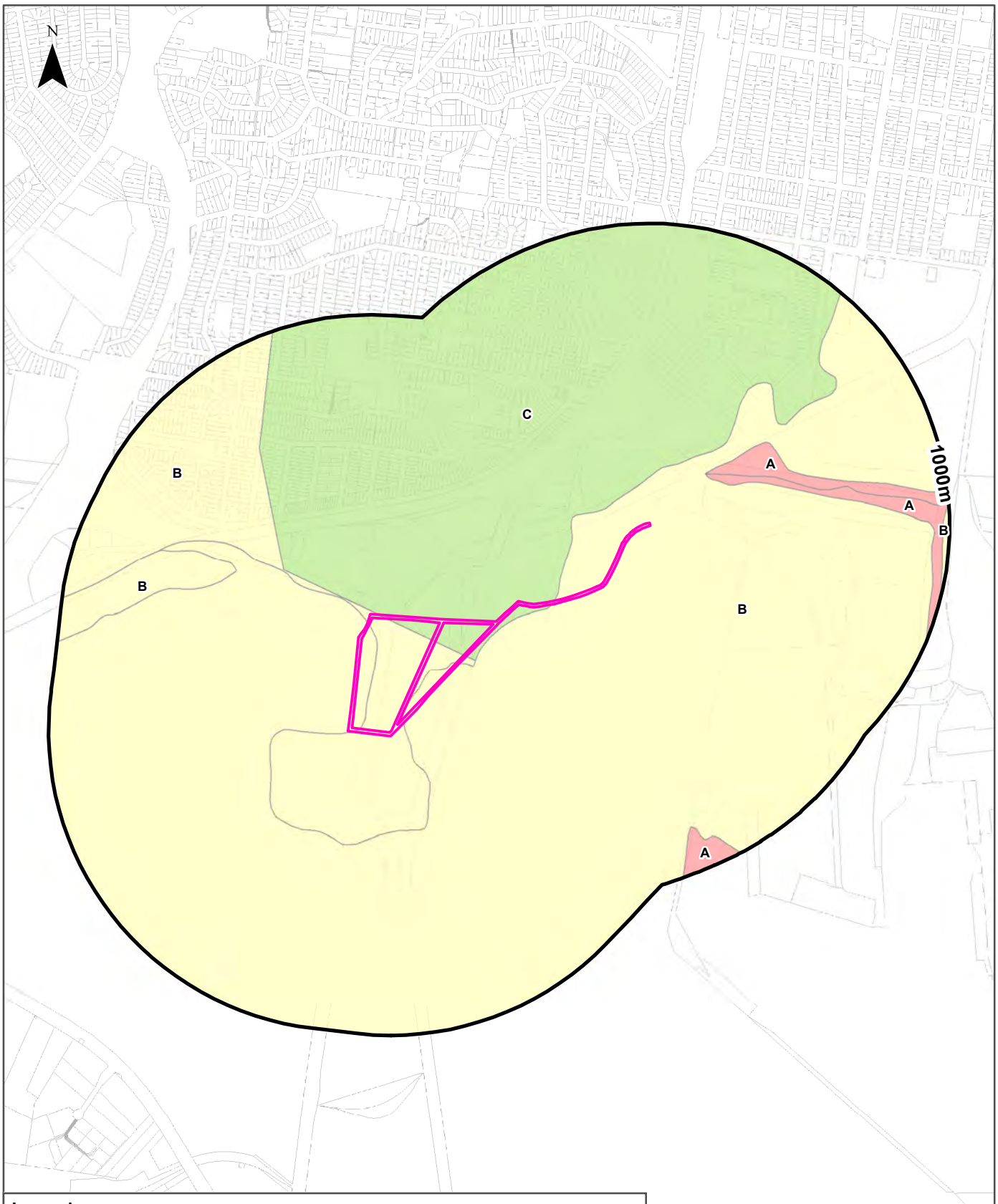
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	LEP	Distance	Direction
N/A				

Acid Sulfate Data Source Accessed 07/10/2016: NSW Crown Copyright - Planning and Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Legend

- Site Boundary
- Report Buffer
- Property Boundary

Probability of occurrence of Acid Sulfate Soils

- A. High (>70%)
- B. Low (6-70%)
- C. Extremely Low (1-5%)
- D. No Chance (0%)
- No Data

Scale: 0 100 200 400 600 800 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 20July 2018

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m
A	High Probability of occurrence. >70% chance of occurrence.	246m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Dryland Salinity

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining Subsidence Districts

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Environmental Zoning

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

State Environmental Planning Policy Protected Areas

Are there any State Environmental Planning Policy Protected Areas onsite or within the dataset buffer?

Dataset	Onsite	Within Site Buffer	Distance
SEPP14 - Coastal Wetlands	No	No	N/A
SEPP26 - Littoral Rainforests	No	No	N/A
SEPP71 - Coastal Protection Zone	Yes - SEPP71 covers 36.86% of the site	Yes	0m

SEPP Protected Areas Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Major Developments (2005)

State Environmental Planning Policy Major Developments within the dataset buffer:

Map Id	Feature	Effective Date	Distance	Direction
68269	Three Ports - Port Kembla	24/07/2009	0m	Onsite

SEPP Major Development Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Strategic Land Use Areas

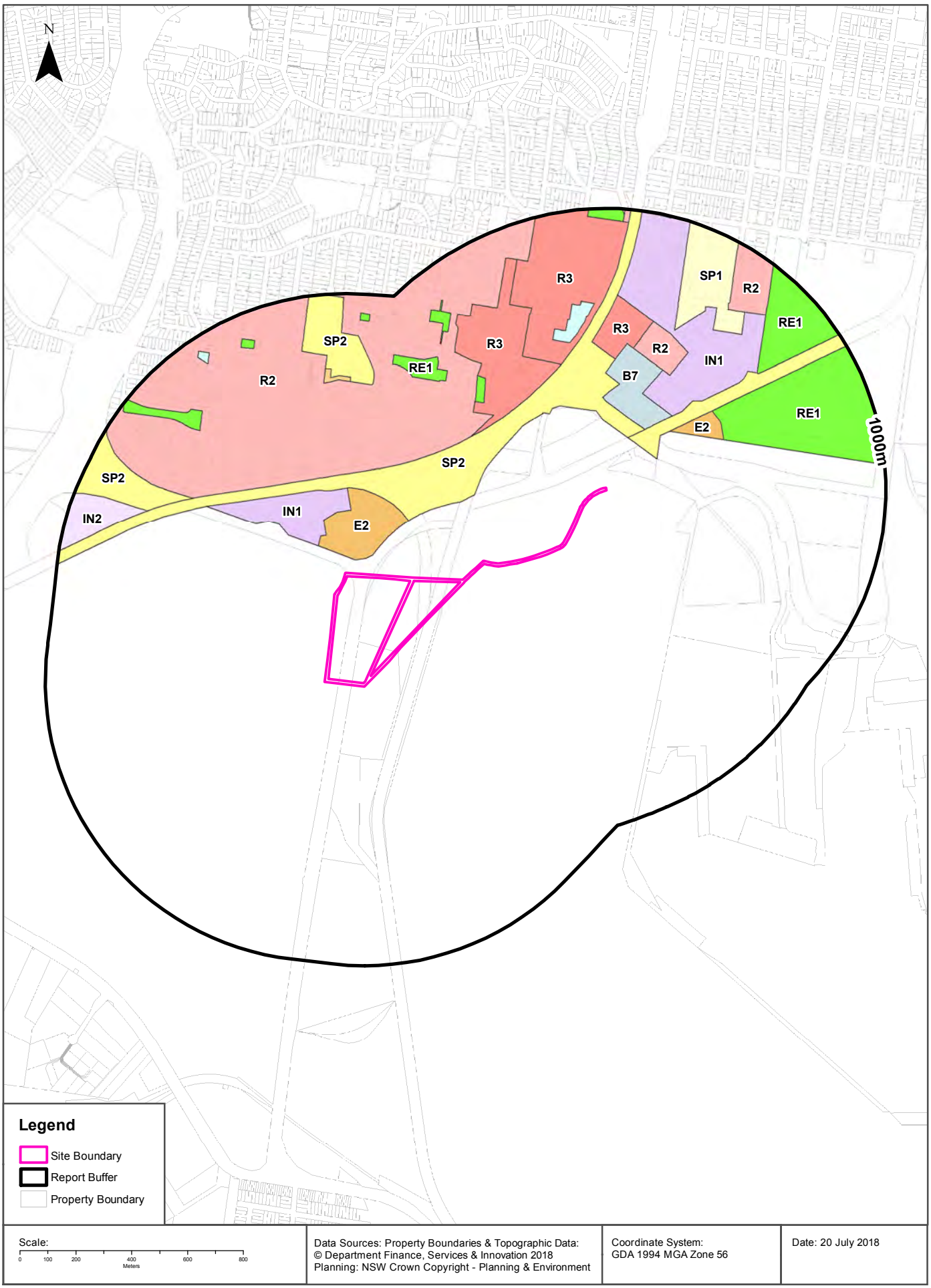
State Environmental Planning Policy Strategic Land Use Areas onsite or within the dataset buffer:

Strategic Land Use	SEPPNo	Effective Date	Amendment	Amendment Year	Distance	Direction
No records within buffer						

SEPP Strategic Land Use Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

LEP Planning Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Land Zoning

What Local Environmental Plan Land Zones exist within the dataset buffer?

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		47m	North West
IN1	General Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		136m	North West
SP2	Infrastructure	Road	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		190m	North
SP2	Infrastructure	Railway	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		194m	North West
B7	Business Park		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		249m	North East
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		304m	North East
IN1	General Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		347m	North East
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		350m	North
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		412m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		454m	North East
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		461m	North East
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		463m	North East
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		469m	North East
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		503m	North
B1	Neighbourhood Centre		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		534m	North East
SP1	Special Activities	Cemetery	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		615m	North East
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		656m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		679m	North East
SP2	Infrastructure	Telecommunications	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		679m	North
E3	Environmental Management		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		684m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		729m	North West
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		732m	West
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		760m	North
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		772m	North East
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		868m	North West
B1	Neighbourhood Centre		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		895m	North West
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		903m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		954m	North East

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	27/01/2012	27/01/2012	16/02/2018	Amendment No 10	978m	North East
B6	Enterprise Corridor		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		992m	North East
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		993m	North East

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Minimum Subdivision Lot Size

What are the onsite Local Environmental Plan Minimum Subdivision Lot Sizes?

Symbol	Minimum Lot Size	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Maximum Height of Building

What are the onsite Local Environmental Plan Maximum Height of Buildings?

Symbol	Maximum Height of Building	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Floor Space Ratio

What are the onsite Local Environmental Plan Floor Space Ratios?

Symbol	Floor Space Ratio	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Land Application

What are the onsite Local Environmental Plan Land Applications?

Application Type	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data						

Land Reservation Acquisition

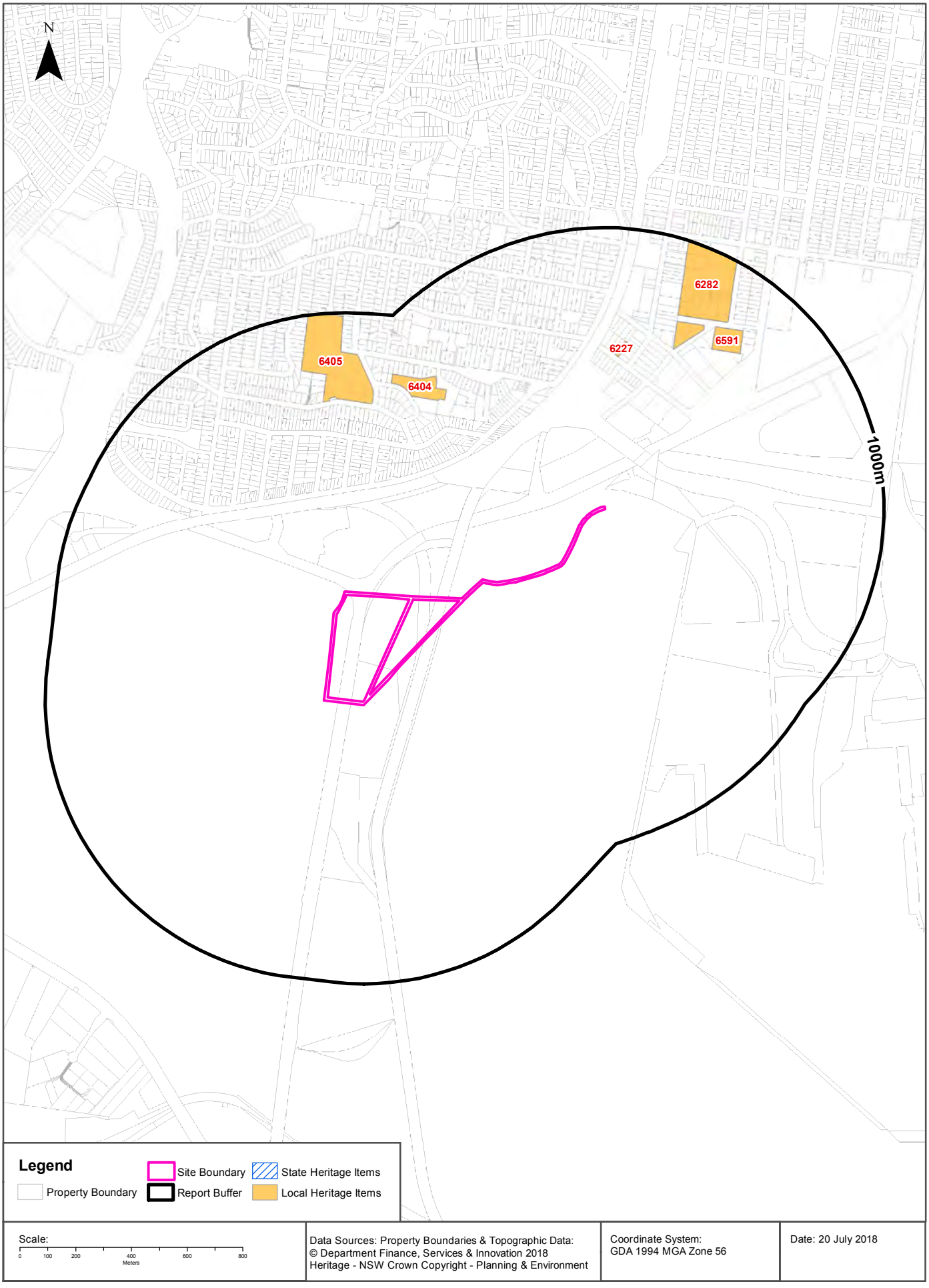
What are the onsite Local Environmental Plan Land Reservation Acquisitions?

Reservation	LEP	Published Date	Commenced Date	Currency Date	Amendment	Comments	Percentage of Site Area
No Data							

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Heritage Items

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Heritage

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

State Heritage Items

What are the State Heritage Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Heritage Items

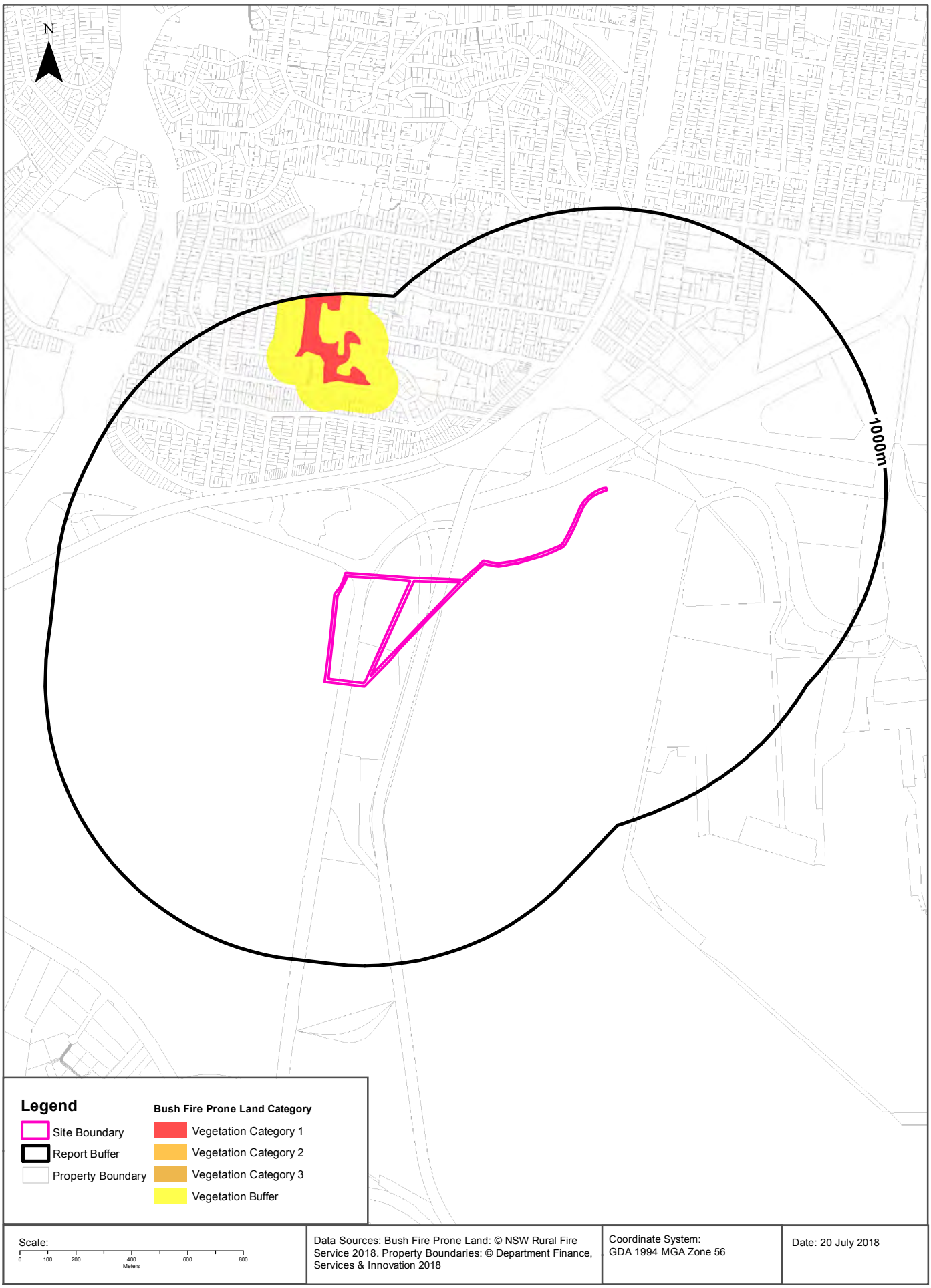
What are the Local Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	LEP or Act	Published Date	Commenced Date	Currency Date	Distance	Direction
6227	House	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	538m	North East
6282	Wollongong General Cemetery Including Nicholle Vault	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	615m	North East
6404	Stand Of Spotted Gum	Item - Landscape	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	658m	North
6405	Fort Drummond Including Stand Of Spotted Gum	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	679m	North
6591	Methodist Cemetery	Item - Landscape	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	682m	North East

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Natural Hazards - Bush Fire Prone Land

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Data Sources: Bush Fire Prone Land: © NSW Rural Fire Service 2018. Property Boundaries: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 20 July 2018

Natural Hazards

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Buffer	574m	North
Vegetation Category 1	673m	North

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & RAMSAR Wetlands

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Native Vegetation of the Illawarra Escarpment & Coastal Plain

What Native Vegetation of the Illawarra Escarpment & Coastal Plain exists within the dataset buffer?

Veg Code	Vegetation Community	Disturbance Class	Disturbance Type	Understorey	Broad Vegetation Type	Endangered Ecological Community	Distance	Direction
MU16	Escarpment Blackbutt Forest	Moderate Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		0m	Onsite
MU24	Lowland Woollybutt-Melaleuca Forest	Moderate Disturbance	Weeds	Melaleuca Dominant	Native Vegetation	Illawarra Coastal Grassy Woodlands	0m	Onsite
MU24	Lowland Woollybutt-Melaleuca Forest	Scattered Trees			Scattered Trees	Illawarra Coastal Grassy Woodlands	0m	Onsite
MU56c	Weeds and Exotics	Weeds and Exotics			Weeds and Exotics		0m	Onsite
MU56e	Modified Lands	Weeds and Exotics			Cleared		0m	Onsite
MU57a	Artificial Wetlands	Unassessed			Wetlands		0m	Onsite
MU16	Escarpment Blackbutt Forest	Scattered Trees			Scattered Trees		4m	North East
MU57f	Fig Trees	Scattered Trees			Scattered Trees		143m	South West
MU25	Spotted Gum Open Forest	High Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		221m	North
MU57e	Estuarine Lagoons and Channels	Unassessed			Wetlands		259m	East
MU53	Estuarine Alluvial Wetland	Unassessed			Native Vegetation	Sydney Coastal Estuary Swamp Complex	265m	North East
MU25	Spotted Gum Open Forest	Scattered Trees			Scattered Trees		505m	North
MU25	Spotted Gum Open Forest	High Disturbance	Weeds	Mesic/Rainforest Shrub Layer	Native Vegetation		589m	North
MU25	Spotted Gum Open Forest	High Disturbance			Native Vegetation		674m	North West
MU55a	Seagrass Meadows and Estuarine Flats	Unassessed			Seagrass		747m	East

Native Vegetation of the Illawarra Escarpment & Coastal Plain : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

RAMSAR Wetlands

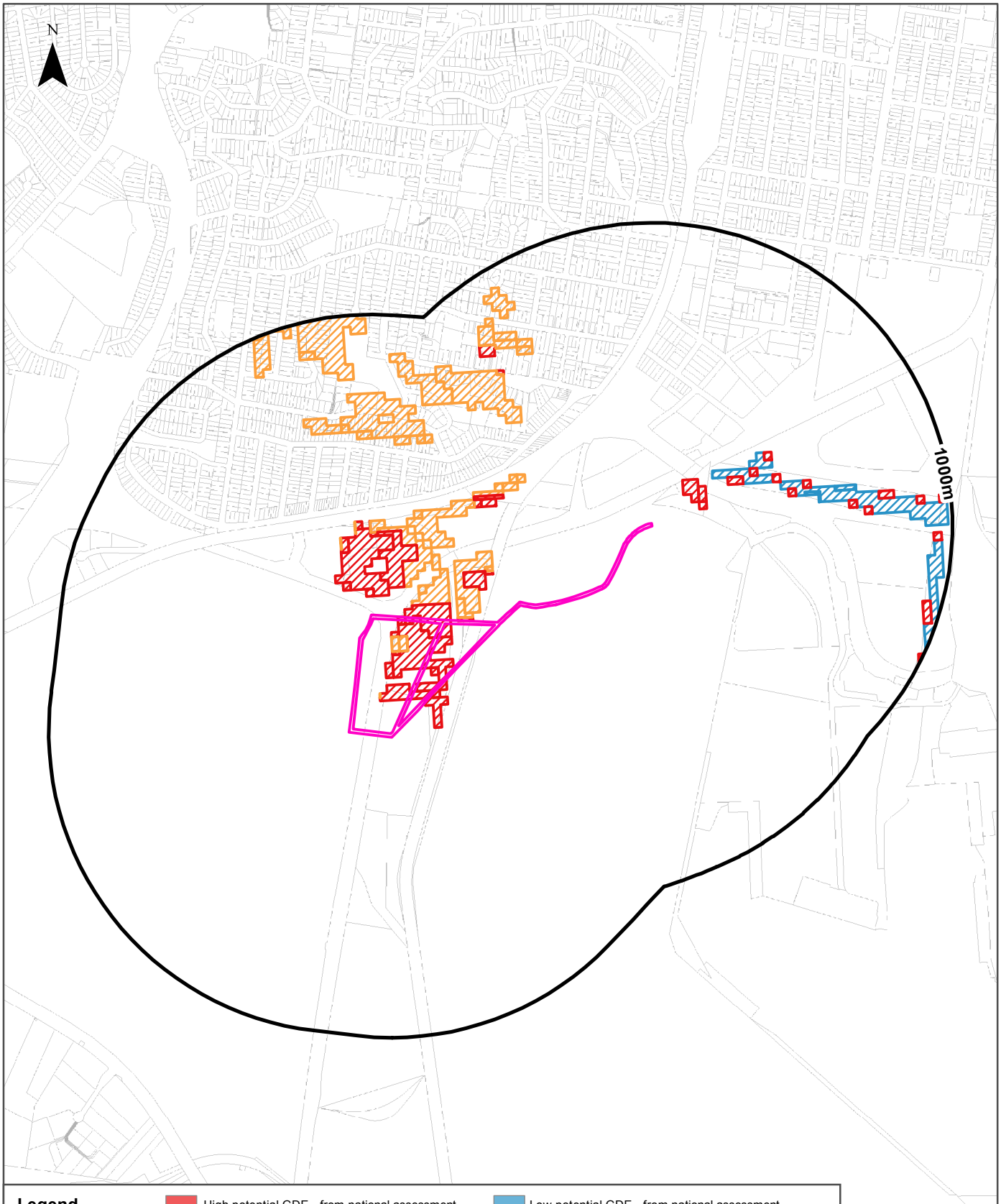
What RAMSAR Wetland areas exist within the dataset buffer?

Map Id	RAMSAR Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

RAMSAR Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

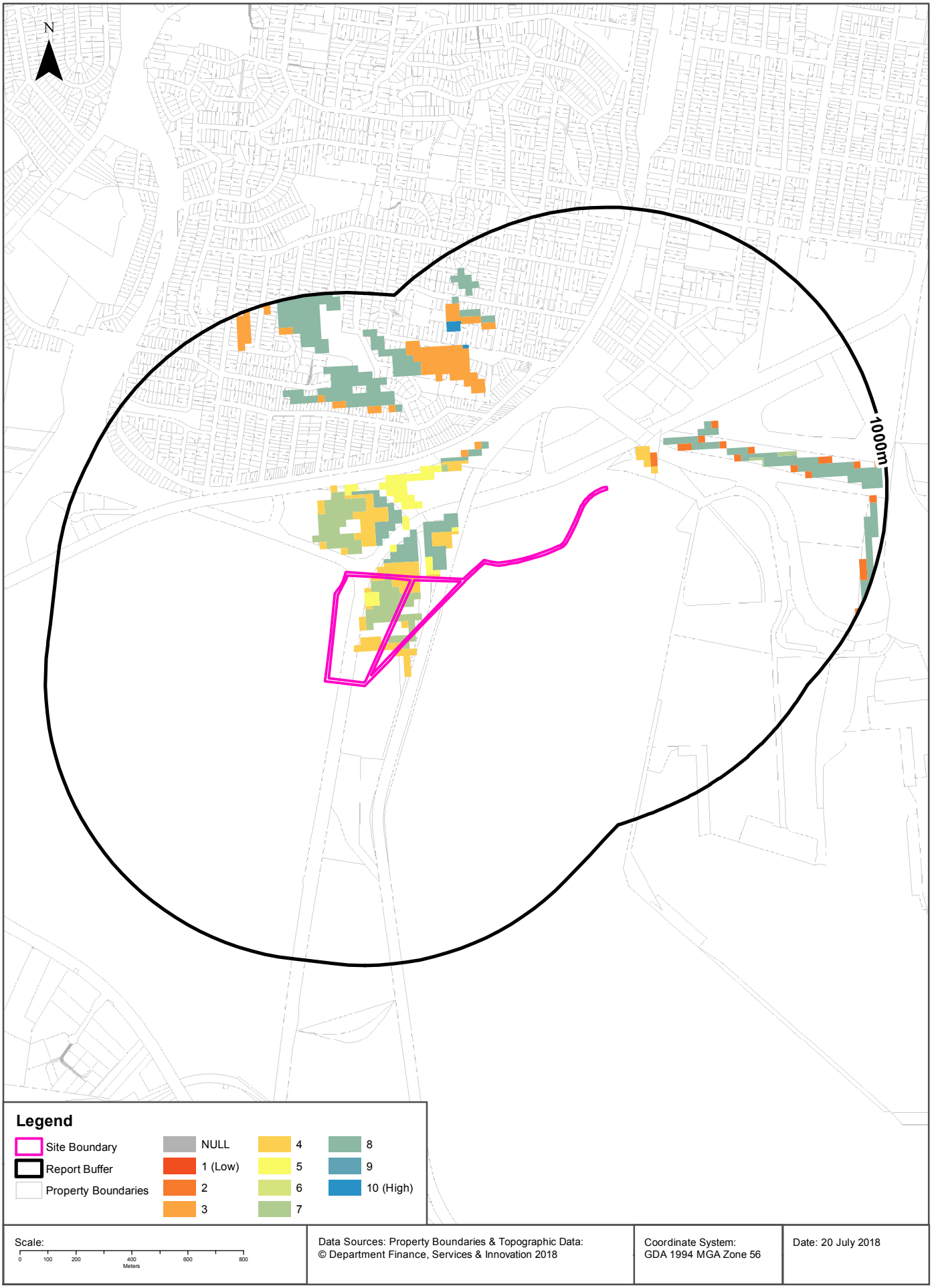
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	High potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	High potential GDE - from regional studies	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		0m
Terrestrial	Moderate potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		8m
Terrestrial	Low potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		252m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	7	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		0m
Terrestrial	5	Deeply dissected sandstone plateaus.	Vegetation		8m
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation		25m
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation		173m
Terrestrial	3	Deeply dissected sandstone plateaus.	Vegetation		374m
Terrestrial	10	Deeply dissected sandstone plateaus.	Vegetation		680m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 3)

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Heleioporus australiacus	Giant Burrowing Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria littlejohni	Littlejohn's Tree Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calonectris leucomelas	Streaked Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Coracina lineata	Barred Cuckoo-shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Diomedea gibsoni	Gibson's Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Thalassarche impavida	Campbell Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche salvini	Salvin's Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Miniopterus australis	Little Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Mormopterus norfolkensis	Eastern Freetail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Petaurus australis	Yellow-bellied Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Physeter macrocephalus	Sperm Whale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Arthropteris palisotii	Lesser Creeping Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Chorizema parviflorum	Eastern Flame Pea	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Epacris purpurascens subsp. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus largeana	Craven Grey Box	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Gossia acmenoides	Scrub Ironwood	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Parsonsia dorrigoensis	Milky Silkpod	Vulnerable	Not Sensitive	Endangered	
Plantae	Flora	Persoonia glaucescens	Mittagong Geebung	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Persoonia nutans	Nodding Geebung	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Solanum celatum		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Zieria granulata	Illawarra Zieria	Endangered	Not Sensitive	Endangered	

Data does not include NSW category 1 sensitive species.

NSW BioNet: © State of NSW and Office of Environment and Heritage

Data obtained 20/07/2018

USE OF REPORT – APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report. The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available (**Third Party Content Suppliers**);
      (j) content which is derived from content described in paragraph (i);
   (b) Lotsearch does not take any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**);
   (d) Lotsearch has not undertaken any physical inspection of the property;
   (e) Lotsearch does not warrant that all land uses or features whether past or current are identified in the Report;
   (f) the Report does not include any information relating to the actual state or condition of the Property;
   (g) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of a Property for any particular purpose;
   (h) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (i) the End User should undertake its own inspection s of the Property to satisfy itself that there are no defects or failures.
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
5. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
6. To the extent permitted by law and subject to paragraph 7, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these terms other than as expressly set out in these terms are excluded.
7. Subject to paragraph 8, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
8. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
9. Subject to paragraph 7, neither Lotsearch nor the End User is liable to the other for any indirect, incidental,consequential, special or exemplary damages arising out of or in relation to these terms.
10. These terms are subject to New South Wales law.

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 19 Jul 2018 20:08:37

Reference: LS003867

Address: Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Table of Contents

Location Confidences 2
Dataset Listings 3
Site Location Aerial 5
Contaminated Land & Waste Management Facilities 6
EPA PFAS Investigation Program 9
EPA Other Sites with Contamination Issues 10
EPA Current Licensed Activities 11
EPA Delicensed & Former Licensed Activities 14
UPSS Sensitive Zones 17
Historical Business Activities 18
Historical Aerial Imagery & Maps 27
Topographic Features 39
Elevation Contours 43
Hydrogeology & Groundwater 44
Geology 51
Naturally Occurring Asbestos Potential 53
Soils 54
Acid Sulfate Soils 58
Dryland Salinity 61
Mining Subsidence Districts 62
State Environmental Planning 63
Local Environmental Planning 65
Heritage 69
Natural Hazards 71
Ecological Constraints 73
Terms & Conditions 83

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
1	Georeferenced to the site location / premise or part of site
2	Georeferenced with the confidence of the general/approximate area
3	Georeferenced to the road or rail
4	Georeferenced to the road intersection
5	Feature is a buffered point
6	Land adjacent to Georeferenced Site
7	Georeferenced to a network of features

Dataset Listing

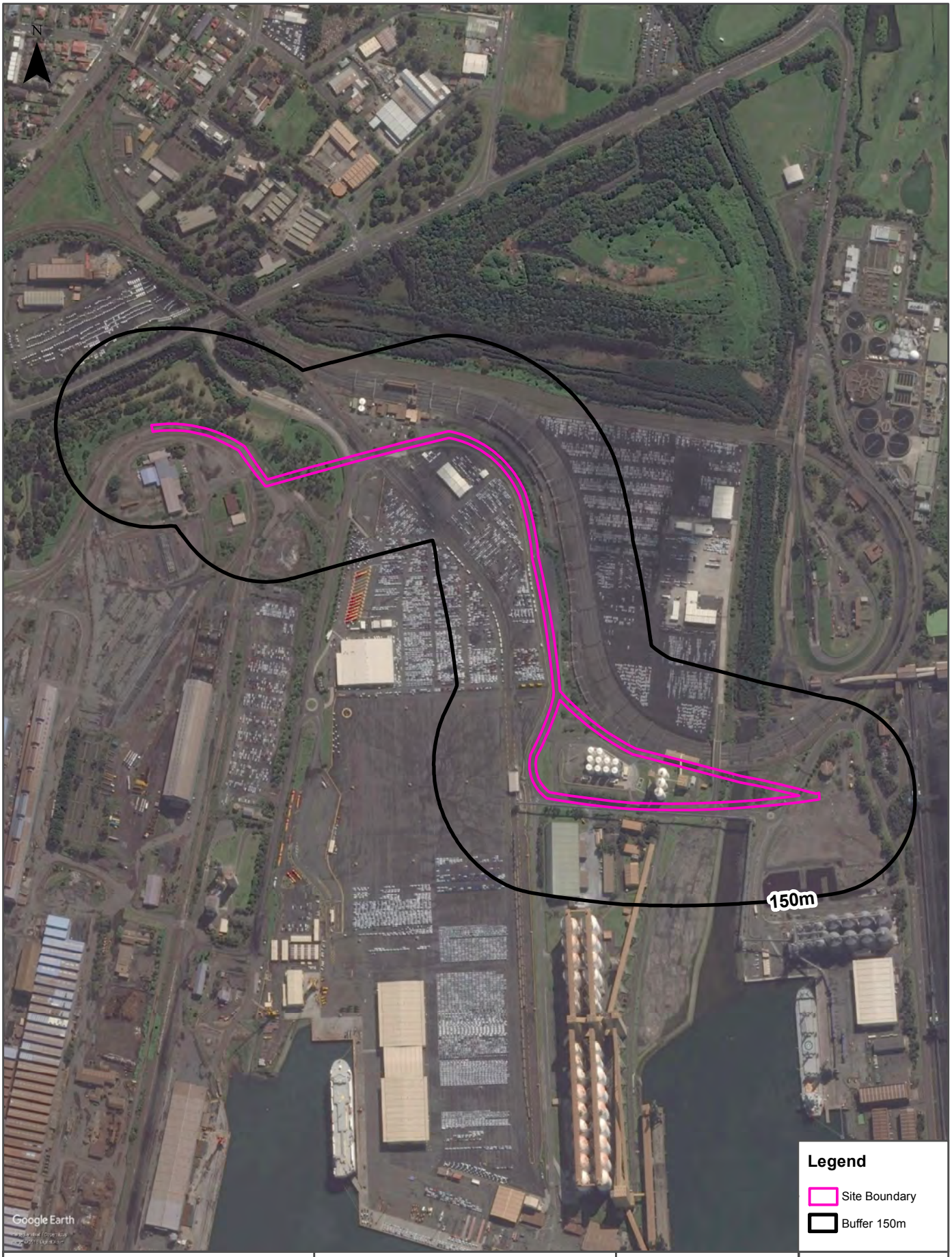
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	Dept. Finance, Services & Innovation	19/07/2018	19/07/2018	Daily	-	-	-	-
Topographic Data	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	06/07/2018	02/07/2018	Monthly	1000	1	1	4
Contaminated Land Records of Notice	Environment Protection Authority	06/07/2018	06/07/2018	Monthly	1000	1	1	3
Former Gasworks	Environment Protection Authority	04/07/2018	11/10/2017	Monthly	1000	0	0	0
National Waste Management Site Database	Geoscience Australia	04/07/2018	07/03/2017	Quarterly	1000	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	04/07/2018	04/07/2018	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	11/01/2018	11/01/2018	Quarterly	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	22	25	27
Delicensed POEO Activities still Regulated by the EPA	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	1	1	3
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	4	6	14
UPSS Environmentally Sensitive Zones	Environment Protection Authority	14/04/2015	12/01/2010	As required	1000	1	1	1
UBD Business Directory 1982 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1982 (Road & Area Matches)	Hardie Grant			Not required	150	-	2	2
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	2	2
UBD Business Directory 1961 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1961 (Road & Area Matches)	Hardie Grant			Not required	150	-	16	16
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	0	4
Points of Interest	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	25
Tanks (Areas)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	0
Tanks (Points)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	2	2
Major Easements	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	1000	1	1	2
State Forest	Dept. Finance, Services & Innovation	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	18/01/2018	30/09/2017	Annually	1000	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Botany Groundwater Management Zones	NSW Department of Primary Industries	15/03/2018	01/10/2005	As required	1000	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	21/03/2016	01/12/2015	Annually	2000	0	0	43
Geological Units 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	1	-	5
Geological Structures 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Soil Landscapes	NSW Office of Environment & Heritage	12/08/2014		None planned	1000	2	-	4
Atlas of Australian Soils	CSIRO	19/05/2017	17/02/2011	As required	1000	2	2	2
Standard Local Environmental Plan Acid Sulfate Soils	NSW Planning and Environment	07/10/2016	07/10/2016	As required	500	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	2	2	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Office of Environment & Heritage	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	Dept. Finance, Services & Innovation	13/07/2017	01/07/2017	As required	1000	0	0	0
SEPP 14 - Coastal Wetlands	NSW Planning and Environment	17/12/2015	24/10/2008	Annually	1000	0	0	0
SEPP 26 - Littoral Rainforest	NSW Planning and Environment	17/12/2015	05/02/1988	Annually	1000	0	0	0
SEPP 71 - Coastal Protection	NSW Planning and Environment	17/12/2015	01/08/2003	Annually	1000	1	1	1
SEPP Major Developments 2005	NSW Planning and Environment	09/03/2013	25/05/2005	Under Review	1000	1	1	1
SEPP Strategic Land Use Areas	NSW Planning and Environment	01/08/2017	28/01/2014	Annually	1000	0	0	0
LEP - Land Zoning	NSW Planning and Environment	11/04/2018	16/03/2018	Quarterly	1000	0	0	30
LEP - Minimum Subdivision Lot Size	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Height of Building	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Floor Space Ratio	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Application	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Reservation Acquisition	NSW Planning and Environment	04/04/2018	09/03/2018	Quarterly	0	0	-	-
State Heritage Items	NSW Office of Environment & Heritage	04/04/2018	30/09/2016	Quarterly	1000	0	0	0
Local Heritage Items	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	1000	0	0	5
Bush Fire Prone Land	NSW Rural Fire Service	10/05/2018	23/01/2018	Quarterly	1000	0	0	2
Native Vegetation of the Illawarra Escarpment & Coastal Plain	NSW Office of Environment & Heritage	20/05/2015	04/08/2011	Unknown	1000	3	4	16
RAMSAR Wetlands	Commonwealth of Australia Department of the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	2	3	4
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	2	4	9
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	19/07/2018	19/07/2018	Daily	10000	-	-	-

Aerial Imagery 2017

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1086	No 2 Steelworks	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	0m	Onsite
1474	Greenhouse Park	Springhill Road	Wollongong	Landfill	Regulation being finalised	Current EPA List	Premise Match	172m	North
7186	Port Kembla Steelworks Recycling Area	Springhill Road	Port Kembla	Unclassified	Regulation under CLM Act not required	Current EPA List	Premise Match	961m	West
1079	BHP Area 21	Springhill Road	Port Kembla	Metal Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	961m	West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
181	No 2 Steelworks	Five Islands Road	Port Kembla	4 former	3337	Premise Match	0m	Onsite
387	Greenhouse Park	Springhill Road	Wollongong	1 current	3415	Premise Match	172m	North
180	BHP Area 21	Springhill Road	Port Kembla	1 former	3121	Premise Match	961m	West

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

EPA PFAS Investigation Program

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

EPA Other Sites with Contamination Issues

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

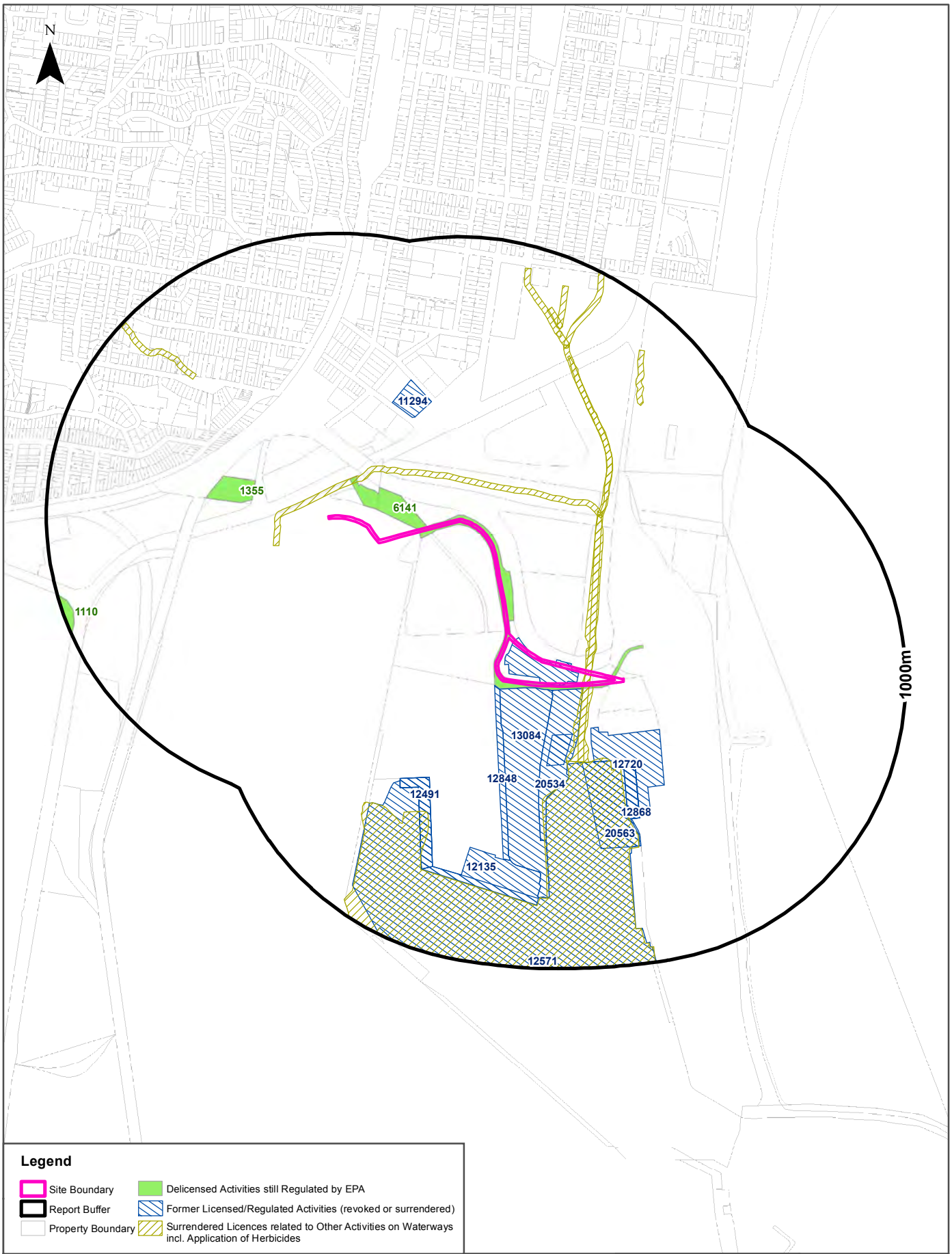
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
20532	Quattro P RE Services Pty Ltd		Tom Thumb Road, PORT KEMBLA, NSW 2505		Other activities	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Agricultural fertiliser (inorganic) production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime handling	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coal works	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coke production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Crushing, grinding or separating	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Dangerous goods production	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	General chemicals storage	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Generation of electrical power from gas	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Iron or steel production (iron ore)	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Mineral processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Railway systems activities	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of general waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of waste tyres	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Scrap metal processing	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - other types of waste	Premise Match	0m	Onsite
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - waste tyres	Premise Match	0m	Onsite

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
3693	GRAINCORP OPERATIONS LIMITED	PORT KEMBLA GRAIN TERMINAL	MORTON WAY	PORT KEMBLA	Shipping in bulk	Premise Match	0m	Onsite
3142	AUSTRALIAN RAIL TRACK CORPORATION LIMITED		GPO BOX 14, SYDNEY, NSW 2001		Railway systems activities	Network of Features	0m	Onsite
13421	JOHN HOLLAND RAIL PTY LTD		PO Box 215 , PARRAMATTA, NSW 2124		Railway systems activities	Road Match	0m	Onsite
1625	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA ROAD	WOLLONGONG	Coal works	Premise Match	3m	South East
1625	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA ROAD	WOLLONGONG	Shipping in bulk	Premise Match	3m	South East
3578	AUSTRALIAN AMALGAMATED TERMINALS PTY LIMITED	AAT FACILITY	FARRER ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	30m	South
218	SYDNEY WATER CORPORATION	WOLLONGONG SEWAGE TREATMENT SYSTEM	PORT KEMBLA ROAD	WOLLONGONG	Sewage treatment processing by large plants	Premise Match	421m	North East
3577	PORT KEMBLA OPERATIONS PTY LIMITED	BERTH 104	MORTON WAY	PORT KEMBLA	Shipping in bulk	Premise Match	463m	South

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6141	PACIFIC NATIONAL (NSW) PTY LTD	ILLAWARRA BULK TERMINAL	TOM THUMB ROAD	PORT KEMBLA	Hazardous, Industrial or Group A Waste Generation or Storage	Road Match	0m	Onsite
1355	CLEARY BROS (BOMBO) PTY LTD	CLEARY BROS CONCRETE	8 JOHN CLEARY PLACE	CONISTON	Concrete works	Premise Match	276m	North West
1110	BITUPAVE LTD	BORAL ASPHALT	SPRINGHILL ROAD	PORT KEMBLA	Bitumen mixing	Premise Match	961m	West

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
13084	DONNELLEY CIVIL PTY LIMITED	Morton Way and Tom Thumb Road, PORT KEMBLA, NSW 2505	Surrendered	05/05/2009	Other activities	Premise Match	0m	Onsite
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
20534	WATERWAY CONSTRUCTIONS PTY LTD	, Inner Harbour, PORT KEMBLA, NSW 2505,	Surrendered	20/11/2014	Other activities	Premise Match	10m	South East
12848	WATERWAY CONSTRUCTIONS PTY LTD	FARRER ROAD, PORT KEMBLA, NSW 2505	Surrendered	01/02/2008	Miscellaneous licensed discharge to waters (at any time)	Road Match	29m	South
20563	BOSKALIS AUSTRALIA PTY LIMITED	, Tom Thumb Road, PORT KEMBLA, NSW 2505,	Surrendered	07/04/2015	Water-based extractive activity	Premise Match	170m	South East
12571	BOSKALIS AUSTRALIA PTY LIMITED	Five Islands Road, PORT KEMBLA, NSW 0	Surrendered	30/01/2007	Water-based extractive activity	General Area/ Suburb Match	271m	South
12720	GEORGIOU GROUP PTY LTD	Tom Thumb Road, PORT KEMBLA, NSW 2505	Surrendered	05/07/2007	Water-based extractive activity	Premise Match	274m	South East
12868	MAINLAND CIVIL PTY LIMITED	FORESHORE ROAD, PORT KEMBLA, NSW 2505	Surrendered	14/03/2008	Miscellaneous licensed discharge to waters (at any time)	Premise Match	274m	South East

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
11294	ENDEAVOUR ENERGY	BRIDGE STREET, CONISTON, NSW 2500	Surrendered	03/01/2001	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	388m	North
12135	AUSTRAL CONSTRUCTION PTY. LTD.	Farrer Road, PORT KEMBLA, NSW 2505	Surrendered	26/05/2004	Coal Washery Reject or Slag Landfilling	Premise Match	429m	South
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Coal Washery Reject or Slag Landfilling	Premise Match	429m	South
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Land-based extractive activity	Premise Match	429m	South

Former Licensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

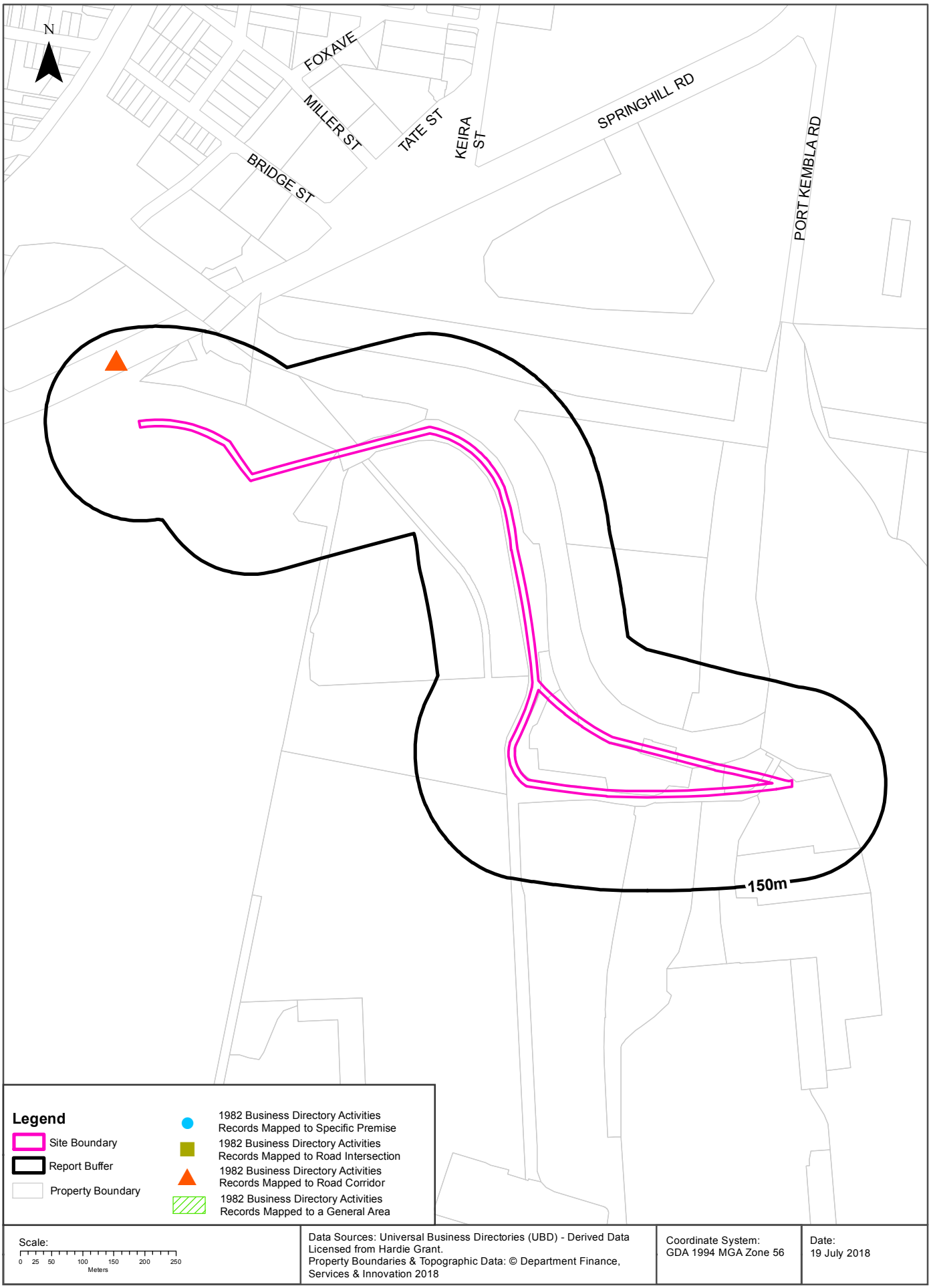
UPSS Sensitive Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



1982 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Business Directory Records
Road or Area Matches

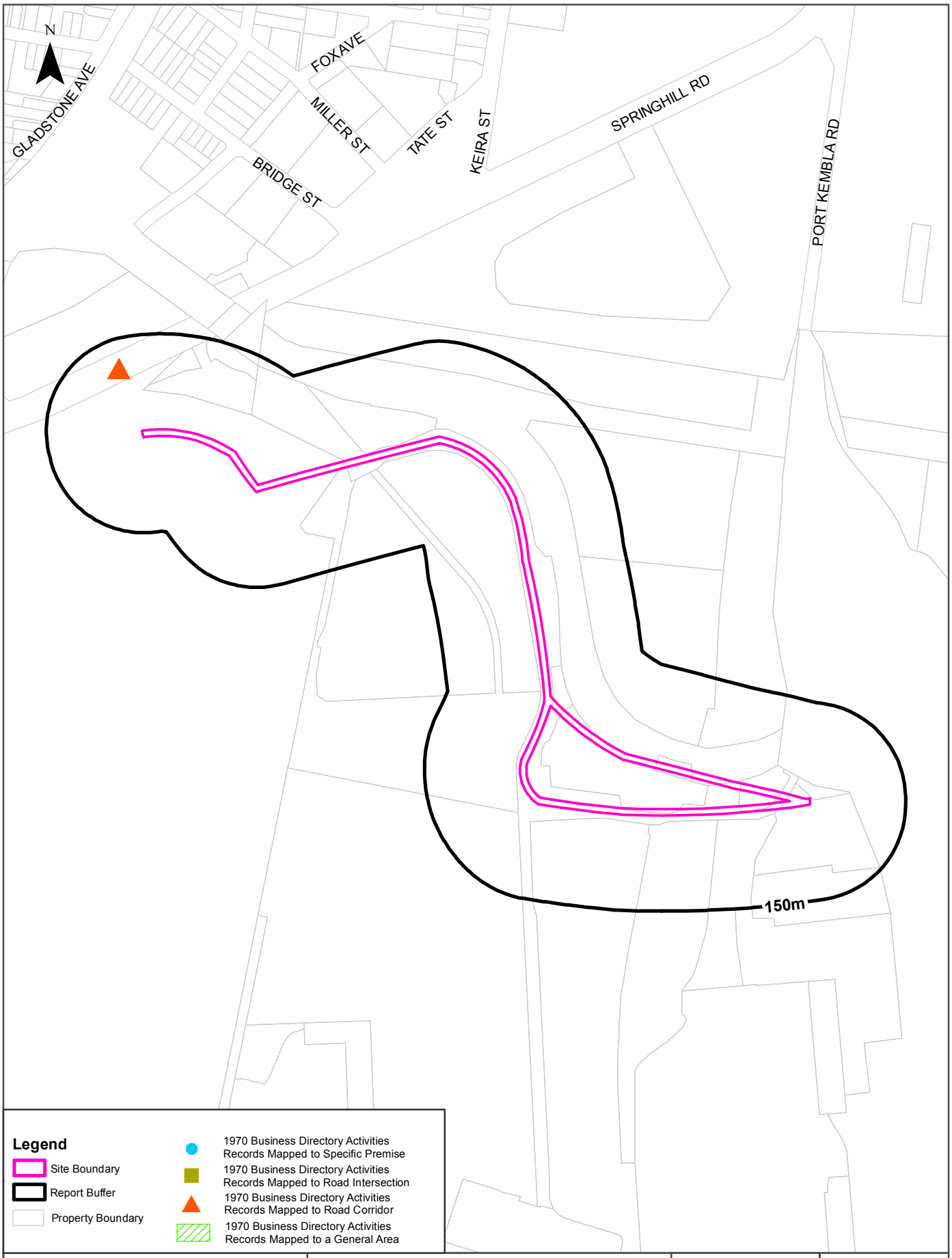
Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
STEEL ROLLING MILLS	Australian Iron & Steel Pty. Ltd., Springhill Rd., Port Kembla., Wollongong	145157	Road Match	83m
CONCRETE - READY MIXED - SUPPLIERS	Cleary Bros. Concrete, Springhill Rd.. Coniston., Wollongong	140192	Road Match	83m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Business Directory Records
Road or Area Matches

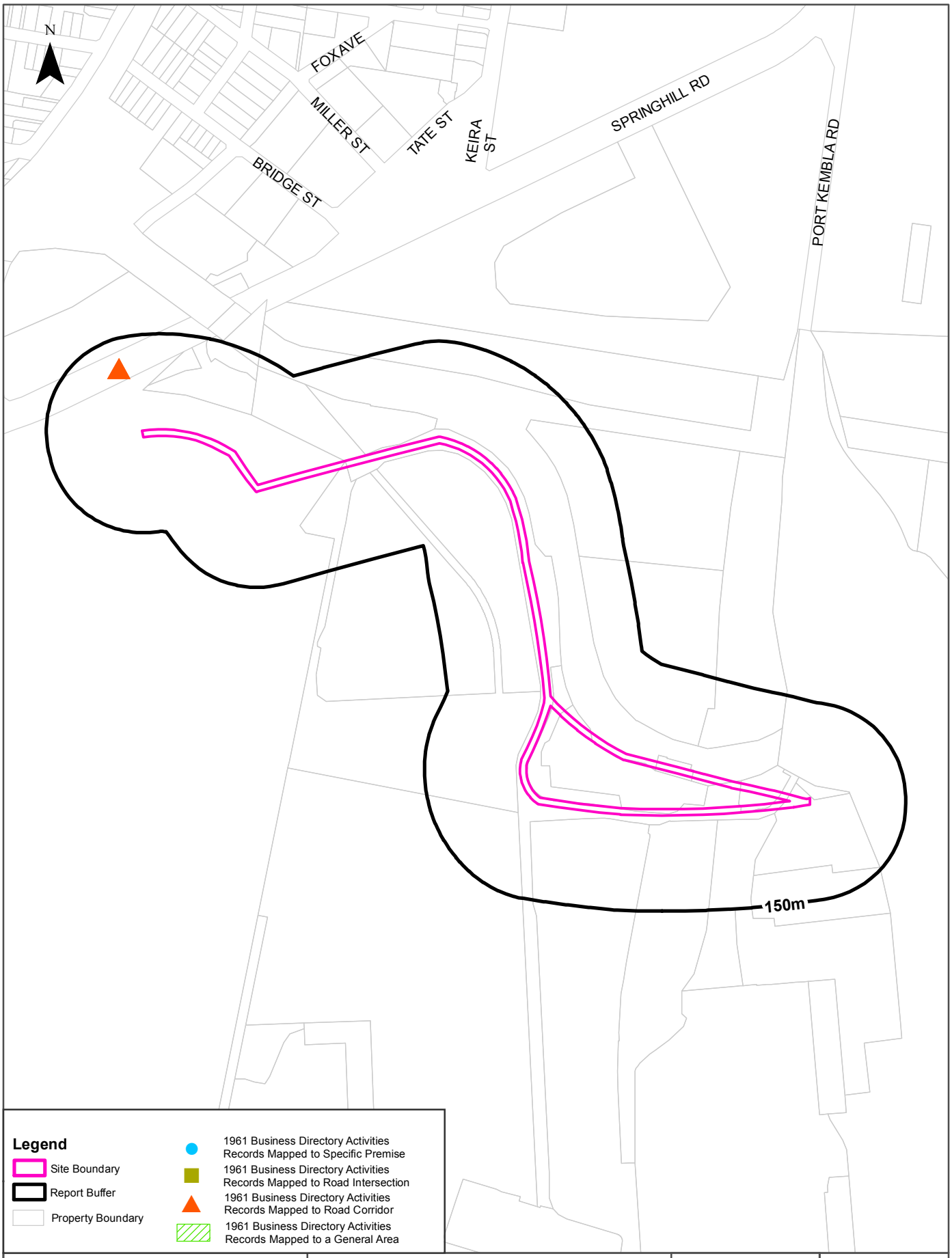
Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
ELECTRICAL CONTRACTORS-LICENSED	Transfield Pty. Ltd., Springhill Rd., Port Kembla Wollongong	562249	Road Match	83m
ENGINEERS-ELECTRICAL	Transfield Pty. Ltd., Springhill Rd., Port Kembla Wollongong	562484	Road Match	83m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Historical Business Directory Records

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

1961 Business Directory Records
Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Business Directory Records
Road or Area Matches

Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
GALVANIZED IRON MANUFACTURERS	Stewarts & Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston, Wollongong	237099	Road Match	83m
STEEL MERCHANTS-GENERAL	Stewarts & Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston. , Wollongong	241112	Road Match	83m
COPPER TUBING DISTRIBUTORS	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	235429	Road Match	83m
PIPE & PIPE FITTINGS MFRS./DISTS.	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	240132	Road Match	83m
STEEL TUBING MFRS. &/OR DISTRIBUTORS	Stewarts & Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	241129	Road Match	83m
TUBE BENDERS	Stewarts & Lloyds Distributors Pty. Ltd., Springhill Rd., Coniston, Wollongong	241493	Road Match	83m
COPPER TUBING DISTRIBUTORS	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	235421	Road Match	83m
PIPE & PIPE FITTINGS MFRS./DISTS.	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	240127	Road Match	83m
PLASTIC PIPE MANUFACTURERS	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	240174	Road Match	83m
STEEL TUBING MFRS. &/OR DISTRIBUTORS	Stewarts and Lloyds (Distributors) Pty Limited., Springhill Rd., Coniston , Wollongong	241127	Road Match	83m
WELDING EQUIPMENT & SUPPLIES MFRS. & DISTRIBUTORS	Stewarts and Lloyds (Distributors) Pty. Limited., Springhill Rd., Coniston, Wollongong	241730	Road Match	83m
PLUMBERS, GASFITTERS & DRAINLAYERS	Stewarts and Lloyds (Distributors) Pty. Ltd., Spring Hill Rd., Coniston, Wollongong	240220	Road Match	83m
ENGINEERS-FABRICATING	Stewarts and Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	236275	Road Match	83m
HARDWARE DEALERS & IRONMONGERS	Stewarts and Lloyds (Distributors) Pty. Ltd., Springhill Rd., Coniston, Wollongong	237634	Road Match	83m
ELECTRICAL CONTRACTORS-LICENSED	Transfield Pty. Ltd., Springhill Rd., Port Kembla, Wollongong	236004	Road Match	83m
ENGINEERS-ELECTRICAL	Transfield Pty. Ltd., Springhill Rd., Port Kembla, Wollongong	236233	Road Match	83m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Business Directory Records
Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

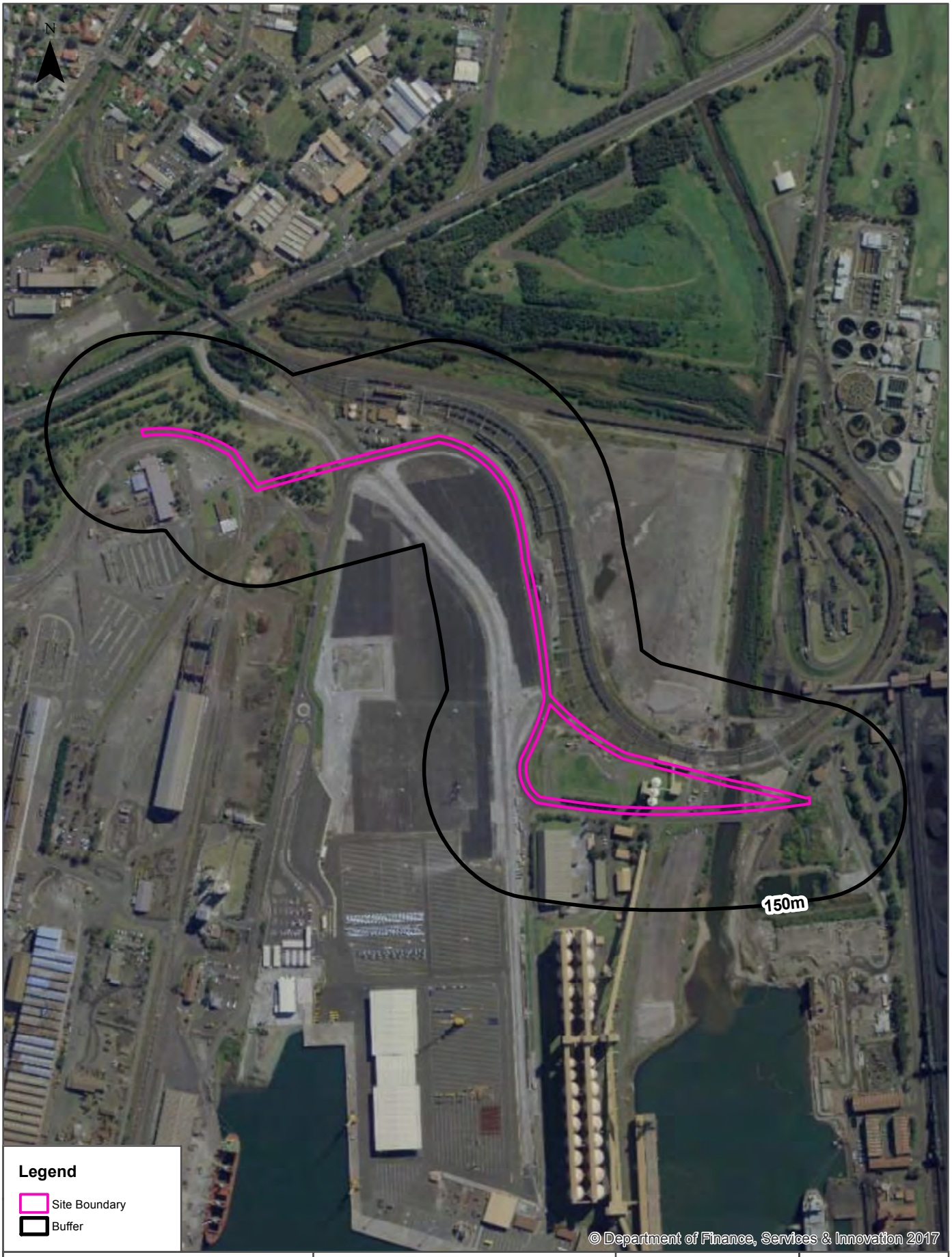
Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Wilhelm, B. Automotive, Keira St., Wollongong	143373	1982	Road Match	403m
MOTOR GARAGES &/OR ENGINEERS	BP Coniston Service Station, Gladstone Ave., Coniston Wollongong	565463	1970	Road Match	459m
MOTOR SERVICE STATIONS-PETROL, OILS, Etc.	BP Coniston Service Station, Gladstone Ave., Coniston Wollongong	565736	1970	Road Match	459m
MOTOR GARAGES &/OR ENGINEERS &/OR SERVICE STATIONS	Golf Course Service Station, 112 Auburn St., Wollongong	143285	1982	Road Match	500m

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Aerial Imagery 2016

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

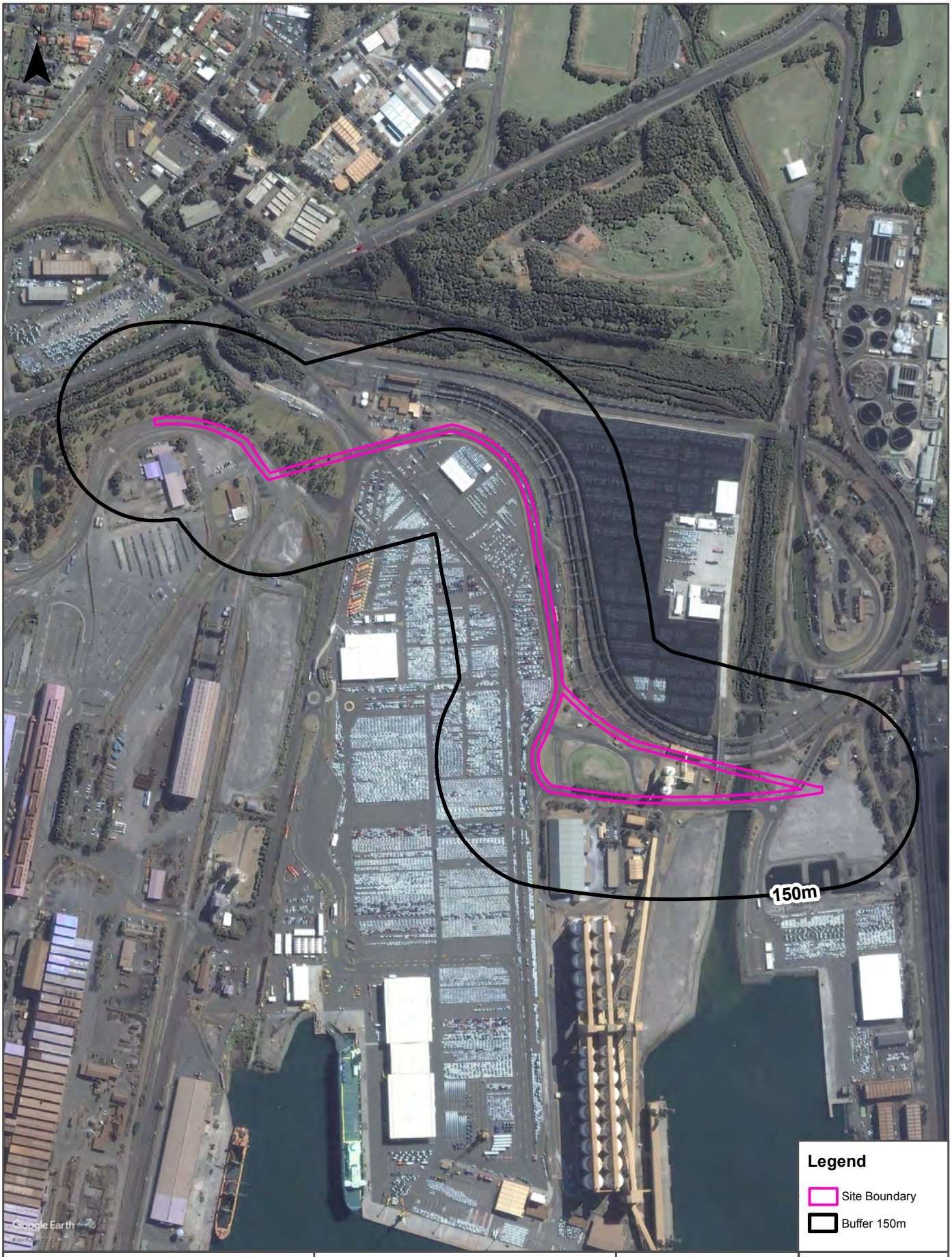


Scale:	Data Sources: Aerial Imagery © Department Finance, Services & Innovation	Coordinate System: GDA 1994 MGA Zone 56	Date: 19 July 2018

0 50 100 200 300 400
Meters

Aerial Imagery 2013

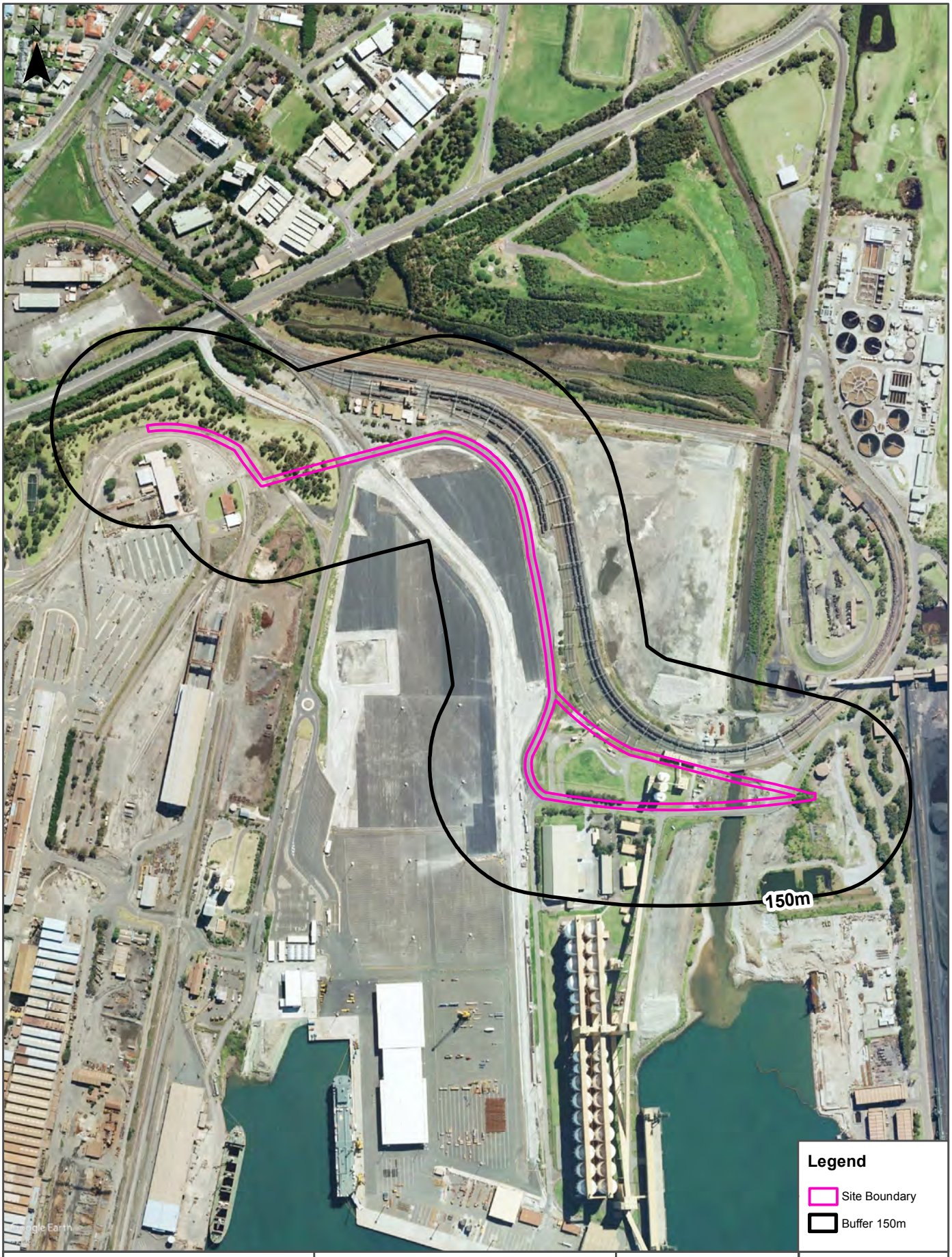
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Scale: 0 100 200 400 Meters	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

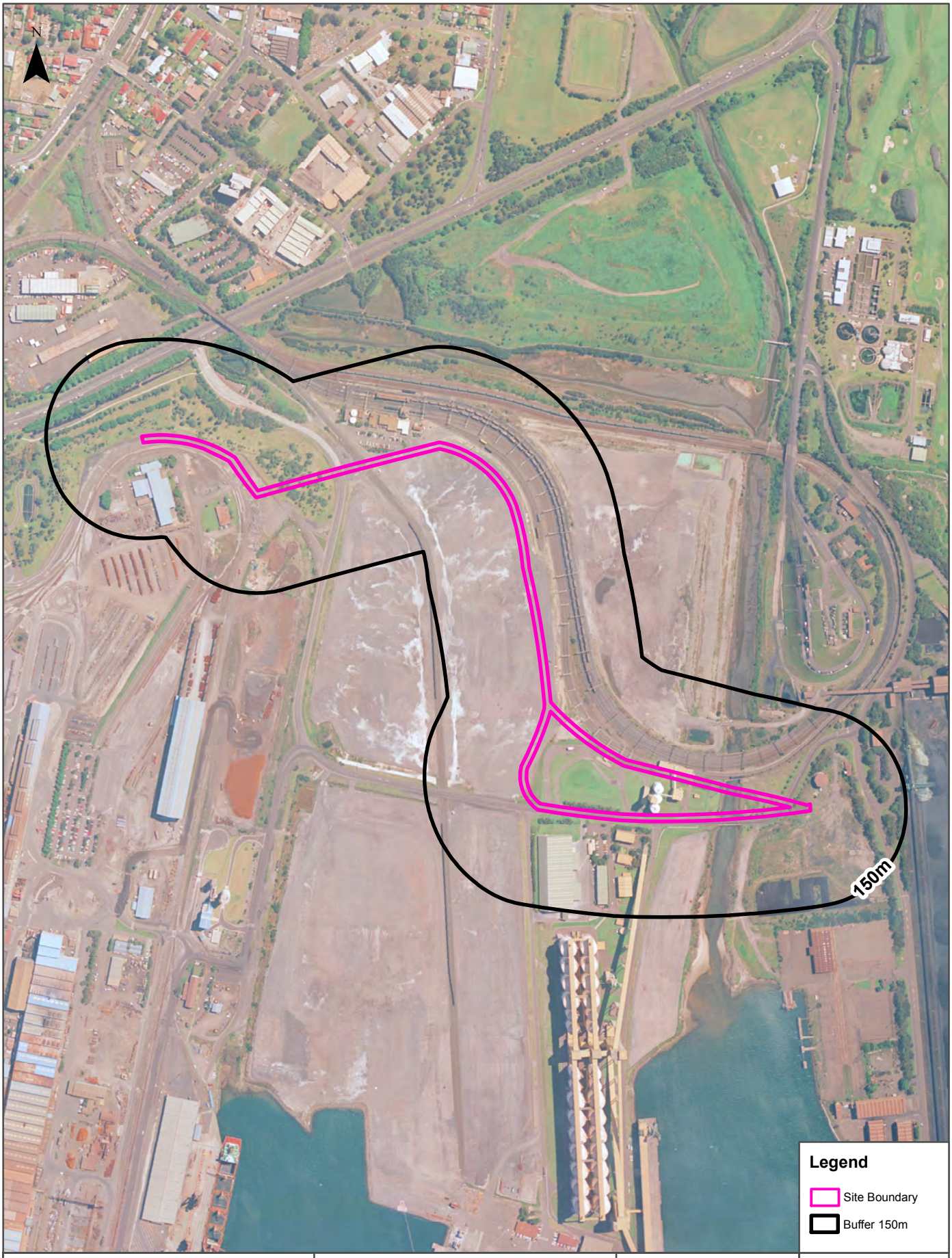
Aerial Imagery 2008

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



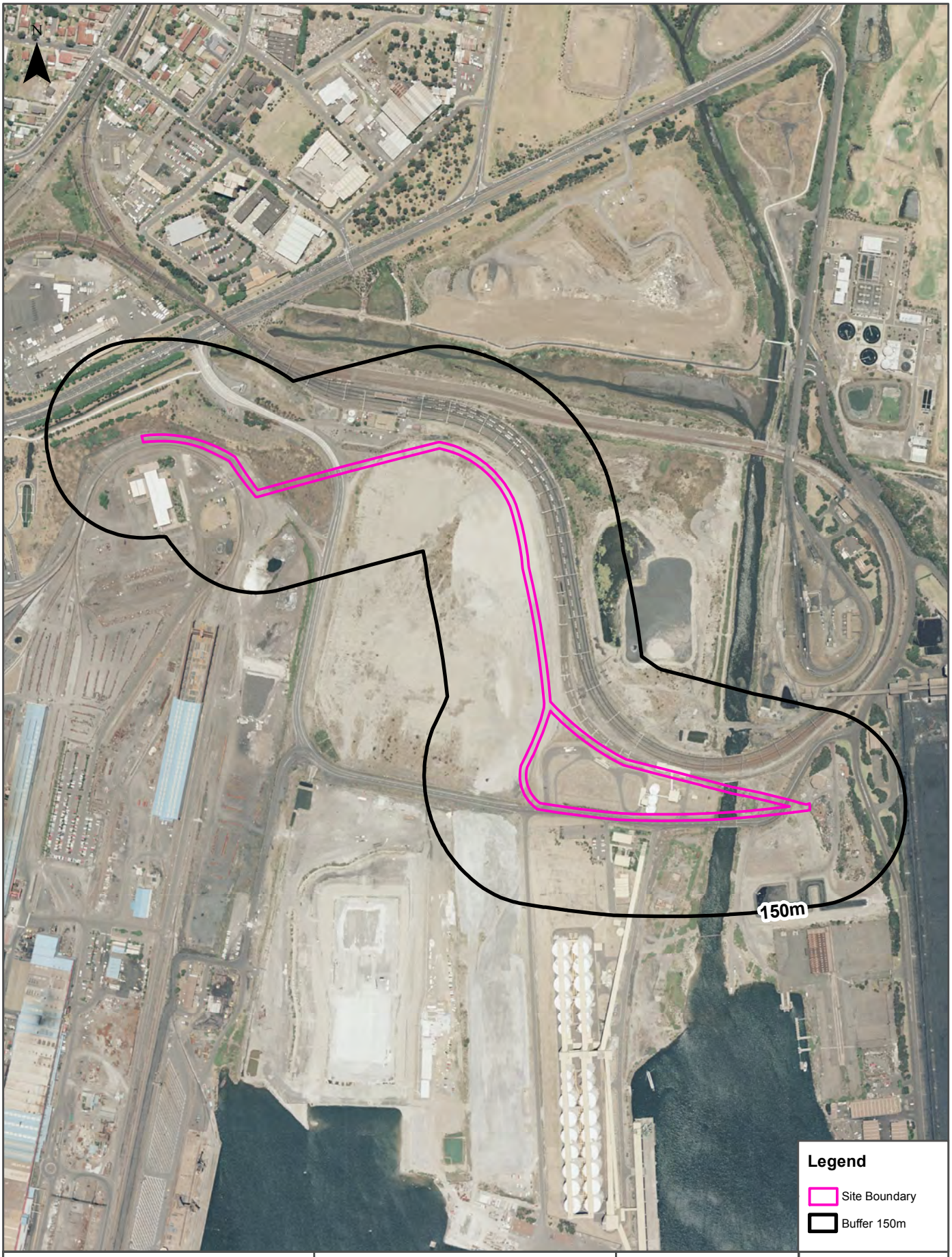
Aerial Imagery 2002

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Aerial Imagery 1994

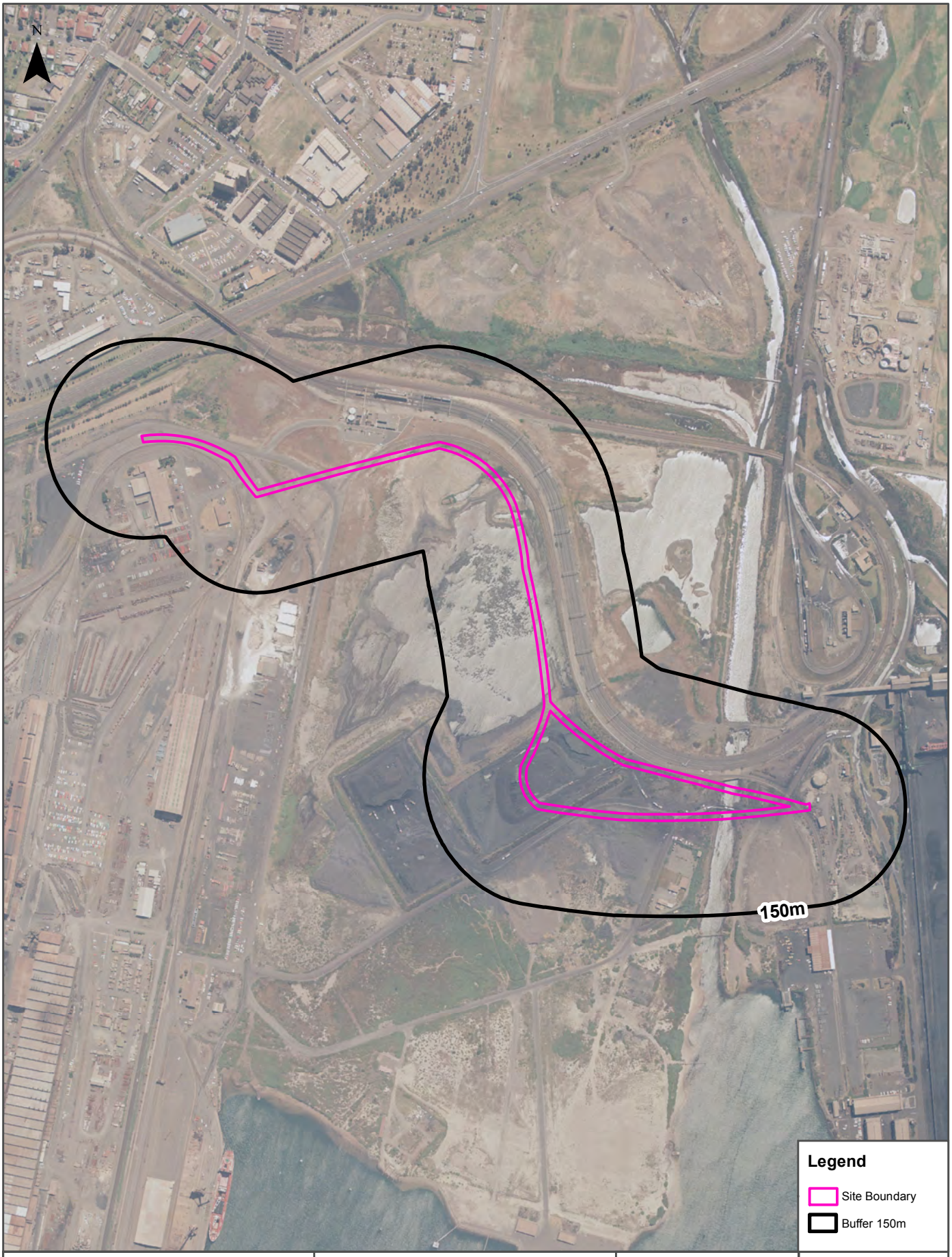
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 17 July 2018
0 100 200 400 Meters	© NSW Department Finance, Services & Innovation	GDA 1994 MGA Zone 56	

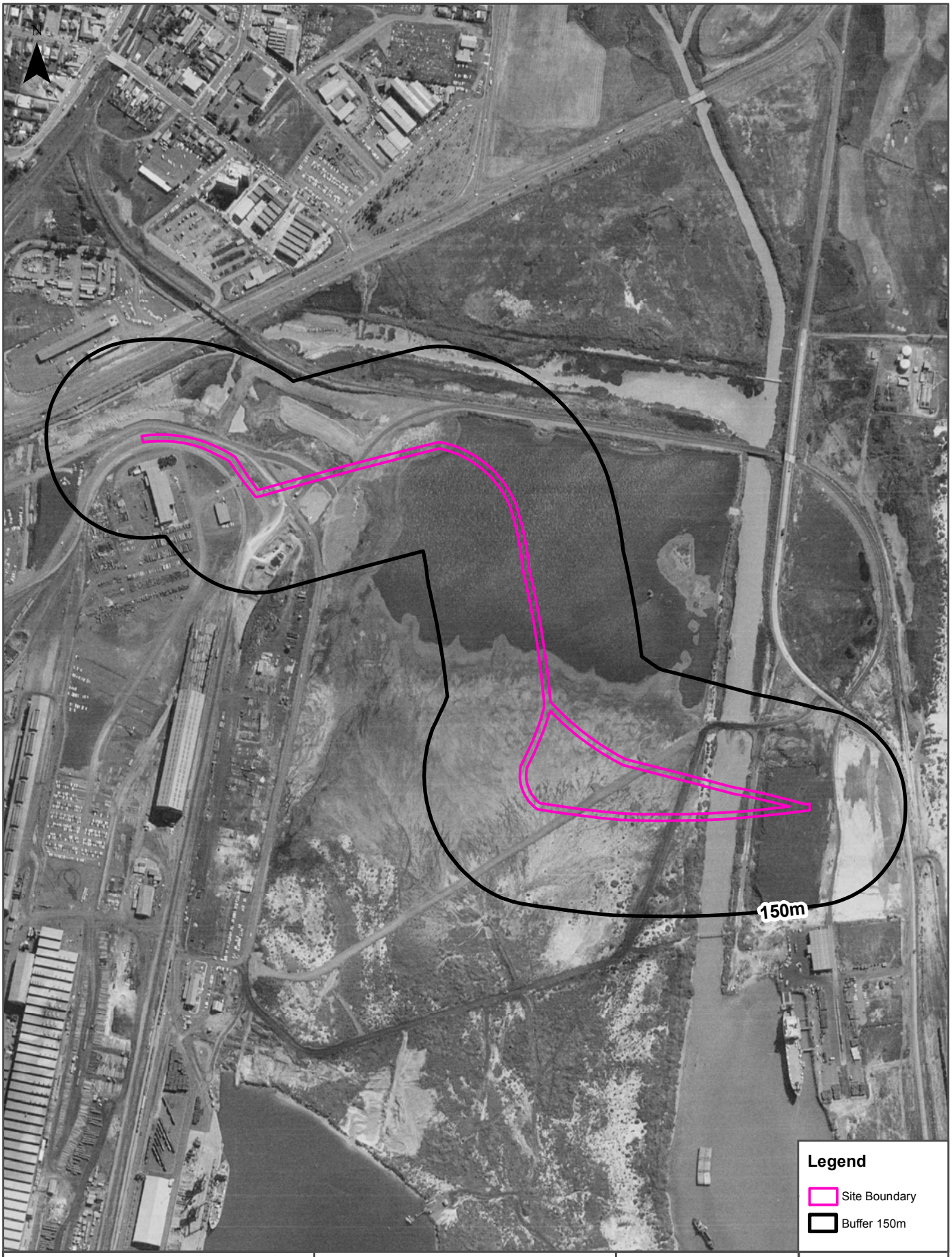
Aerial Imagery 1984

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Aerial Imagery 1975

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



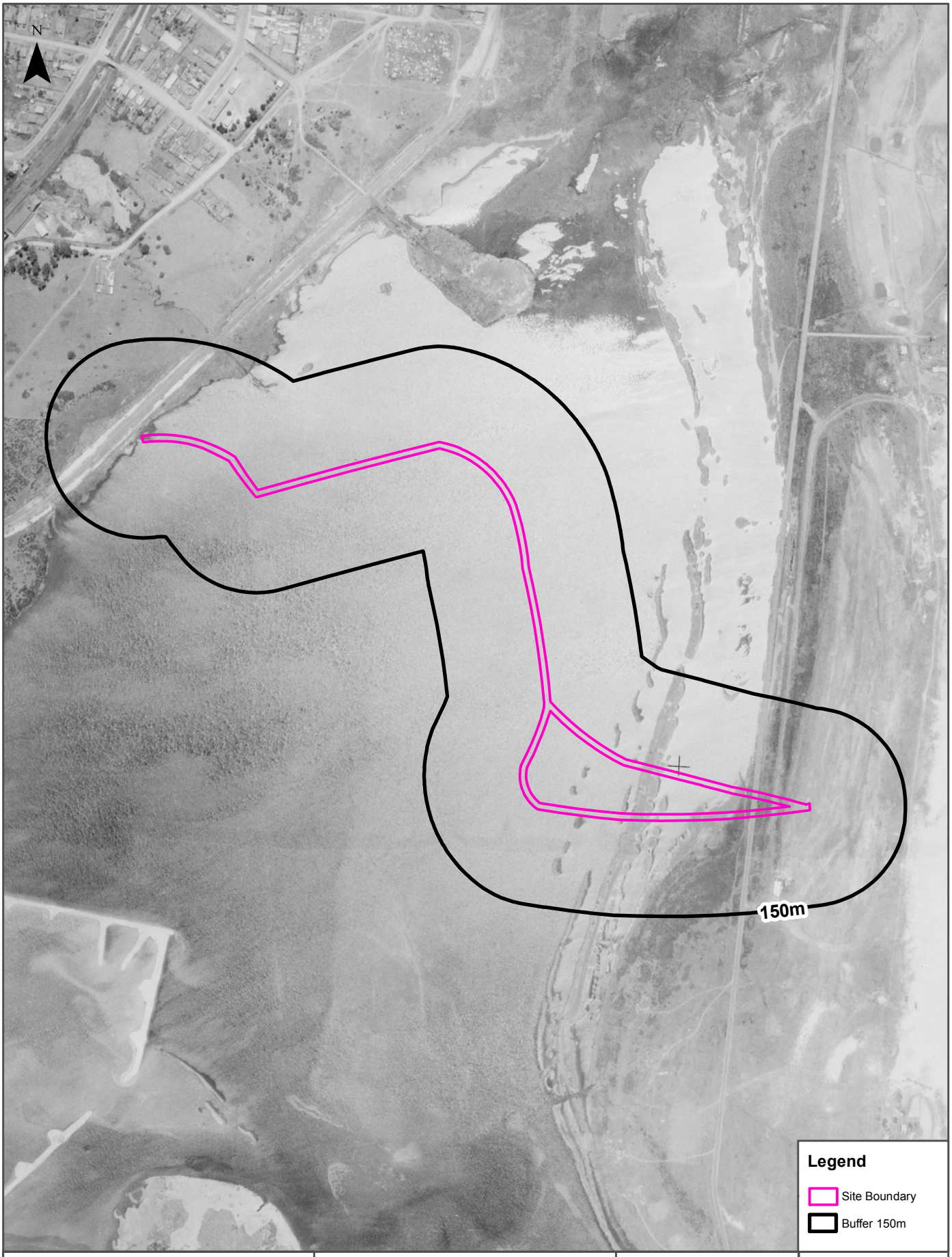
Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Aerial Imagery 1951

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Topographic Map 2015

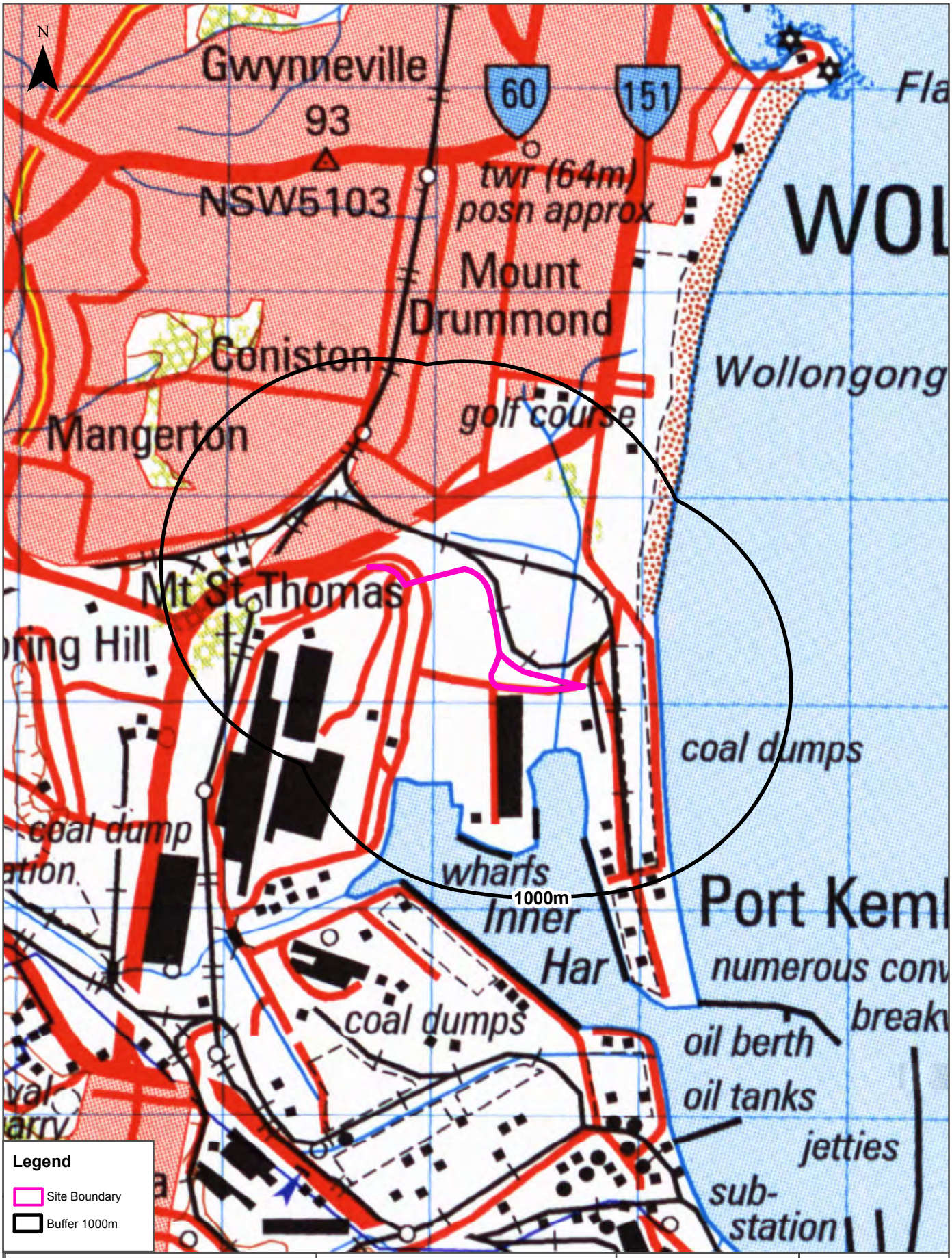
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



© Land and Property Information 2015

Historical Map 1998

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



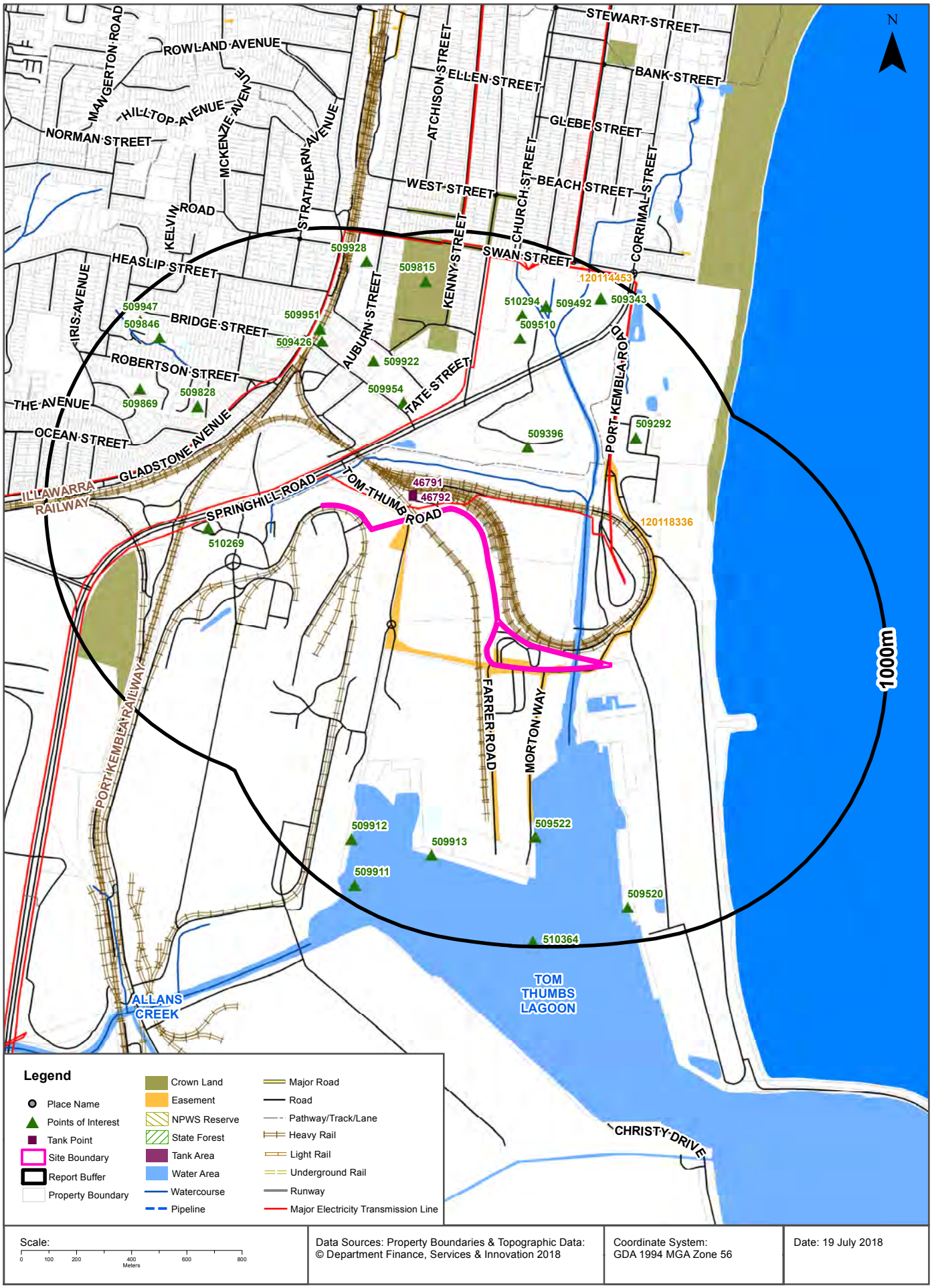
Historical Map 1942

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
509396	Lookout	AUSTRALIA'S INDUSTRY WORLD LOOKOUT	325m	North
509954	Medical Centre	CONISTON MENTAL HEALTH SERVICES	408m	North West
510269	Community Facility	BHP VISITORS CENTRE	420m	West
509922	Primary School	CONISTON PUBLIC SCHOOL	534m	North West
509828	Park	Park	573m	North West
509426	Community Facility	CONISTON COMMUNITY CENTRE	589m	North West
509901	Suburb	CONISTON	600m	North West
509802	Post Office	CONISTON POST OFFICE	603m	North West
509522	Wharf	Wharf	604m	South
509951	Railway Station	CONISTON RAILWAY STATION	636m	North West
509292	Sewage Works	Sewage Works	650m	North East
509510	Sports Field	SOCCER FIELDS	658m	North
509913	Wharf	Wharf	722m	South
510294	Community Facility	CONISTON LIONS UNITED SOCCER CLUB	739m	North
509869	Park	Park	779m	North West
509492	Park	J J KELLY PARK	802m	North
509912	Wharf	Wharf	812m	South West
509815	Cemetery	WOLLONGONG CEMETERY	823m	North
509846	Park	Park	843m	North West
509520	Wharf	Wharf	875m	South East
509928	Post Office	WOLLONGONG POST BUSINESS CENTRE	886m	North
509343	Sports Field	VIKING RUGBY FIELD	917m	North
509947	Community Home	WARRIGAL CARE CONISTON	935m	North West
509911	Wharf	Wharf	940m	South West
510364	Natural Waterbody	TOM THUMBS LAGOON	984m	South

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
46792	Undefined	Operational		09/04/2006	68m	North West
46791	Undefined	Operational		09/04/2006	79m	North West

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120118336	Primary	Undefined		0m	Onsite
120114453	Primary	Undefined		977m	North

Easements Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Legend

- Elevation Contour (m AHD)
- Site Boundary
- Report Buffer
- Property Boundary

Accuracy & Currency: This contour data can be up to 0.4 of the contour interval out in height and must therefore not be used for any design or engineering works, but only as a general guide to topography. Gaps may occur along contour lines due to vertical topography, obscured topography in the source photography such as buildings, dense vegetation or dead ground, or the fact that original buildings have been replaced in the intervening thirty years since the original contour capture.

Scale:	Data Sources: Property Boundaries & Topographic Data:	Coordinate System:	Date: 19 July 2018
0 100 200 400 Meters	© Department Finance, Services & Innovation 2018	GDA 1994 MGA Zone 56	

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Hydrogeology

Description of aquifers on-site:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Botany Groundwater Management Zones

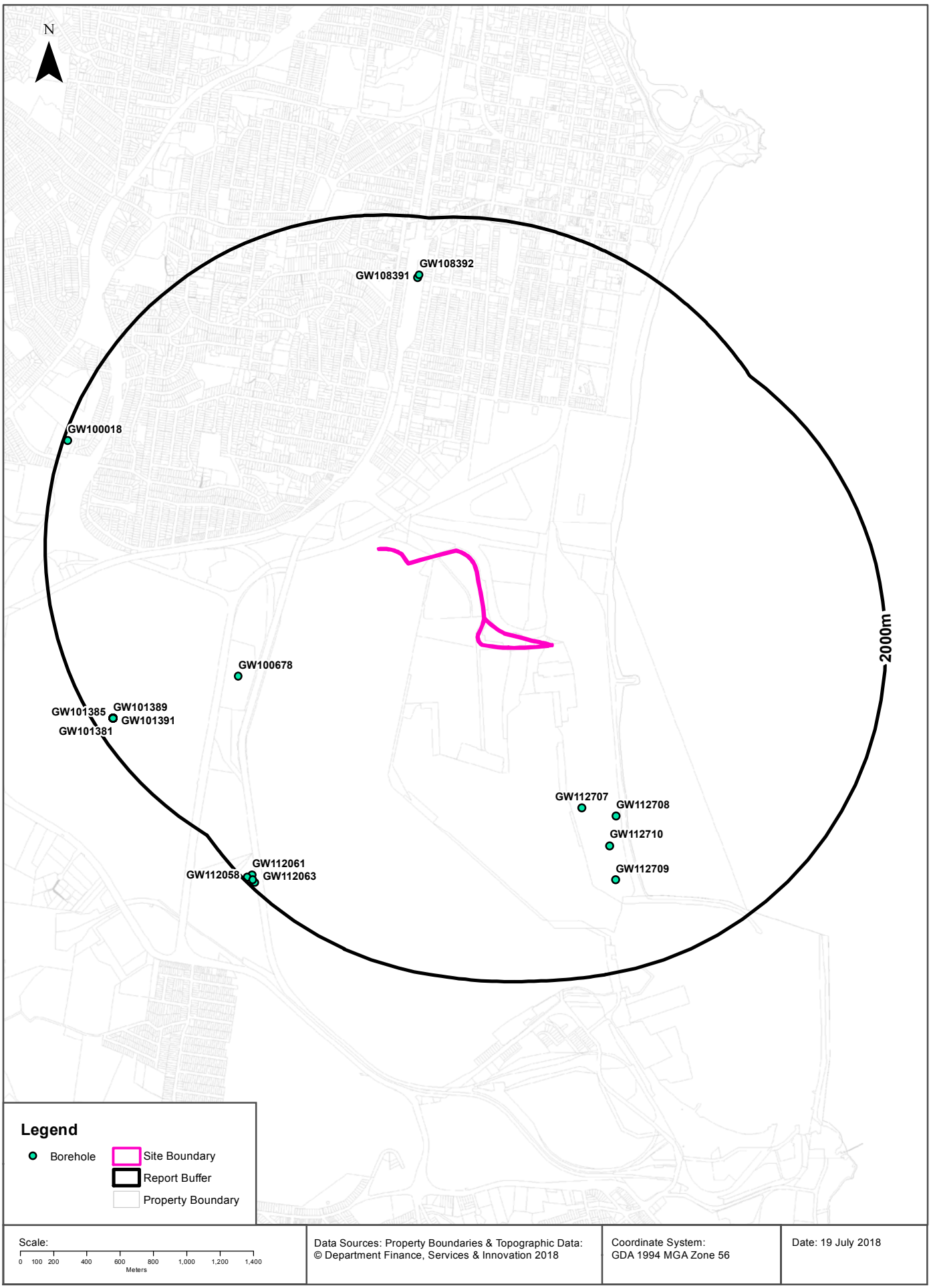
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW112707	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	22/11/2011	6.50	6.50					991m	South East
GW112708	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	22/11/2011	7.50	7.50					1091 m	South East
GW100678	10BL156580	Bore	Private	Monitoring	KH Adams & Sons Pty Ltd	22/03/1995	65.00	65.00	2200	8.20	7.500		1133 m	West
GW112710	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	23/11/2011	7.00	7.00					1251 m	South East
GW112709	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	23/11/2011	6.00	6.00					1457 m	South East
GW108391	10BL600472	Bore				28/09/2007	6.20	6.20					1634 m	North
GW108392	10BL600472	Bore				28/09/2007	6.00	6.00		5.83			1651 m	North
GW101379	10BL156497	Bore	Mines	Monitoring		01/04/1992	9.60	9.60					1888 m	West
GW101383	10BL156497	Bore	Mines	Monitoring		22/04/1992	9.00	9.00					1888 m	West
GW101371	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.60	8.60					1888 m	West
GW101391	10BL156497	Bore	Mines	Monitoring		18/05/1992	6.50	6.50					1888 m	West
GW101373	10BL156497	Bore	Mines	Monitoring		24/04/1992	8.00	8.00					1888 m	West
GW101390	10BL156497	Bore	Mines	Monitoring		18/05/1992	12.00	12.00					1888 m	West
GW101381	10BL156497	Bore	Mines	Monitoring		13/04/1992	32.50	32.50					1888 m	West
GW101366	10BL156497	Bore	Mines	Monitoring		28/04/1992	5.00	5.00					1888 m	West
GW101386	10BL156497	Bore	Mines	Monitoring		01/05/1992	10.10	10.10					1888 m	West
GW101392	10BL156497	Bore	Mines	Monitoring		15/05/1992	13.00	13.00					1888 m	West
GW101364	10BL156497	Bore	Mines	Monitoring		08/04/1992	7.90	7.90					1888 m	West
GW101369	10BL156497	Bore	Private	Monitoring		08/05/1992	6.50	6.60					1888 m	West
GW101384	10BL156497	Bore	Mines	Monitoring		29/04/1992	22.00	22.00					1888 m	West
GW101376	10BL156497	Bore	Mines	Monitoring		08/04/1992	11.80	11.80					1888 m	West
GW101367	10BL156497	Bore	Mines	Monitoring		04/05/1992	26.00	30.00					1888 m	West
GW101363	10BL156497	Bore	Mines	Monitoring		08/04/1992	21.00	21.00					1888 m	West
GW101387	10BL156497	Bore	Mines	Monitoring		30/04/1992	13.00	13.00					1888 m	West
GW101385	10BL156497	Bore	Mines	Monitoring		29/04/1992	6.00	6.00					1888 m	West
GW101377	10BL156497	Bore	Mines	Monitoring		09/04/1992	5.10	5.10					1888 m	West

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW101375	10BL156497	Bore	Mines	Monitoring		12/05/1992	11.00	11.00					1888 m	West
GW101374	10BL156497	Bore	Mines	Monitoring		12/05/1992	38.60	38.60					1888 m	West
GW101368	10BL156497	Bore	Mines	Monitoring		14/05/1992	5.60	5.60					1888 m	West
GW101388	10BL156497	Bore	Mines	Monitoring		13/05/1992	10.00	10.00					1888 m	West
GW101365	10BL156497	Bore	Mines	Monitoring		28/04/1992	17.50	17.60					1888 m	West
GW101372	10BL156497	Bore	Mines	Monitoring		15/04/1992	26.70	26.70					1888 m	West
GW101370	10BL156497	Bore	Mines	Monitoring		23/04/1992	40.00	40.00					1888 m	West
GW101382	10BL156497	Bore	Mines	Monitoring		14/04/1992	13.50	13.50					1888 m	West
GW101551	10BL156497	Bore		Monitoring		18/05/1992	6.00	6.00					1888 m	West
GW101378	10BL156497	Bore	Mines	Monitoring		10/04/1992	19.60	19.60					1888 m	West
GW101389	10BL156497	Bore	Mines	Monitoring		13/05/1992	4.00	4.00					1888 m	West
GW101380	10BL156497	Bore	Mines	Monitoring		14/05/1992	15.00	15.00					1888 m	West
GW112061	10BL157702	Bore	Private	Monitoring		03/08/1994	1.20	1.20					1948 m	South West
GW112064	10BL157702	Bore	Private	Monitoring		03/08/1994	1.70	1.70					1964 m	South West
GW112063	10BL157702	Bore	Private	Monitoring		03/08/1994	1.50	1.50					1967 m	South West
GW100018	10BL156571, 10WA107737	Bore	Private	Recreation	Windley's Water Wells Pty Ltd	16/03/1995	36.00	36.00	Good	4.00	3.500		1972 m	West
GW112058	10BL157702	Bore	Private	Monitoring		03/08/1994	2.00	2.00					1976 m	South West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW100678	0.00m-0.60m TOPSOIL 0.60m-3.80m WEATHERED BASALT 3.80m-9.00m BASALT 9.00m-16.00m INDURATED SHALE 16.00m-65.00m SANDSTONE	1133m	West
GW108391	0.00m-0.40m FILL , GRAVEL 0.40m-1.50m FILL SAND 1.50m-2.50m CLAY 2.50m-6.20m CLAY	1634m	North
GW108392	0.00m-0.30m FILL,GRAVEL 0.30m-1.00m FILL. SAND 1.00m-1.90m CLAY BROWN 1.90m-6.00m CLAY DARK,BROWN	1651m	North
GW101363	0.00m-7.00m FILL. Dark slag fill range from 300mm near surface to 10mm and fines increase at depth 7.00m-10.00m CLAYS.Esturine. Dark brown to grey stiff esturine clays 10.00m-16.60m SANDSTONE.Weathered grey to light yellow.Drilled to refusal. 16.60m-21.00m SANDSTONE. Fresh grey sandstone. Water loss high.	1888m	West
GW101364	0.00m-6.80m FILL Dark slag fill size range from 300mm near surface to 10 mm and fines at increased depth 6.80m-7.90m CLAYS.Esturine. Dark brown to grey stiff esturine clays	1888m	West
GW101365	0.00m-2.00m FILL. Compacted coal wash reject 2.00m-12.60m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays 12.60m-15.60m SANDSTONE.H.W. Sandstone becomming fresher with increasing depth 15.60m-17.60m SANDSTONE. Fresh grey sandstone	1888m	West
GW101366	0.00m-2.00m FILL. Compacted coalwash reject. 2.00m-5.00m CLAYS.ESTURINE. Dark brown to grey stiff esturine clays.	1888m	West
GW101367	1.80m-5.20m FILL. Compacted coal wash reject 5.20m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays 6.40m-13.00m WEATHERED SANDSTONE.Green to grey weathered sandstone with minor gravels 13.00m-30.00m SANDSTONE.Fine grained grey fresh sandstone	1888m	West
GW101368	0.00m-1.40m FILL. Dark slag fill with fines and some clay> 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt 3.20m-4.40m SAND. Grey to lighbrown silty sand> 4.40m-5.60m CLAY. Stiff grey clay.	1888m	West
GW101369	0.00m-0.60m TOP SOIL.Dark top soil 0.60m-1.80m FILL. Grey slag fill 1.80m-5.00m FILL. Compacted coal wash reject. 5.00m-6.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. 6.40m-6.60m CLAY. Very silty clay.	1888m	West
GW101370	0.00m-5.40m FILL.Dark grey slag fill> Some brown slags present> 5.40m-7.60m ESTURINE CLAY. Firm to stiff orange brown clay becoming grey with increasing depth. Some gravels. 7.60m-20.00m ESTURINE CLAYS.Dark brown to grey stiff esturine clays. At 15.8 m Grey stiff clays.At 17.9m Interbedded sands and clays. 20.00m-22.40m ESTURINE CLAYS.Dark brown to grey stiff esturine clays interbedded with sands> 22.40m-23.40m RESIDUAL CLAY. Light green clays> 23.40m-31.20m WEATHERED SANDSTONE.Fine grained highly weathered green sandstone 31.20m-40.00m SANDSTONE.Fine grained fresh grey sandstone.	1888m	West
GW101371	0.00m-5.40m FILL.Dark slag fill.Some brown slags present. 5.40m-7.60m CLAY,ESTURINE. Firm to stiff orange brown clay becoming grey with increasing depth.Some gravels 7.60m-8.60m CLAY, ESTURINE.Dark brown to grey stiff esturine clays>	1888m	West
GW101372	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present. 3.40m-6.40m CLAY. Light brown to bright orange wet clay. Possibly of filter cake or flue dust origin 6.40m-19.20m CLAY, ESTURINE. Dark brown to grey stiff esturine clays. 19.20m-22.40m SANDSTONE. E.W. Light brown sandstone. 22.40m-26.70m SANDSTONE. Fresh grey fine grained sandstone.	1888m	West

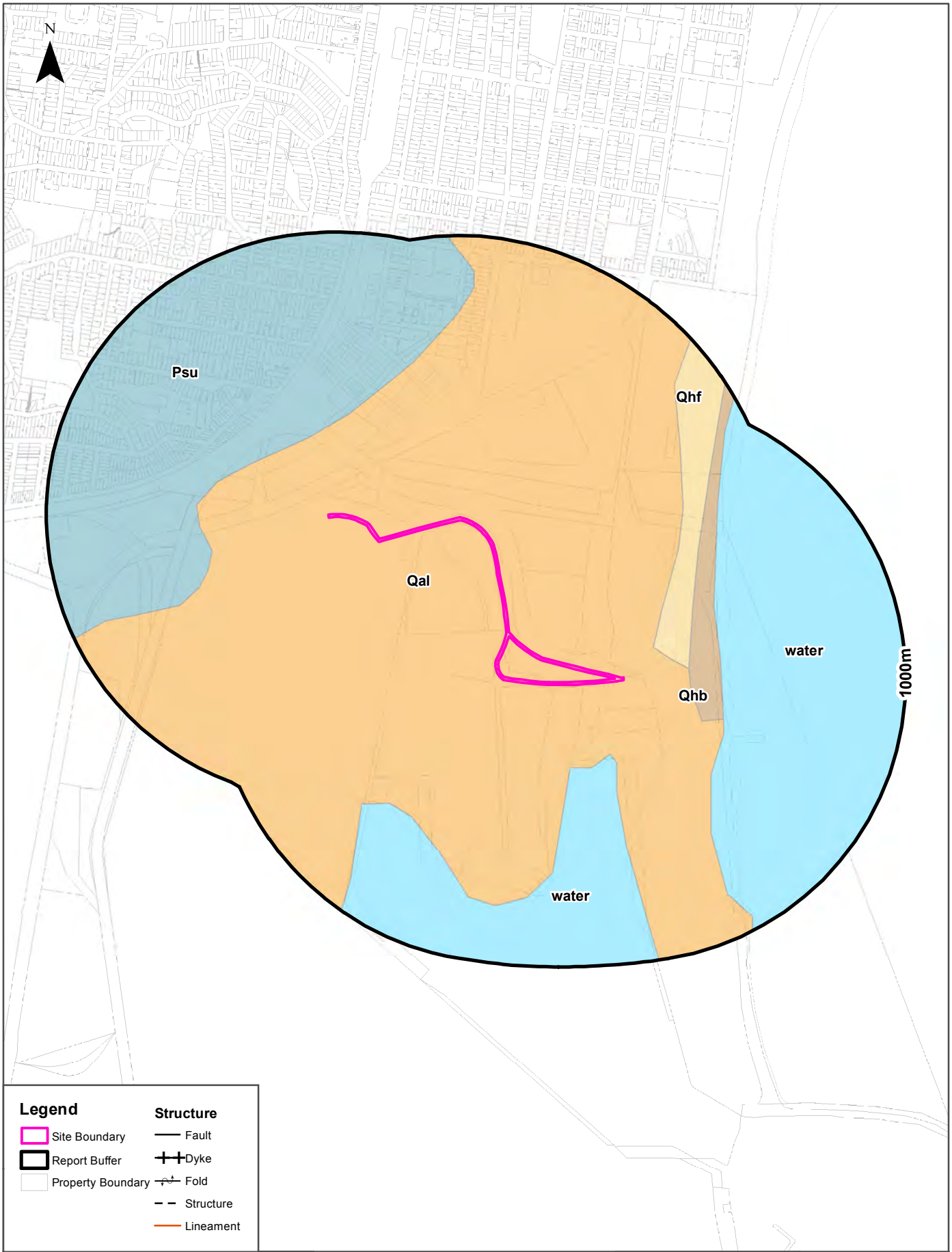
Groundwater No	Drillers Log	Distance	Direction
GW101373	0.00m-3.40m FILL.Dark grey slag fill. Some brown slags present 3.40m-6.40m CLAY.Light brown to bright orange wet clay.Possibly of filter cake or flue dust origin. 6.40m-8.00m CLAY,ESTURINE.Dark brown to grey stiff esturine clays.	1888m	West
GW101374	0.00m-0.60m CLAY. Loose sandy clay. 0.60m-9.00m CLAY. Firm sandy grey to brown clay. 9.00m-10.00m CLAY, ESTURINE. Sandy clay esturine clays> 10.00m-21.00m CLAYS, ESTURINE. Sandy esturine clays with some fine gravels. 21.00m-38.60m SANDSTONE.Fine to medium grained fresh grey sandstone.	1888m	West
GW101375	0.00m-0.60m CLAY. Loose sandy clay 0.60m-9.00m CLAY. Firm sandy grey to brownclay> 9.00m-11.00m CLAYS,ESTURINE.Sandy clay. esturine clays,	1888m	West
GW101376	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-4.80m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone. 4.80m-8.20m SANDSTONE.EW toW light brown sandstone becoming harder with increased depth. 8.20m-11.80m SANDSTONE.Fresh fine grained grey sandstone.	1888m	West
GW101377	0.00m-3.00m FILL. Slag fill with some dark clays. 3.00m-5.10m GRAVELS.Gravel particles to 6mm size.Sand and clay present.EW Sandstone.	1888m	West
GW101378	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm & fines at increased depth. 8.60m-16.20m CLAY,ESTURINE.Dark grey stiff esturine clay. 16.20m-17.40m CLAY,ESTURINE.Dark grey stiff esturine clays with some minor sandstone particles. 17.40m-19.60m SANDSTONE.Fresh hard grey sandstone.	1888m	West
GW101379	0.00m-8.60m FILL.Dark slag fill size range from 300mm near surface to 10mm& fines at increased depth. 8.60m-9.60m CLAY,ESTURINE.Dark grey stiff esturine clay.	1888m	West
GW101380	0.00m-1.40m FILL.Dark slag fill with fines and some clay 1.40m-3.20m CLAY.Red to brown stiff clay.Some silt. 3.20m-4.40m SAND.Grey to light brown silty sand. 4.40m-6.00m CLAY.Stiff grey clay. 6.00m-6.80m SAND.Light brown silty sand. 6.80m-7.00m CLAY. Stiff grey to brown clay. 7.00m-9.00m SANDSTONE.Gravelly residual brown to yellow sandstone. 9.00m-12.40m SANDSTONE.Moderately weathered yellow sandstone. 12.40m-15.00m SANDSTONE.Fresh light brown to yellow Budgong sandstone.	1888m	West
GW101381	0.00m-11.40m FILL. Mixed fill consisting of slag< filter cake and coalwash reject> Nodifinite bands-generally mixed. 11.40m-19.20m CLAY,ESTURINE:Grey esturine clay with some thin sand bands. Organic material< wood and root fragments. 19.20m-27.40m SANDSTONE.Weathered soft sandstone.Becomes less weathered with increasing depth. 27.40m-30.00m SANDSTONE.Brown to yellow slightly weathered sandstone. 30.00m-32.50m SANDSTONE.Fresh hard grey sandstone.	1888m	West
GW101382	0.00m-12.00m FILL.Mixed fill consisting of slag,Filter cake and coal wash reject. No difinite bands-generally mixed. 12.00m-13.50m CLAYS, ESTURINE.Firm dark esturine clays.	1888m	West
GW101383	0.00m-7.60m FILL.Dark slag fill size range from 300mm near surface to 10mm and fines at increased depth. 7.60m-9.00m CLAY,ESTURINE.Dark grey stiff esturine clay.	1888m	West
GW101384	0.00m-3.00m FILL, Compacted coal wash reject with brown clays and gravels. 3.00m-15.00m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 15.00m-20.00m SAND. Light brown to yellow sands. 20.00m-20.80m SANDSTONE. Extremely to weathered sandstone. 20.80m-22.00m SANDSTONE. Fresh hard light brown sandstone.	1888m	West
GW101385	0.00m-3.00m FILL.Compacted coal wash reject with brown clays and gravels. 3.00m-6.00m CLAYS,ESTURINE Dark brown to grey stiff esturine clays.	1888m	West
GW101386	0.00m-9.00m FILL.Hard coal wash reject with slag possibly of open hearth furnace origin 9.00m-10.10m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays.	1888m	West
GW101387	0.00m-7.20m FILL. Hard coal wash reject with slag possibly of open hearth furnace origin 7.20m-8.20m CLAYS,ESTURINE.Dark brown to grey stiff esturine clays. 8.20m-13.00m SANDSTONE.E.W. Sandstone with sandy clay.	1888m	West
GW101388	0.00m-1.40m FILL.Dark brown to grey soils with some clay.May be from North Wall construction.Becomes brown clay with incr. depth. 1.40m-5.00m CLAY.Red to brown stiff clay> Some silty sand and pebbles up to 20mm. 5.00m-6.00m SANDSTONE.Light brown weathered sandstone. 6.00m-10.00m SANDSTONE.Fresh hard grey sandstone.	1888m	West
GW101389	0.00m-1.40m FILL. Dark brown to grey soils with some clay.May be from North Wall construction. Becomes brown clay with incrs.depth. 1.40m-4.00m CLAY.Red to brown stiff clay.Some silt.	1888m	West
GW101390	0.00m-2.00m TOP SOIL.Dark topsoil turning to soft brown clays. 2.00m-3.00m CLAY.Firm brown to light brown clay. 3.00m-7.00m CLAY.Red to brown stiff clay.Some silt. 7.00m-8.00m SANDSTONE.Extremely to weathered light brown sandstone. 8.00m-12.00m SANDSTONE. Fresh hard yellow to grey sandstone	1888m	West

Groundwater No	Drillers Log	Distance	Direction
GW101391	0.00m-0.40m TOP SOIL.Dark topsoil 0.40m-5.20m CLAY.Firm brown to light brown clay. 5.20m-6.50m CLAY.Red to brown stiff clay.Some silt	1888m	West
GW101392	0.00m-0.40m TOP SOIL.Dark topsopil 0.40m-5.20m CLAY.Firm brown to light brown clay 5.20m-7.00m CLAY.Red to brown stiff clay. Some silt 7.00m-7.60m CLAY.Stiff grey sandy clay. 7.60m-8.40m SANDSTONE.Extremely weathered light brown sandstone 8.40m-9.40m SANDSTONE.Weathered light brown to grey sandstone 9.40m-13.00m SANDSTONE.Fresh grey sandstone.	1888m	West
GW101551	0.00m-2.00m TOP SOIL. Dark topsoil turning to soft brown clays 2.00m-3.00m CLAY. Firm brown to light brown clay. 3.00m-6.00m CLAY. Red to brown stiff clay. Some silt	1888m	West
GW100018	0.00m-1.00m SOIL & CLAY FILL 1.00m-6.00m MUD SILT 6.00m-15.00m GRAVEL 15.00m-36.00m SANDSTONE	1972m	West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:100,000

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Geology

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psu	red, brown, and grey lithic sandstone	Budgong Sandstone	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000
Qhb	"marine" quartz sand, medium to coarse, with shelly fragments						Wollongong & Port Hacking	1:100,000
Qhf	"marine quartz sand , fine to medium, shelly. Leached to varying degrees						Wollongong & Port Hacking	1:100,000
water							Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy
© State of New South Wales through the NSW Department of Industry, Resources & Energy

Naturally Occurring Asbestos Potential

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Naturally Occurring Asbestos Potential

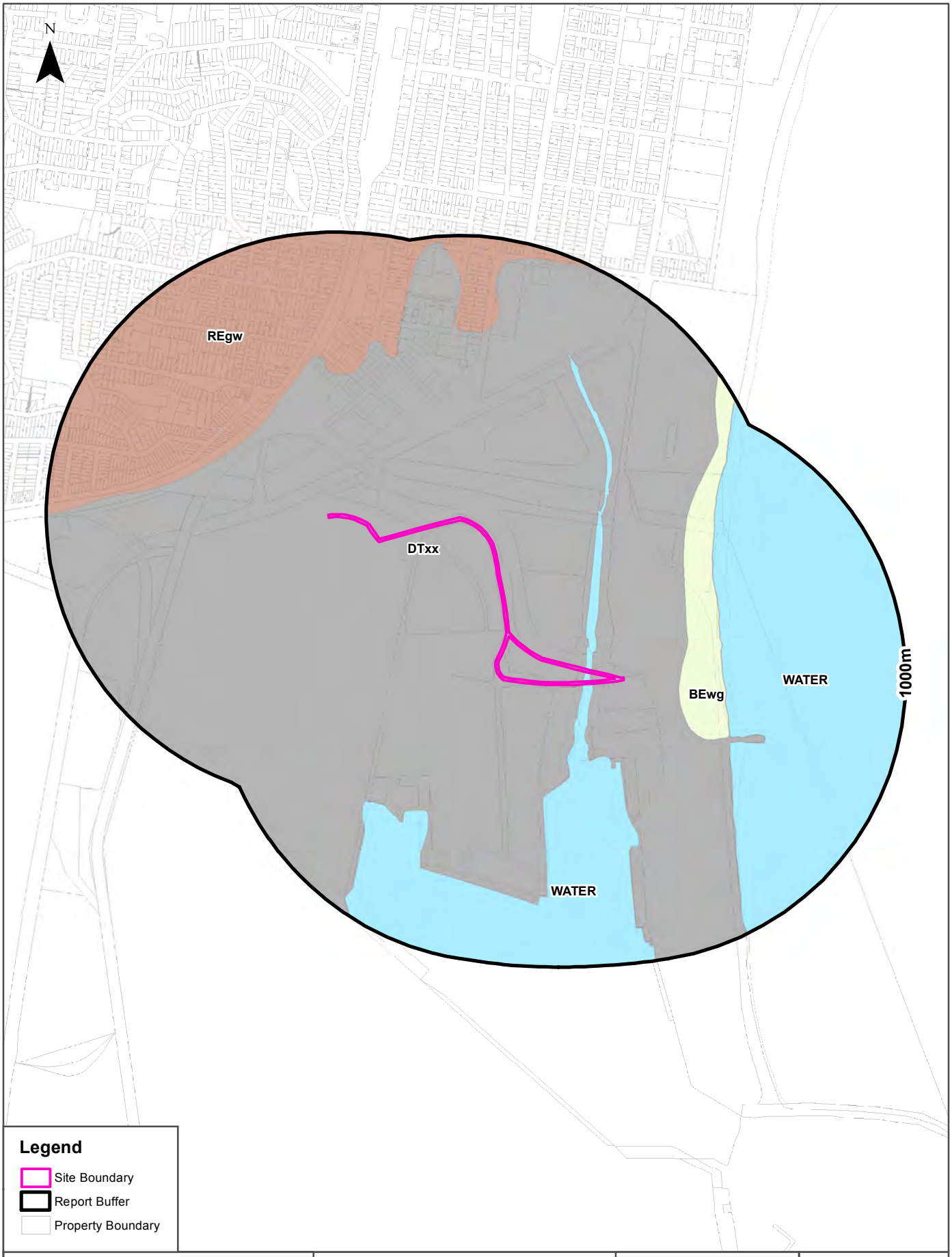
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Soil Landscapes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
BEwg	WOLLONGONG		BEACH	Wollongong & Port Hacking	1:100,000
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
REgw	GWYNNEVILLE		RESIDUAL	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Legend

Site Boundary
Report Buffer
Property Boundary

Australian Soil Classification Orders

Anthroposol	Dermosol	Kandosol	Podosol	Tenosol	No Data	
Calcarosol	Ferrosol	Kurosol	Rudosol	Vertosol		
Chromosol	Hydrosol	Organosol	Sodosol	Lake		

Scale: 0 100 200 400 600 800 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 19 July 2018

Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Ca6	Podosol	Dunes of leached sands (Uc2.2) with some areas of (Uc2.3) soils in low-lying situations, also (Dy5.41) soils in some localities, and flanked by some dunes of calcareous sands (Uc1.11) along the coast.	0m
Me2	Dermosol	Steep hilly to mountainous with incised stream valleys: steep but more or less rounded hill slopes of brown friable earths (Gn3.21 and Gn3.22) and possibly some (Gn4) soils, in association with: at the higher altitudes, steep hill slopes of sandy soils (Uc4.2), loamy soils having an A2 horizon (Um4.2) with yellow-brown earths (Gn2.44), and possibly (Uc6.11) and (Um5.41) soils; and at the lower altitudes, moderate to steep slopes of hard acidic yellow mottled soils (Dy3 21 and Dy3.41), hard acidic red soils (Dr2.21), and yellow leached friable earths (Gn3.54); and narrow incised stream valleys of various soils including (Um6.11) and (Dy) soils. This unit is a broad one. In some areas the (Um4.2) and (Gn2.44) soils and in others the (Dy) and (Dr) soils rather than the (Gn3 soils could be dominant.	0m

Atlas of Australian Soils Data Source: CSIRO
Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Standard Local Environmental Plan Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	LEP
N/A		

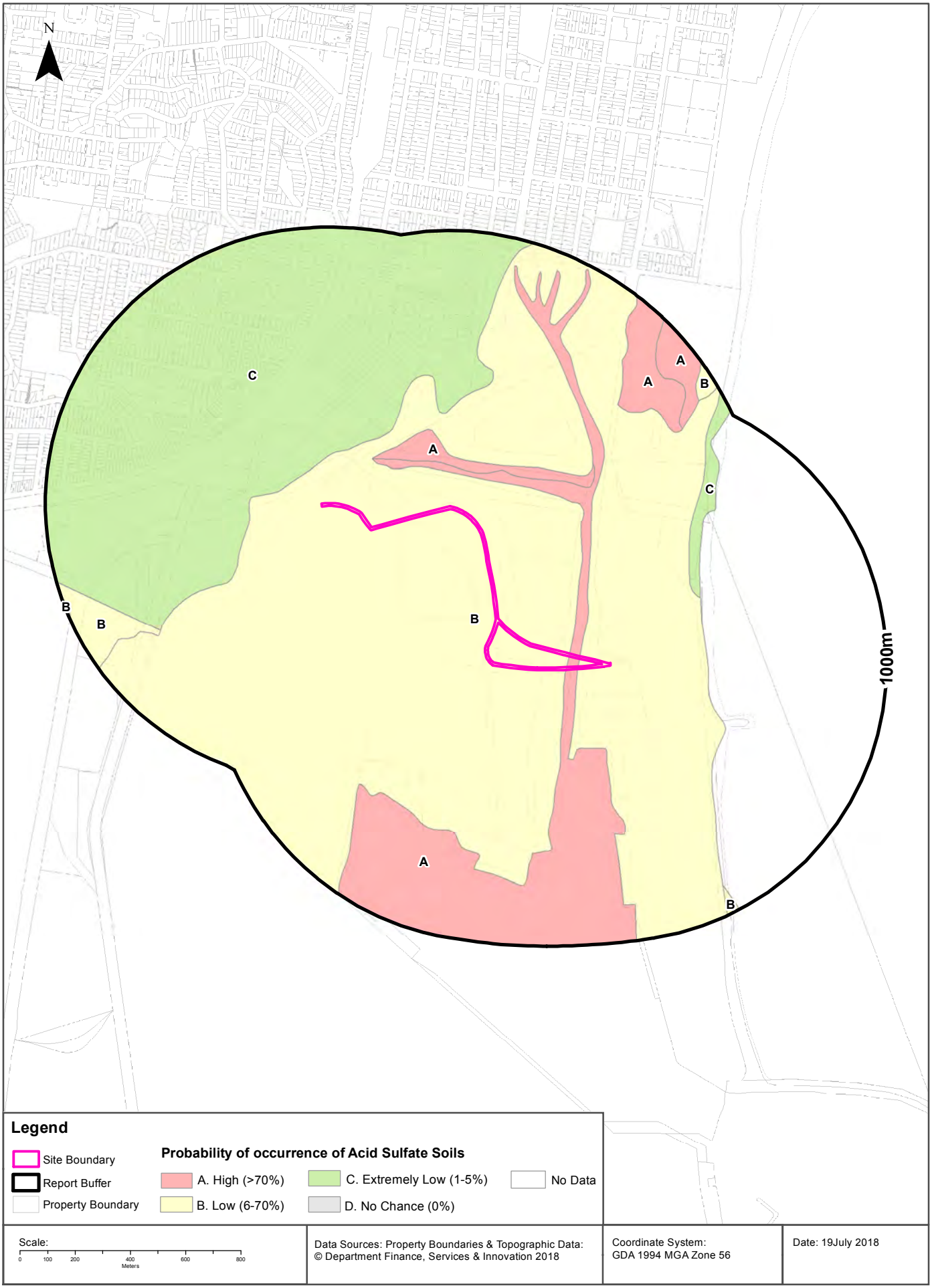
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	LEP	Distance	Direction
N/A				

Acid Sulfate Data Source Accessed 07/10/2016: NSW Crown Copyright - Planning and Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
A	High Probability of occurrence. >70% chance of occurrence.	0m
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	124m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Dryland Salinity

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining Subsidence Districts

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Environmental Zoning

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

State Environmental Planning Policy Protected Areas

Are there any State Environmental Planning Policy Protected Areas onsite or within the dataset buffer?

Dataset	Onsite	Within Site Buffer	Distance
SEPP14 - Coastal Wetlands	No	No	N/A
SEPP26 - Littoral Rainforests	No	No	N/A
SEPP71 - Coastal Protection Zone	Yes - SEPP71 covers 97.47% of the site	Yes	0m

SEPP Protected Areas Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Major Developments (2005)

State Environmental Planning Policy Major Developments within the dataset buffer:

Map Id	Feature	Effective Date	Distance	Direction
68269	Three Ports - Port Kembla	24/07/2009	0m	Onsite

SEPP Major Development Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Strategic Land Use Areas

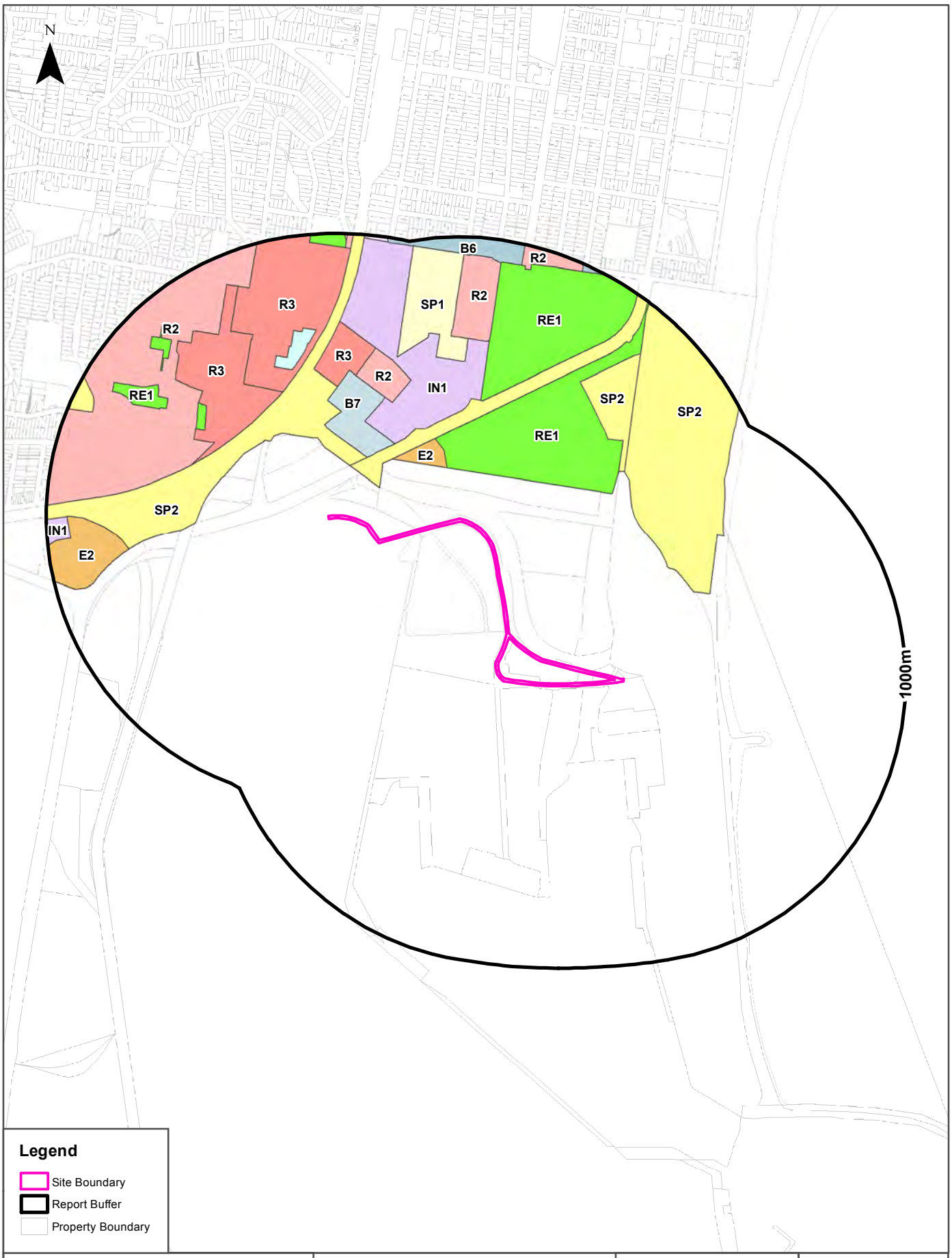
State Environmental Planning Policy Strategic Land Use Areas onsite or within the dataset buffer:

Strategic Land Use	SEPPNo	Effective Date	Amendment	Amendment Year	Distance	Direction
No records within buffer						

SEPP Strategic Land Use Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

LEP Planning Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Land Zoning

What Local Environmental Plan Land Zones exist within the dataset buffer?

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
SP2	Infrastructure	Road	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		135m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		172m	North
SP2	Infrastructure	Railway	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		179m	West
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		187m	North West
B7	Business Park		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		219m	North West
IN1	General Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		299m	North
SP2	Infrastructure	Sewerage System	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		395m	North East
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		425m	North
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		427m	North West
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		432m	North West
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		458m	North West
R3	Medium Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		470m	North West
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		479m	North West
SP2	Infrastructure	Heliport and Parking	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		515m	North East
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		533m	North West
B1	Neighbourhood Centre		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		534m	North West
SP1	Special Activities	Cemetery	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		557m	North
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		636m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		689m	North West
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		716m	West
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		783m	North West
SP2	Infrastructure	Telecommunications	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		913m	North West
IN1	General Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		915m	West
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		915m	North
B6	Enterprise Corridor		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		918m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		950m	North West
B6	Enterprise Corridor		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		974m	North
R2	Low Density Residential		Wollongong Local Environmental Plan 2009	27/01/2012	27/01/2012	16/02/2018	Amendment No 10	974m	North

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
IN2	Light Industrial		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		983m	North
E3	Environmental Management		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		992m	North West

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Minimum Subdivision Lot Size

What are the onsite Local Environmental Plan Minimum Subdivision Lot Sizes?

Symbol	Minimum Lot Size	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Maximum Height of Building

What are the onsite Local Environmental Plan Maximum Height of Buildings?

Symbol	Maximum Height of Building	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Floor Space Ratio

What are the onsite Local Environmental Plan Floor Space Ratios?

Symbol	Floor Space Ratio	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Land Application

What are the onsite Local Environmental Plan Land Applications?

Application Type	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data						

Land Reservation Acquisition

What are the onsite Local Environmental Plan Land Reservation Acquisitions?

Reservation	LEP	Published Date	Commenced Date	Currency Date	Amendment	Comments	Percentage of Site Area
No Data							

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Heritage Items

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Heritage

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

State Heritage Items

What are the State Heritage Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Heritage Items

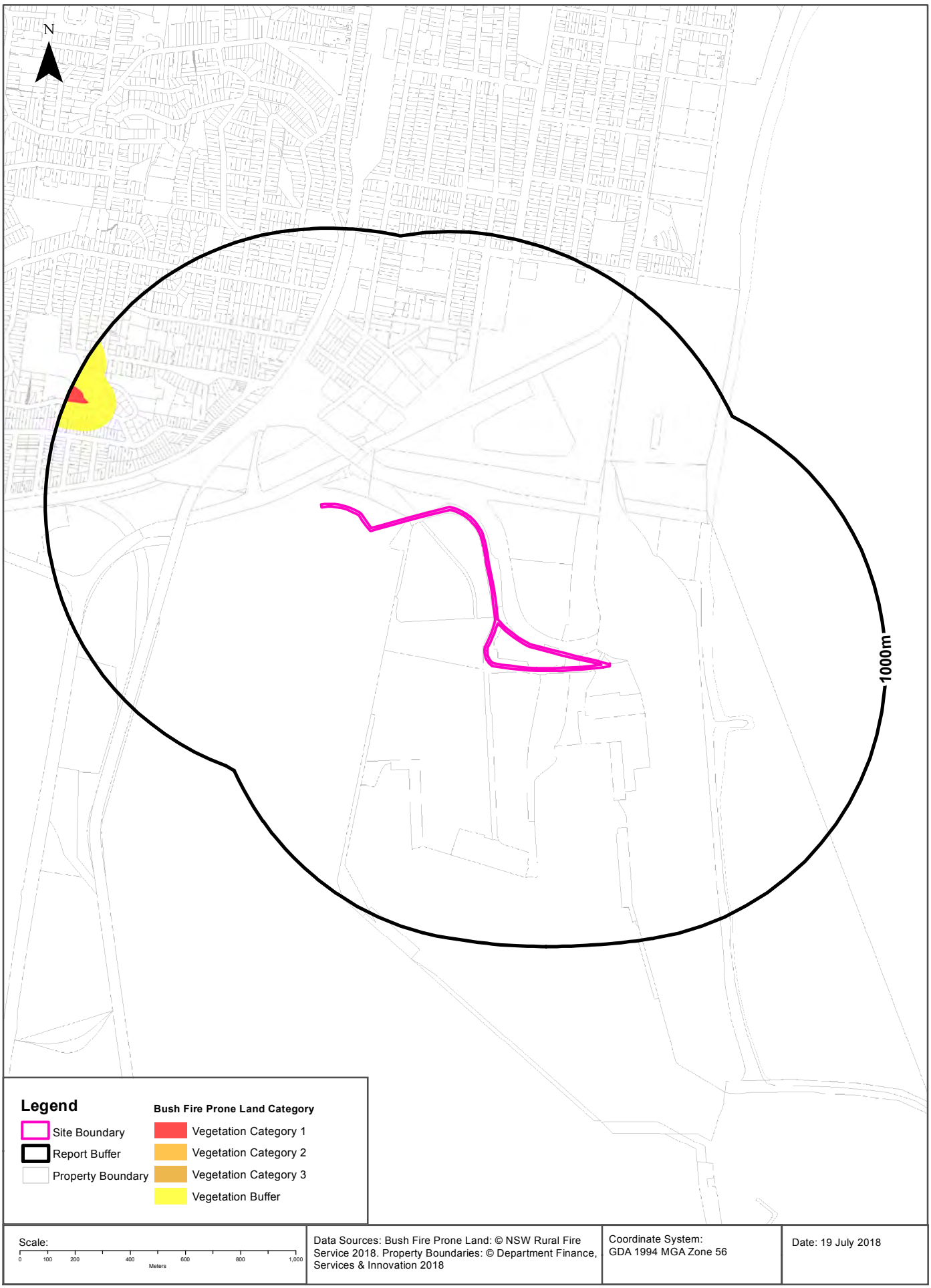
What are the Local Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	LEP or Act	Published Date	Commenced Date	Currency Date	Distance	Direction
6227	House	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	534m	North West
6591	Methodist Cemetery	Item - Landscape	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	557m	North
6282	Wollongong General Cemetery Including Nicholle Vault	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	591m	North
6404	Stand Of Spotted Gum	Item - Landscape	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	690m	North West
6405	Fort Drummond Including Stand Of Spotted Gum	Item - General	Local	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	09/02/2018	913m	North West

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Natural Hazards - Bush Fire Prone Land

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Natural Hazards

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Buffer	818m	North West
Vegetation Category 1	918m	North West

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & RAMSAR Wetlands

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Native Vegetation of the Illawarra Escarpment & Coastal Plain

What Native Vegetation of the Illawarra Escarpment & Coastal Plain exists within the dataset buffer?

Veg Code	Vegetation Community	Disturbance Class	Disturbance Type	Understorey	Broad Vegetation Type	Endangered Ecological Community	Distance	Direction
MU56c	Weeds and Exotics	Weeds and Exotics			Weeds and Exotics		0m	Onsite
MU56e	Modified Lands	Weeds and Exotics			Cleared		0m	Onsite
MU57e	Estuarine Lagoons and Channels	Unassessed			Wetlands		0m	Onsite
MU57a	Artificial Wetlands	Unassessed			Wetlands		31m	South East
MU53	Estuarine Alluvial Wetland	Unassessed			Native Vegetation	Sydney Coastal Estuary Swamp Complex	101m	North
MU55a	Seagrass Meadows and Estuarine Flats	Unassessed			Seagrass		121m	East
MU57i	Water	Water			Water		342m	South East
MU57b	Beach Sand	Unassessed			Rocks		388m	North East
MU45	Coastal Sand Scrub	High Disturbance	Weeds	Not Described	Native Vegetation		392m	East
MU16	Escarpment Blackbutt Forest	Scattered Trees			Scattered Trees		443m	West
MU16	Escarpment Blackbutt Forest	Moderate Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		520m	West
MU25	Spotted Gum Open Forest	Scattered Trees			Scattered Trees		520m	North West
MU25	Spotted Gum Open Forest	High Disturbance	Weeds	Shrubs and Grasses	Native Vegetation		554m	West
MU25	Spotted Gum Open Forest	High Disturbance	Weeds	Mesic/Rainforest Shrub Layer	Native Vegetation		618m	North West
MU24	Lowland Woollybutt-Melaleuca Forest	Moderate Disturbance	Weeds	Melaleuca Dominant	Native Vegetation	Illawarra Coastal Grassy Woodlands	758m	West
MU24	Lowland Woollybutt-Melaleuca Forest	Scattered Trees			Scattered Trees	Illawarra Coastal Grassy Woodlands	801m	West

Native Vegetation of the Illawarra Escarpment & Coastal Plain : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

RAMSAR Wetlands

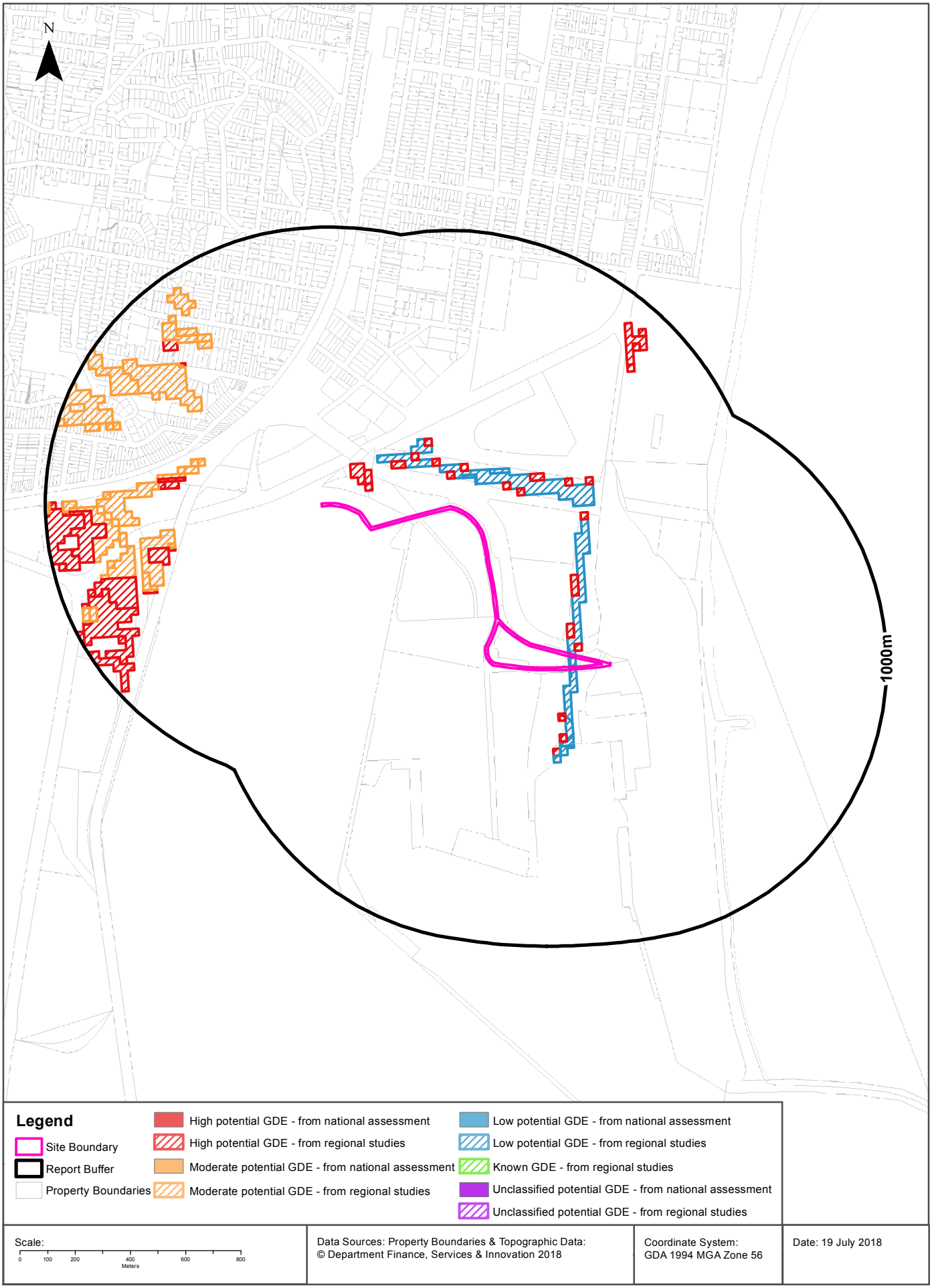
What RAMSAR Wetland areas exist within the dataset buffer?

Map Id	RAMSAR Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

RAMSAR Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

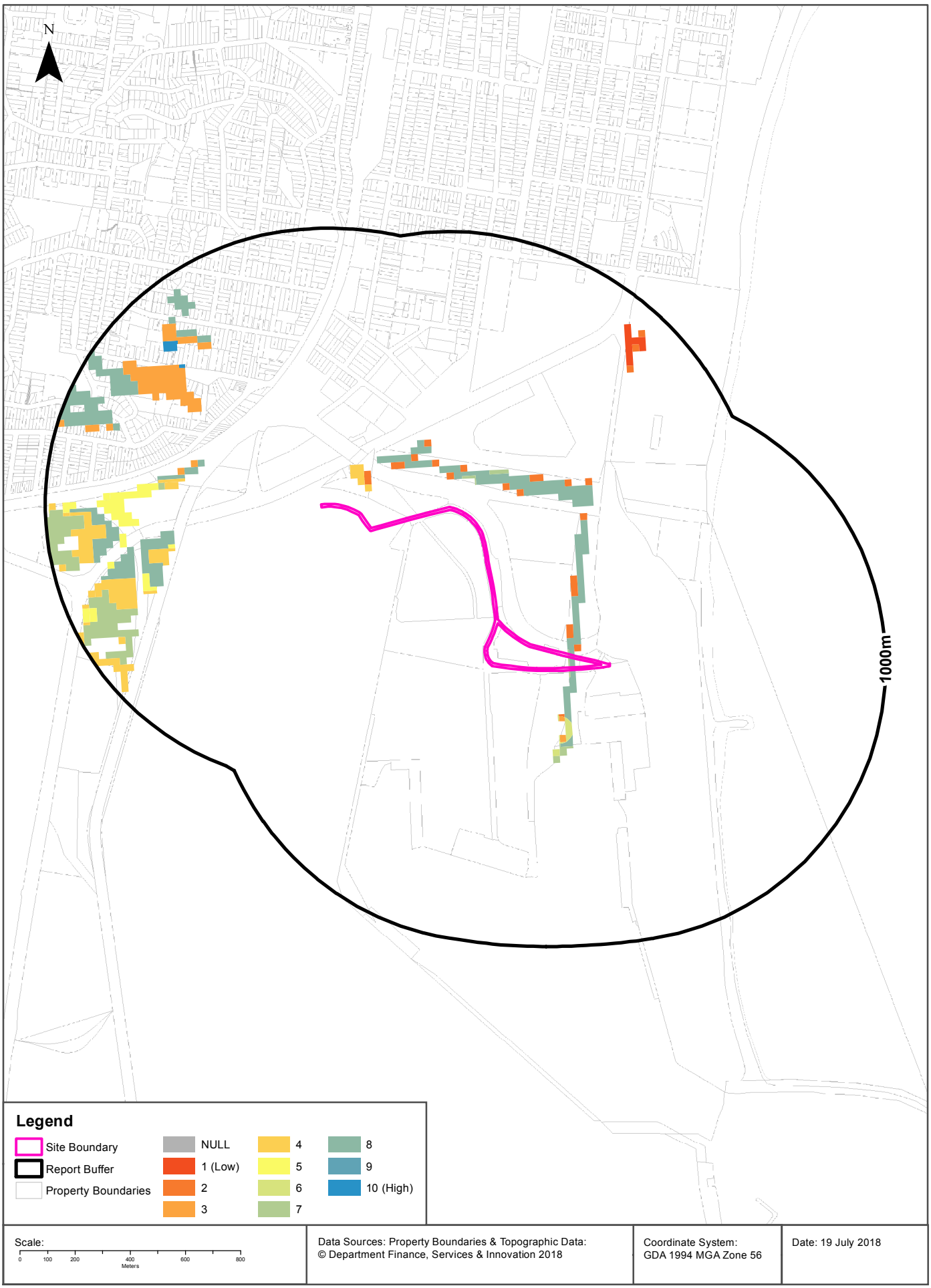
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	Low potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	Low potential GDE - from regional studies	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		0m
Terrestrial	High potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		14m
Terrestrial	Moderate potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		442m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	7	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		0m
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation		0m
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation		14m
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation		75m
Terrestrial	6	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		158m
Terrestrial	3	Deeply dissected sandstone plateaus.	Vegetation		164m
Terrestrial	5	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		258m
Terrestrial	10	Deeply dissected sandstone plateaus.	Vegetation		698m
Terrestrial	1	Deeply dissected sandstone plateaus.	Vegetation		787m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 4)

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Heleioporus australiacus	Giant Burrowing Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria littlejohni	Littlejohn's Tree Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calonectris leucomelas	Streaked Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Coracina lineata	Barred Cuckoo-shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Diomedea gibsoni	Gibson's Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Thalassarche impavida	Campbell Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche salvini	Salvin's Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Miniopterus australis	Little Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Mormopterus norfolkensis	Eastern Freetail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Petaurus australis	Yellow-bellied Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Physeter macrocephalus	Sperm Whale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Arthropteris palisotii	Lesser Creeping Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Chorizema parviflorum	Eastern Flame Pea	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Epacris purpurascens subsp. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus largeana	Craven Grey Box	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Gossia acmenoides	Scrub Ironwood	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia glaucescens	Mittagong Geebung	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Persoonia nutans	Nodding Geebung	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Solanum celatum		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Zieria granulata	Illawarra Zieria	Endangered	Not Sensitive	Endangered	

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage
Data obtained 19/07/2018

USE OF REPORT – APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report. The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available (**Third Party Content Suppliers**);
      (j) content which is derived from content described in paragraph (i);
   (b) Lotsearch does not take any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**);
   (d) Lotsearch has not undertaken any physical inspection of the property;
   (e) Lotsearch does not warrant that all land uses or features whether past or current are identified in the Report;
   (f) the Report does not include any information relating to the actual state or condition of the Property;
   (g) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of a Property for any particular purpose;
   (h) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (i) the End User should undertake its own inspection s of the Property to satisfy itself that there are no defects or failures.
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
5. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
6. To the extent permitted by law and subject to paragraph 7, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these terms other than as expressly set out in these terms are excluded.
7. Subject to paragraph 8, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
8. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
9. Subject to paragraph 7, neither Lotsearch nor the End User is liable to the other for any indirect, incidental,consequential, special or exemplary damages arising out of or in relation to these terms.
10. These terms are subject to New South Wales law.

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 19 Jul 2018 10:47:54

Reference: LS003868

Address: Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Table of Contents

Location Confidences 2
Dataset Listings 3
Site Location Aerial 5
Contaminated Land & Waste Management Facilities 6
EPA PFAS Investigation Program 9
EPA Other Sites with Contamination Issues 10
EPA Current Licensed Activities 11
EPA Delicensed & Former Licensed Activities 14
UPSS Sensitive Zones 17
Historical Business Activities 18
Historical Aerial Imagery & Maps 24
Topographic Features 36
Elevation Contours 40
Hydrogeology & Groundwater 41
Geology 45
Naturally Occurring Asbestos Potential 47
Soils 48
Acid Sulfate Soils 52
Dryland Salinity 55
Mining Subsidence Districts 56
State Environmental Planning 57
Local Environmental Planning 59
Heritage 62
Natural Hazards 63
Ecological Constraints 64
Terms & Conditions 74

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a confidence is given under the field heading “LocConf” or “Location Confidence”.

Location Confidence	Description
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced with the confidence of the general/approximate area
Road Match	Georeferenced to the road or rail
Road Intersection	Georeferenced to the road intersection
Buffered Point	Feature is a buffered point
Network of Features	Georeferenced to a network of features

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	Dept. Finance, Services & Innovation	19/07/2018	19/07/2018	Daily	-	-	-	-
Topographic Data	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	06/07/2018	02/07/2018	Monthly	1000	0	0	2
Contaminated Land Records of Notice	Environment Protection Authority	06/07/2018	06/07/2018	Monthly	1000	0	0	2
Former Gasworks	Environment Protection Authority	04/07/2018	11/10/2017	Monthly	1000	0	0	0
National Waste Management Site Database	Geoscience Australia	04/07/2018	07/03/2017	Quarterly	1000	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	04/07/2018	04/07/2018	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	11/01/2018	11/01/2018	Quarterly	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	2	6	27
Delicensed POEO Activities still Regulated by the EPA	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	0	1	1
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	13/07/2018	13/07/2018	Monthly	1000	0	1	15
UPSS Environmentally Sensitive Zones	Environment Protection Authority	14/04/2015	12/01/2010	As required	1000	1	1	1
UBD Business Directory 1982 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1982 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1961 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1961 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	0	0
Points of Interest	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	8
Tanks (Areas)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	0
Tanks (Points)	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	Quarterly	1000	0	0	2
Major Easements	Dept. Finance, Services & Innovation	09/04/2018	09/04/2018	As required	1000	0	1	1
State Forest	Dept. Finance, Services & Innovation	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	18/01/2018	30/09/2017	Annually	1000	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Botany Groundwater Management Zones	NSW Department of Primary Industries	15/03/2018	01/10/2005	As required	1000	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	21/03/2016	01/12/2015	Annually	2000	0	0	25
Geological Units 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	1	-	5
Geological Structures 1:100,000	NSW Dept. of Industry, Resources & Energy	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Soil Landscapes	NSW Office of Environment & Heritage	12/08/2014		None planned	1000	1	-	3
Atlas of Australian Soils	CSIRO	19/05/2017	17/02/2011	As required	1000	1	1	2
Standard Local Environmental Plan Acid Sulfate Soils	NSW Planning and Environment	07/10/2016	07/10/2016	As required	500	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	1	1	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Office of Environment & Heritage	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	Dept. Finance, Services & Innovation	13/07/2017	01/07/2017	As required	1000	0	0	0
SEPP 14 - Coastal Wetlands	NSW Planning and Environment	17/12/2015	24/10/2008	Annually	1000	0	0	0
SEPP 26 - Littoral Rainforest	NSW Planning and Environment	17/12/2015	05/02/1988	Annually	1000	0	0	0
SEPP 71 - Coastal Protection	NSW Planning and Environment	17/12/2015	01/08/2003	Annually	1000	1	1	1
SEPP Major Developments 2005	NSW Planning and Environment	09/03/2013	25/05/2005	Under Review	1000	1	1	1
SEPP Strategic Land Use Areas	NSW Planning and Environment	01/08/2017	28/01/2014	Annually	1000	0	0	0
LEP - Land Zoning	NSW Planning and Environment	11/04/2018	16/03/2018	Quarterly	1000	0	0	4
LEP - Minimum Subdivision Lot Size	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Height of Building	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Floor Space Ratio	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Application	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	0	0	-	-
LEP - Land Reservation Acquisition	NSW Planning and Environment	04/04/2018	09/03/2018	Quarterly	0	0	-	-
State Heritage Items	NSW Office of Environment & Heritage	04/04/2018	30/09/2016	Quarterly	1000	0	0	0
Local Heritage Items	NSW Planning and Environment	04/04/2018	23/03/2018	Quarterly	1000	0	0	0
Bush Fire Prone Land	NSW Rural Fire Service	10/05/2018	23/01/2018	Quarterly	1000	0	0	0
Native Vegetation of the Illawarra Escarpment & Coastal Plain	NSW Office of Environment & Heritage	20/05/2015	04/08/2011	Unknown	1000	0	0	9
RAMSAR Wetlands	Commonwealth of Australia Department of the Environment	08/10/2014	24/06/2011	As required	1000	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	2
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	6
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	16/07/2018	16/07/2018	Daily	10000	-	-	-

Aerial Imagery 2017

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1474	Greenhouse Park	Springhill Road	Wollongong	Landfill	Regulation being finalised	Current EPA List	Premise Match	690m	North
1086	No 2 Steelworks	Five Islands Road	Port Kembla	Metal Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	763m	South West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land & Waste Management Facilities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
387	Greenhouse Park	Springhill Road	Wollongong	1 current	3415	Premise Match	690m	North West
181	No 2 Steelworks	Five Islands Road	Port Kembla	4 former	3337	Premise Match	763m	South West

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

EPA PFAS Investigation Program

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

EPA Other Sites with Contamination Issues

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill

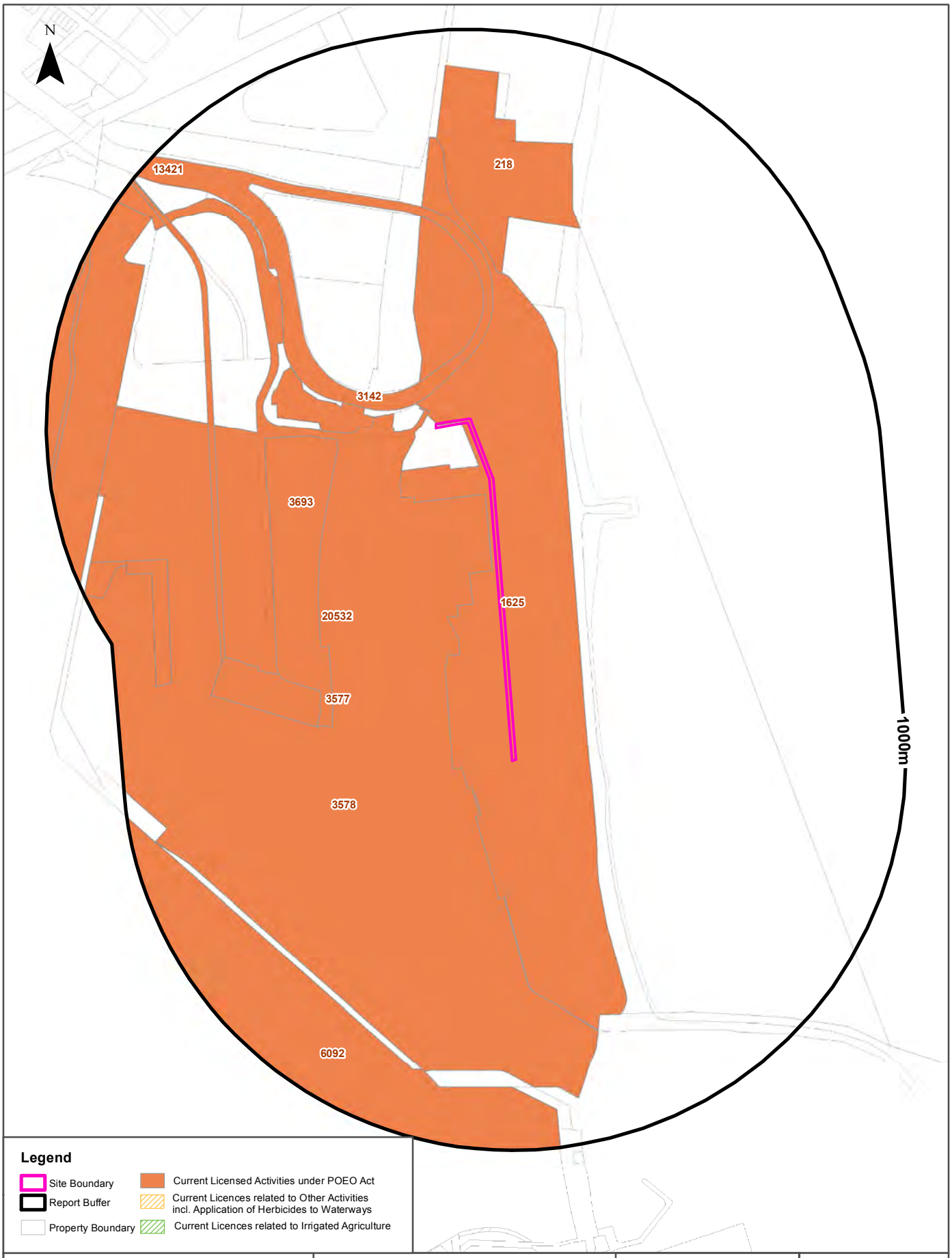
Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
1625	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA ROAD	WOLLONGONG	Coal works	Premise Match	0m	Onsite
1625	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA COAL TERMINAL LIMITED	PORT KEMBLA ROAD	WOLLONGONG	Shipping in bulk	Premise Match	0m	Onsite
20532	Quattro P RE Services Pty Ltd		Tom Thumb Road, PORT KEMBLA, NSW 2505		Other activities	Premise Match	12m	South West
3578	AUSTRALIAN AMALGAMATED TERMINALS PTY LIMITED	AAT FACILITY	FARRER ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	12m	South West
3142	AUSTRALIAN RAIL TRACK CORPORATION LIMITED		GPO BOX 14, SYDNEY, NSW 2001		Railway systems activities	Network of Features	72m	North West
13421	JOHN HOLLAND RAIL PTY LTD		PO Box 215 , PARRAMATTA, NSW 2124		Railway systems activities	Road Match	72m	North West
3693	GRAINCORP OPERATIONS LIMITED	PORT KEMBLA GRAIN TERMINAL	MORTON WAY	PORT KEMBLA	Shipping in bulk	Premise Match	161m	West
218	SYDNEY WATER CORPORATION	WOLLONGONG SEWAGE TREATMENT SYSTEM	PORT KEMBLA ROAD	WOLLONGONG	Sewage treatment processing by large plants	Premise Match	383m	North
3577	PORT KEMBLA OPERATIONS PTY LIMITED	BERTH 104	MORTON WAY	PORT KEMBLA	Shipping in bulk	Premise Match	409m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Agricultural fertiliser (inorganic) production	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime handling	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Cement or lime production	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coal works	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Coke production	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Crushing, grinding or separating	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Dangerous goods production	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	General chemicals storage	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Generation of electrical power from gas	Premise Match	762m	South West

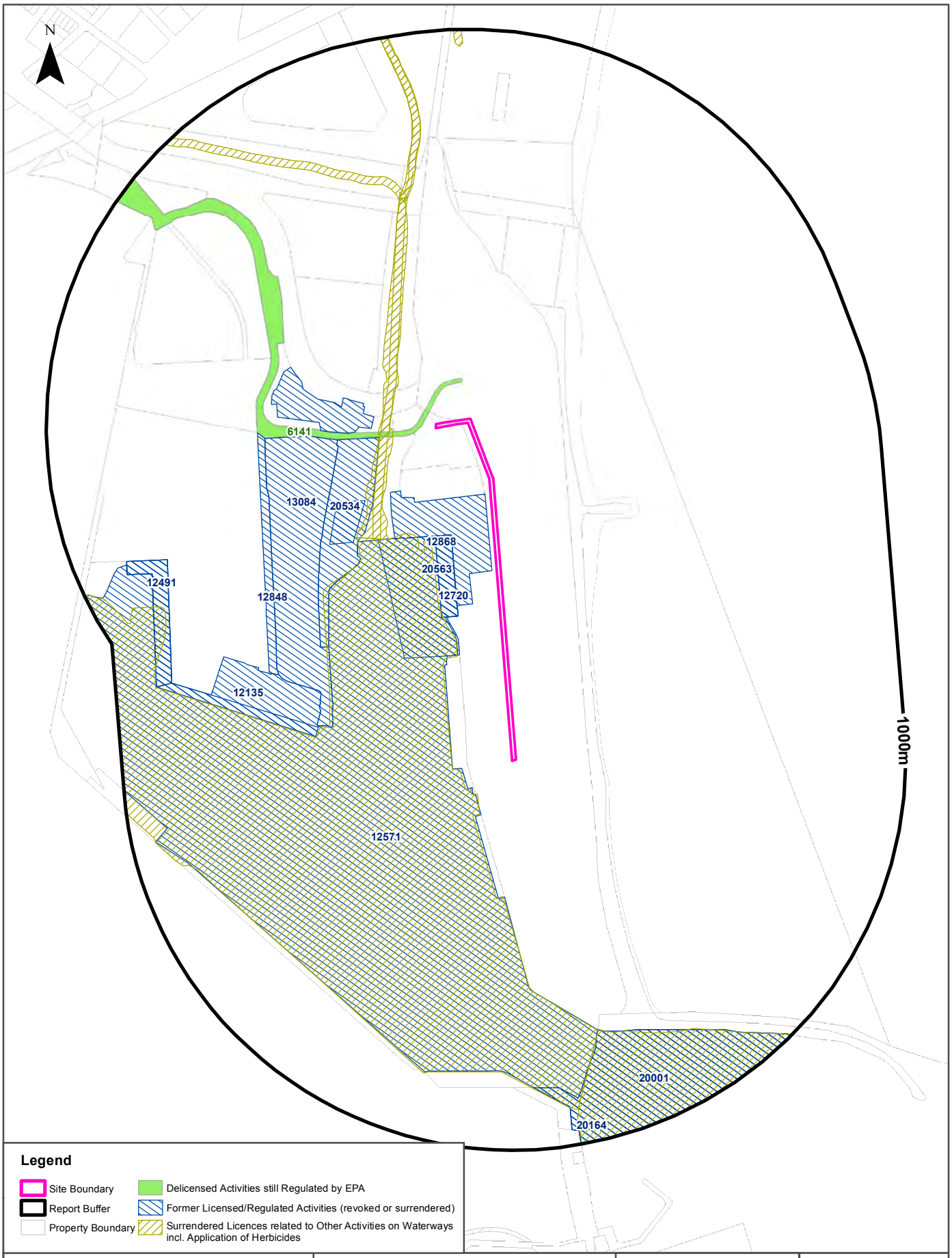
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Iron or steel production (iron ore)	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Mineral processing	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Railway systems activities	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of general waste	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Recovery of waste tyres	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Scrap metal processing	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Shipping in bulk	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - other types of waste	Premise Match	762m	South West
6092	BLUESCOPE STEEL (AIS) PTY. LTD.	PORT KEMBLA STEELWORKS	FIVE ISLANDS ROAD	PORT KEMBLA	Waste storage - waste tyres	Premise Match	762m	South West

POEO Licence Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



EPA Activities

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
6141	PACIFIC NATIONAL (NSW) PTY LTD	ILLAWARRA BULK TERMINAL	TOM THUMB ROAD	PORT KEMBLA	Hazardous, Industrial or Group A Waste Generation or Storage	Road Match	31m	North West

Delicensed Activities Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
20534	WATERWAY CONSTRUCTIONS PTY LTD	, Inner Harbour, PORT KEMBLA, NSW 2505,	Surrendered	20/11/2014	Other activities	Premise Match	12m	North West
12571	BOSKALIS AUSTRALIA PTY LIMITED	Five Islands Road, PORT KEMBLA, NSW 0	Surrendered	30/01/2007	Water-based extractive activity	General Area/ Suburb Match	108m	South
12720	GEORGIOU GROUP PTY LTD	Tom Thumb Road, PORT KEMBLA, NSW 2505	Surrendered	05/07/2007	Water-based extractive activity	Premise Match	108m	West
20563	BOSKALIS AUSTRALIA PTY LIMITED	, Tom Thumb Road, PORT KEMBLA, NSW 2505,	Surrendered	07/04/2015	Water-based extractive activity	Premise Match	108m	West
12868	MAINLAND CIVIL PTY LIMITED	FORESHORE ROAD, PORT KEMBLA, NSW 2505	Surrendered	14/03/2008	Miscellaneous licensed discharge to waters (at any time)	Premise Match	108m	West
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	112m	-
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	112m	-
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered		Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	112m	-
13084	DONNELLEY CIVIL PTY LIMITED	Morton Way and Tom Thumb Road, PORT KEMBLA, NSW 2505	Surrendered	05/05/2009	Other activities	Premise Match	161m	West
12848	WATERWAY CONSTRUCTIONS PTY LTD	FARRER ROAD, PORT KEMBLA, NSW 2505	Surrendered	01/02/2008	Miscellaneous licensed discharge to waters (at any time)	Road Match	440m	West
12135	AUSTRAL CONSTRUCTION PTY. LTD.	Farrer Road, PORT KEMBLA, NSW 2505	Surrendered	26/05/2004	Coal Washery Reject or Slag Landfilling	Premise Match	475m	West

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
20001	CLEARY BROS (BOMBO) PTY LTD	Off Christy Drive, PORT KEMBLA, NSW 2505	Surrendered	22/08/2011	Other activities	General Area/ Suburb Match	723m	South
20164	PORT KEMBLA PORT CORPORATION	Christy Drive, PORT KEMBLA, NSW 2505	Surrendered	09/08/2012	Waste storage - other types of waste	General Area/ Suburb Match	723m	South
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Coal Washery Reject or Slag Landfilling	Premise Match	768m	West
12491	GEORGIOU GROUP PTY LTD	Products Berth Road, PORT KEMBLA, NSW 2505	Surrendered	23/05/2006	Land-based extractive activity	Premise Match	768m	West

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

UPSS Sensitive Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

1982 Business Directory Records
Premise or Road Intersection Matches

Records from the 1982 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1982 Business Directory Records
Road or Area Matches

Records from the 1982 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

1970 Business Directory Records
Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1970 Business Directory Records
Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

1961 Business Directory Records
Premise or Road Intersection Matches

Records from the 1961 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1961 Business Directory Records
Road or Area Matches

Records from the 1961 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

1950 Business Directory Records
Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

1950 Business Directory Records
Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer			

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Feature Point	Direction
N/A	No records in buffer					

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Historical Business Directories

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer				

Business Directory Content Derived from Universal Business Directories (UBD) - Licensed from Hardie Grant

Aerial Imagery 2016

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Scale: 0 50 100 200 Meters	Data Sources: Aerial Imagery © Department Finance, Services & Innovation	Coordinate System: GDA 1994 MGA Zone 56	Date: 18 July 2018

Aerial Imagery 2013

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Aerial Imagery 2008

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Scale: 0 50 100 200 Meters	Data Source Aerial Imagery: © 2018 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 56	Date: 17 July 2018

Aerial Imagery 2002

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Aerial Imagery 1994

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Aerial Imagery 1984

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Aerial Imagery 1975

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



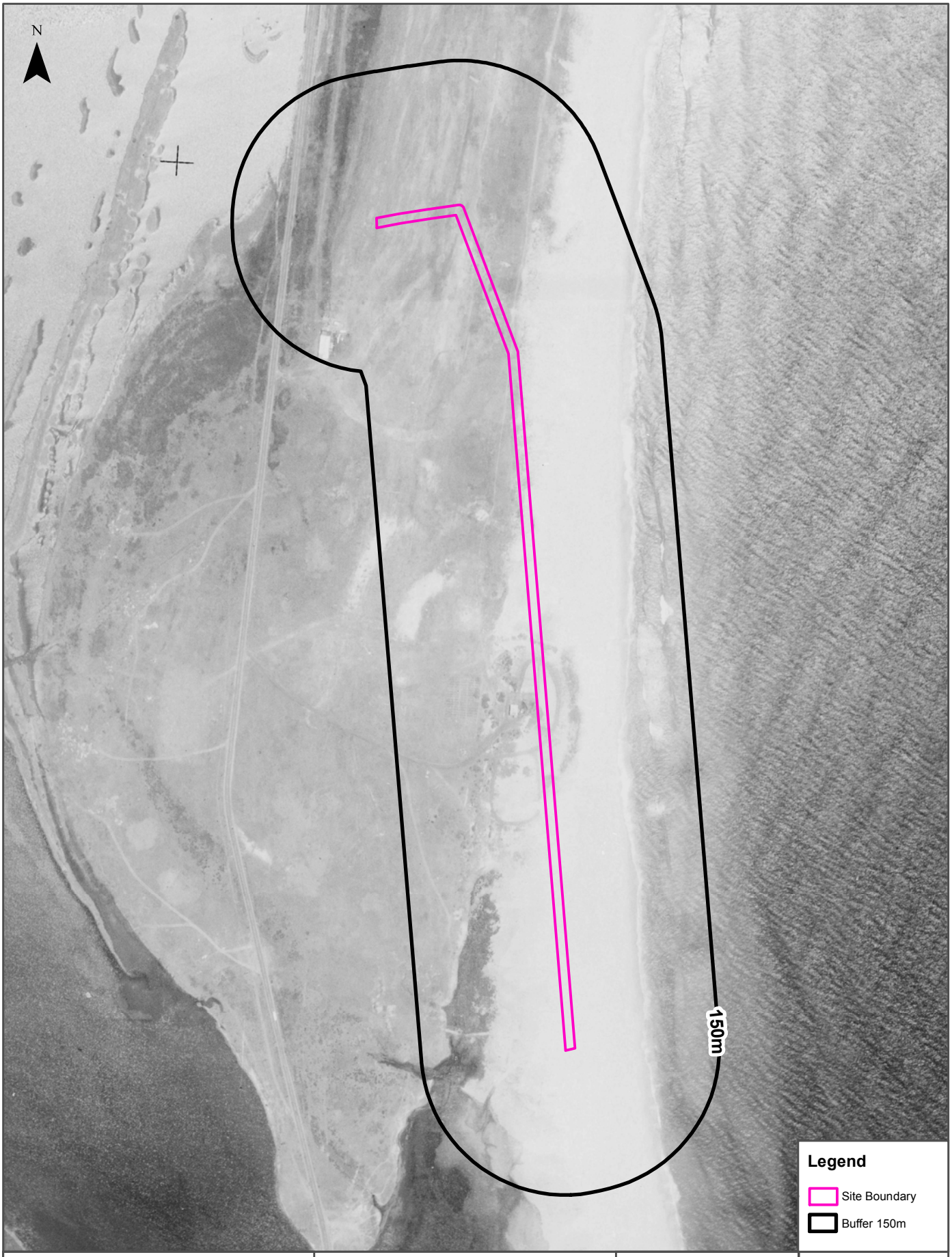
Aerial Imagery 1961

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Aerial Imagery 1951

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Topographic Map 2015

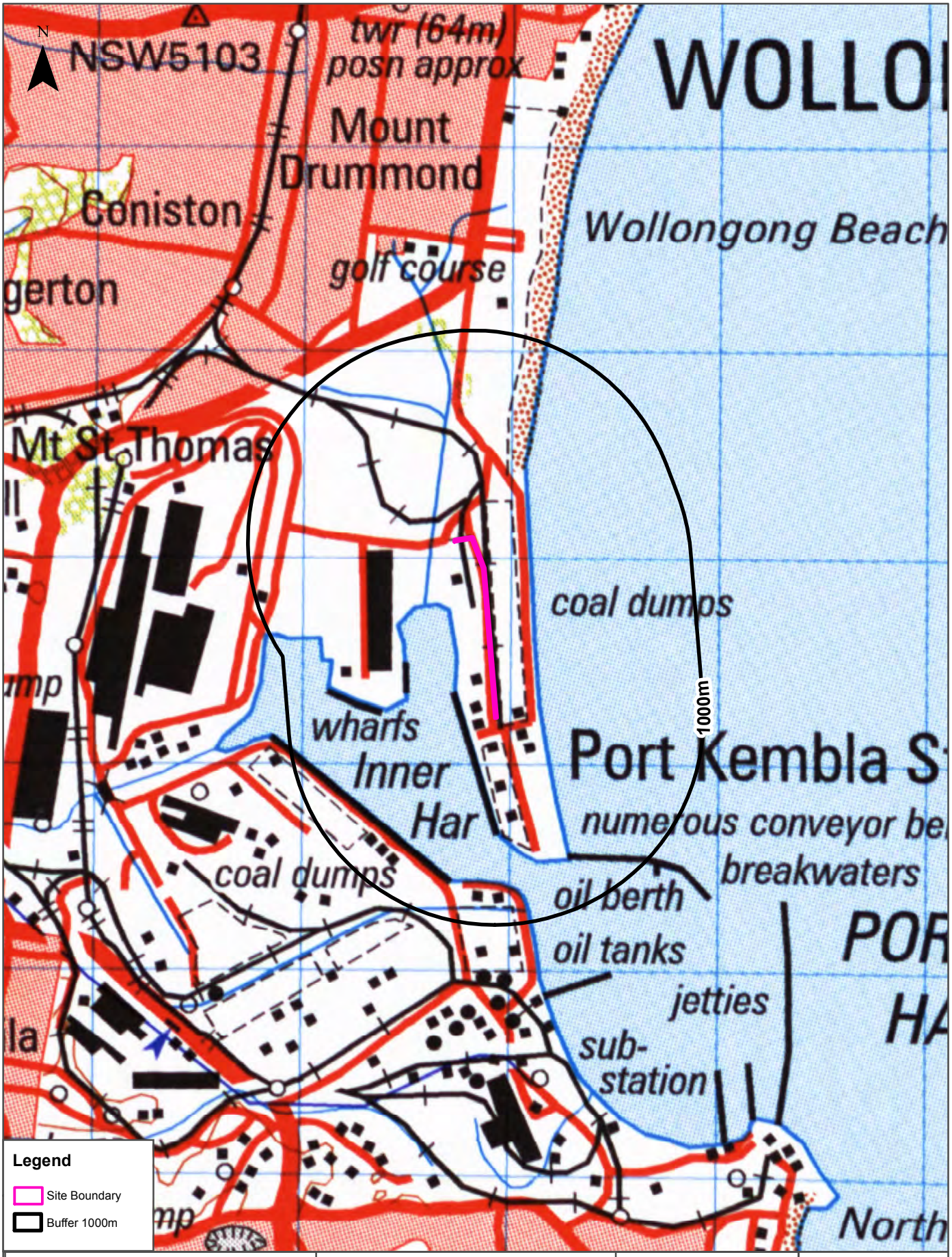
Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Scale: 0 100 200 400 600 Meters	Data Sources: Topographic Map Data © NSW Land and Property Information	Coordinate System: GDA 1994 MGA Zone 56	Date: 18 July 2018

Historical Map 1998

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Historical Map 1942

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



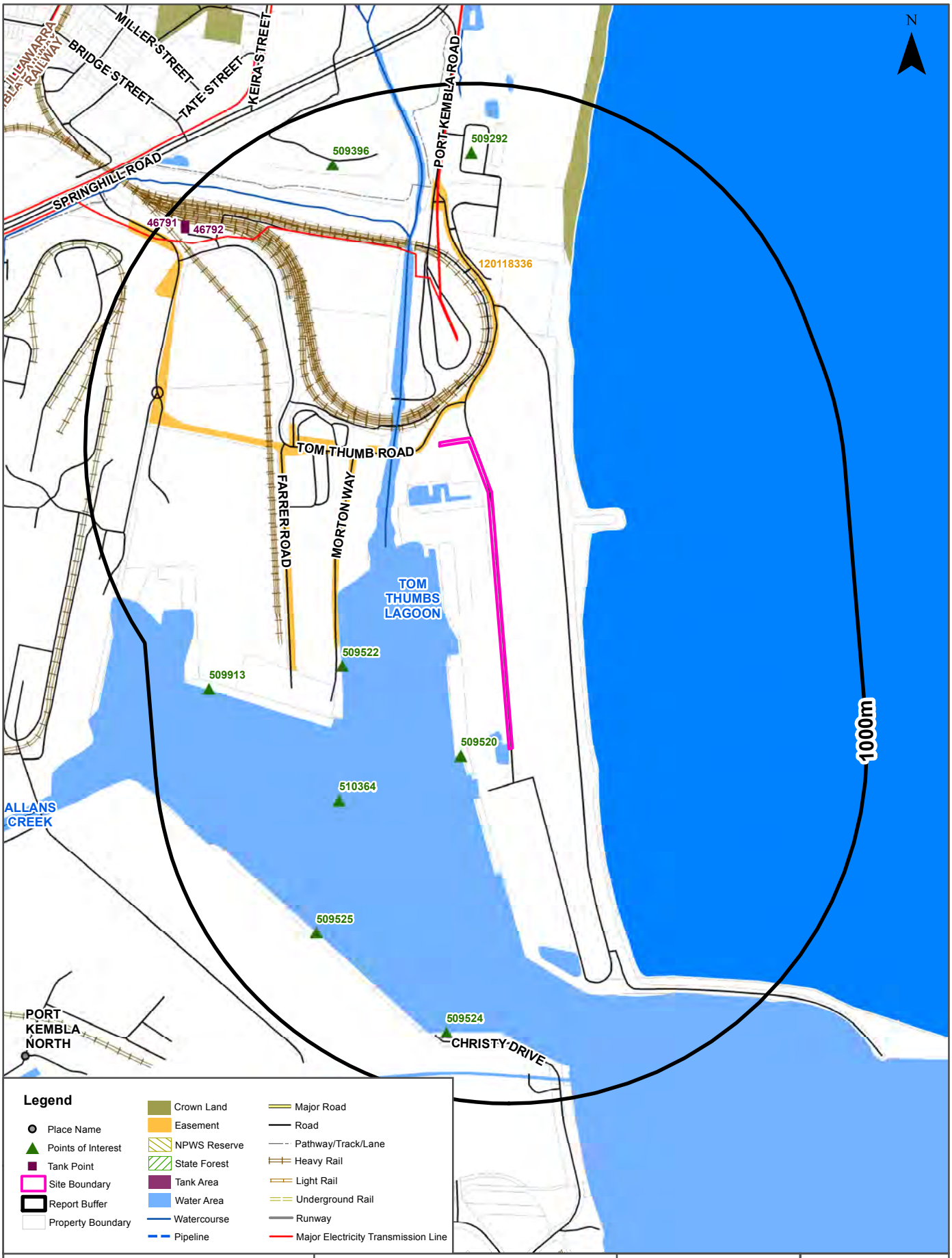
Data Sources: Australia 1:63360, Sheet 434, Wollongong, NSW. Prepared by Australian Section Imperial General Staff

Coordinate System: GDA 1994 MGA Zone 56

Date: 18 July 2018

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
509520	Wharf	Wharf	137m	South
509522	Wharf	Wharf	449m	South West
510364	Natural Waterbody	TOM THUMBS LAGOON	501m	South West
509525	Wharf	Wharf	751m	South West
509292	Sewage Works	Sewage Works	805m	North
509524	Wharf	Wharf	819m	South
509913	Wharf	Wharf	829m	West
509396	Lookout	AUSTRALIA'S INDUSTRY WORLD LOOKOUT	840m	North

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
46792	Undefined	Operational		09/04/2006	937m	North West
46791	Undefined	Operational		09/04/2006	944m	North West

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120118336	Primary	Undefined		31m	North West

Easements Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

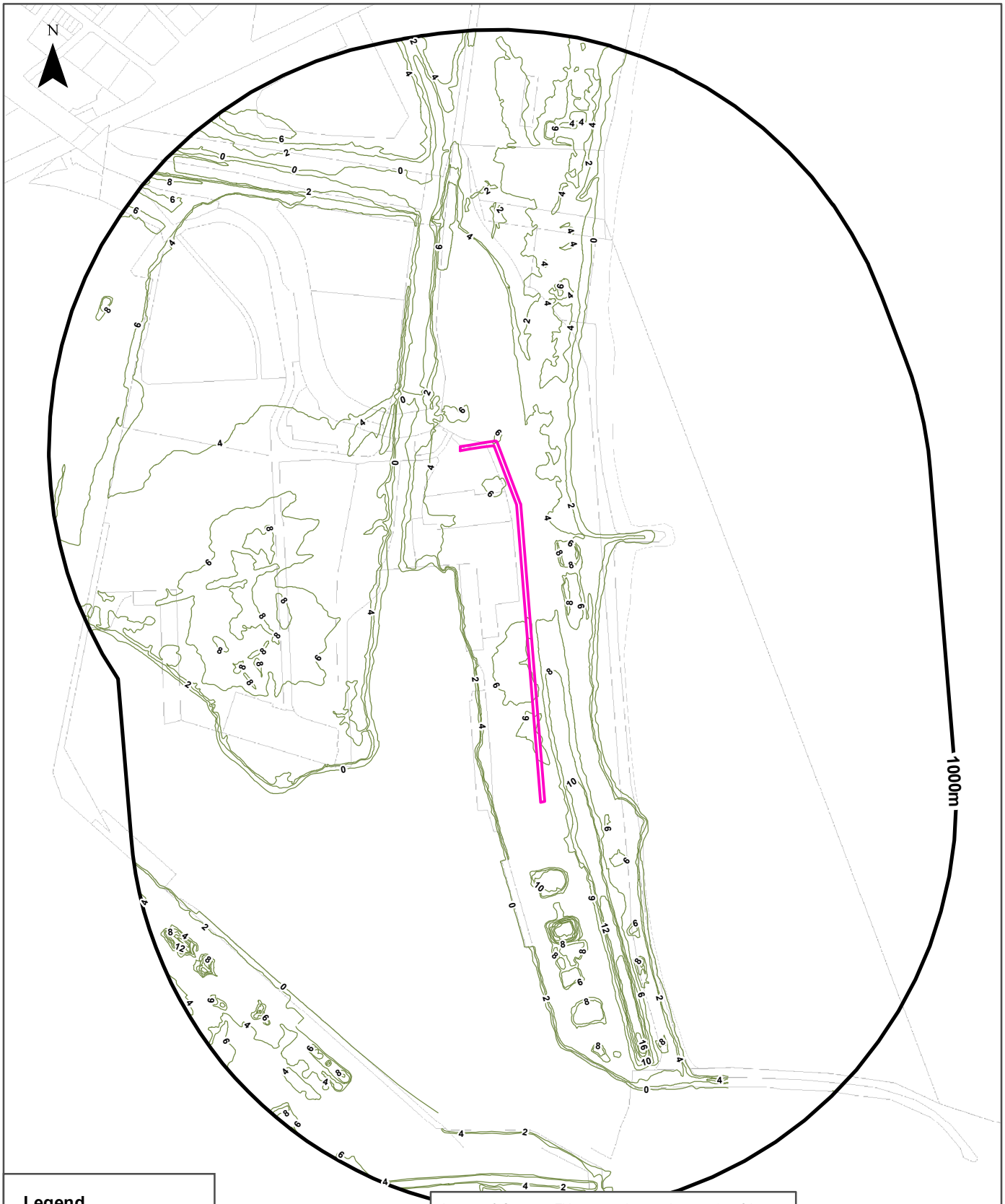
What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Hydrogeology

Description of aquifers on-site:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Fractured or fissured, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Botany Groundwater Management Zones

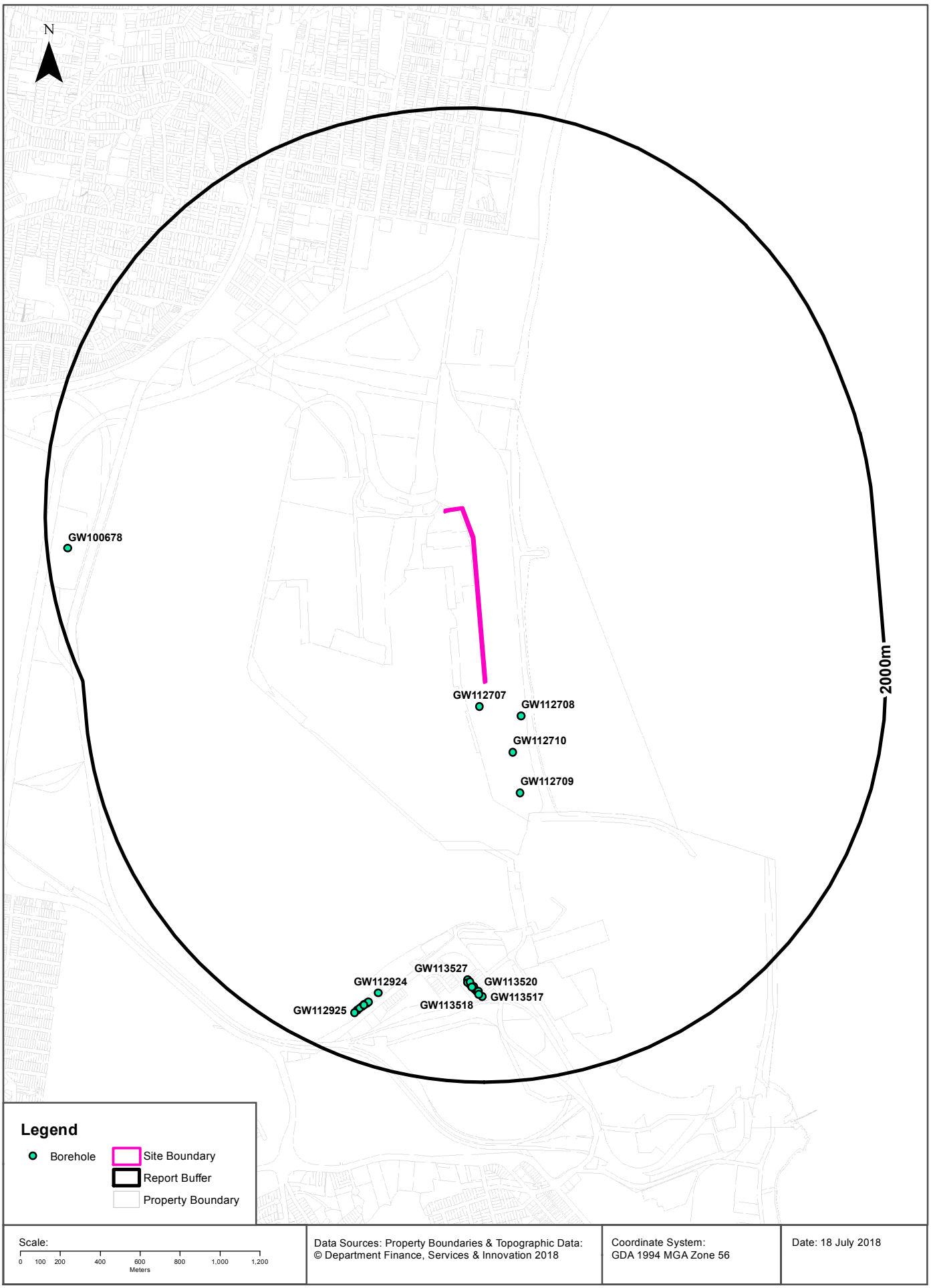
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Purpose	Contractor	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW112707	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	22/11/2011	6.50	6.50					123m	South
GW112708	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	22/11/2011	7.50	7.50					245m	South
GW112710	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	23/11/2011	7.00	7.00					377m	South
GW112709	10BL605035	Bore	Private	Monitoring	Douglas Partners Pty Ltd	23/11/2011	6.00	6.00					581m	South
GW113527	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	14/12/2012	2.80	2.80					1492 m	South
GW113525	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	22/01/2014	12.00	12.00					1502 m	South
GW113526	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	11/12/2012	1.80	1.80					1505 m	South
GW113524	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	10/12/2012	10.00	10.00					1515 m	South
GW113521	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	13/12/2012	1.70	1.70					1525 m	South
GW113522	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	11/12/2012	10.00	10.00					1527 m	South
GW113523	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	14/12/2012	16.00	16.00					1538 m	South
GW113520	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	12/12/2012	14.00	14.00					1546 m	South
GW113519	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	13/12/2012	15.00	15.00					1550 m	South
GW113518	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	11/12/2012	4.50	4.50					1562 m	South
GW113517	10BL605295	Bore	Private	Monitoring	Rockwell Drilling	10/02/2012	6.00	6.00					1573 m	South
GW112924	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	5.30	5.30					1642 m	South
GW112718	10BL604502	Bore	Private	Monitoring	TERRATEST		4.60	4.60		1.20			1701 m	South
GW112717	10BL604502	Bore	Private	Monitoring	TERRATEST	03/03/2011	6.00	6.00		1.30			1711 m	South
GW112716	10BL604502	Bore	Private	Monitoring	TERRATEST	03/03/2011	5.30	5.30		1.20			1720 m	South
GW112929	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/05/2011	6.70	6.70					1724 m	South
GW112928	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/05/2011	7.50	7.50					1735 m	South
GW112927	10BL604900	Bore	Private	Monitoring	Coffey Environments	26/11/2004	5.50	5.50					1747 m	South
GW112926	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	4.60	4.60					1759 m	South
GW112925	10BL604900	Bore	Private	Monitoring	Coffey Environments	03/03/2011	4.00	4.00					1775 m	South
GW100678	10BL156580	Bore	Private	Monitoring	KH Adams & Sons Pty Ltd	22/03/1995	65.00	65.00	2200	8.20	7.500		1895 m	West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Driller's Logs

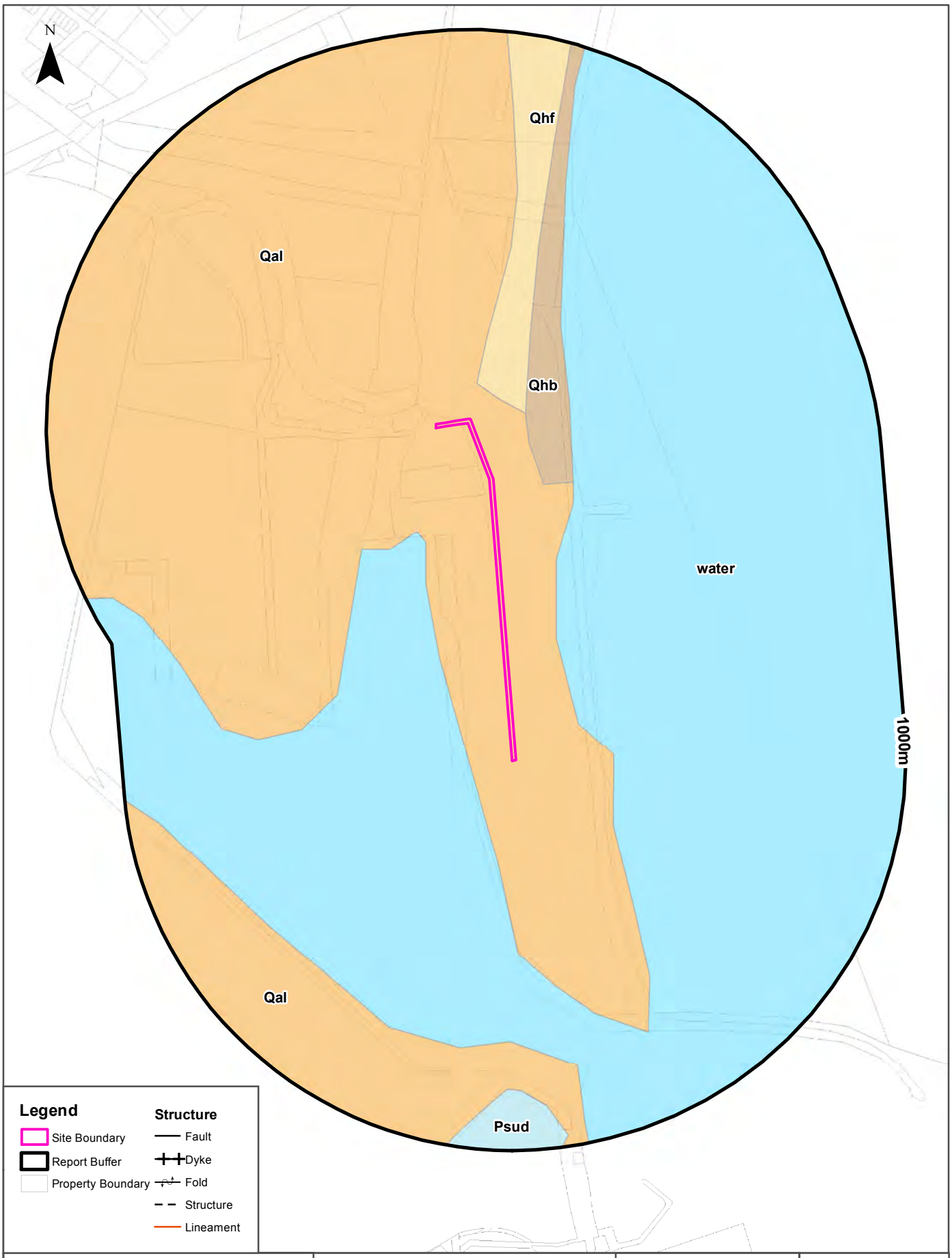
Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW100678	0.00m-0.60m TOPSOIL 0.60m-3.80m WEATHERED BASALT 3.80m-9.00m BASALT 9.00m-16.00m INDURATED SHALE 16.00m-65.00m SANDSTONE	1895m	West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology 1:100,000

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Geology

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Psud	melanocratic, coarse-grained and porphyritic latite	Dapto Latite Member	Shoalhaven Group				Wollongong & Port Hacking	1:100,000
Qal	quartz and lithic "fluvial" sand, silt, and clay						Wollongong & Port Hacking	1:100,000
Qhb	"marine" quartz sand, medium to coarse, with shelly fragments						Wollongong & Port Hacking	1:100,000
Qhf	"marine quartz sand , fine to medium, shelly. Leached to varying degrees						Wollongong & Port Hacking	1:100,000
water							Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy

© State of New South Wales through the NSW Department of Industry, Resources & Energy

Naturally Occurring Asbestos Potential

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Naturally Occurring Asbestos Potential

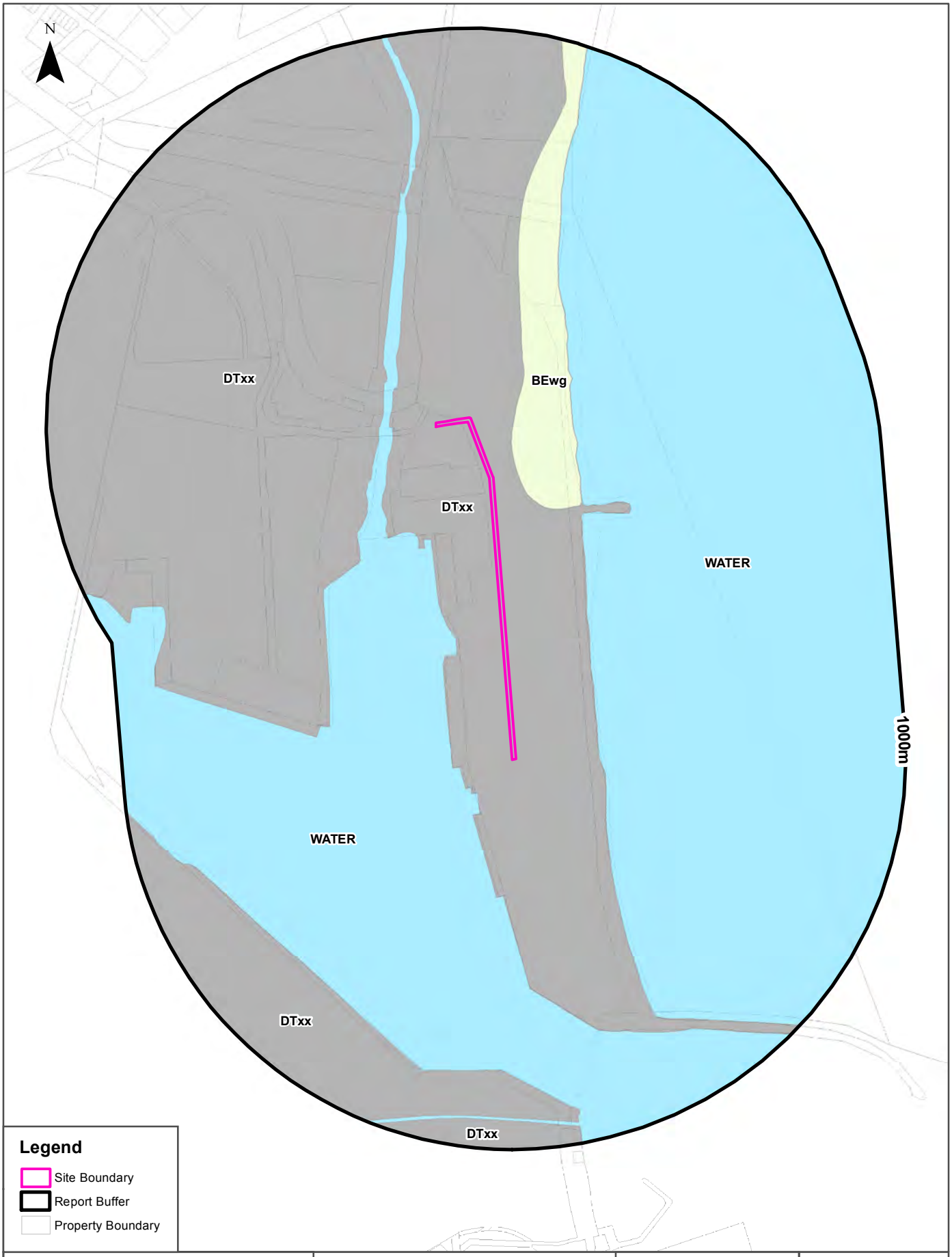
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Soil Landscapes

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000

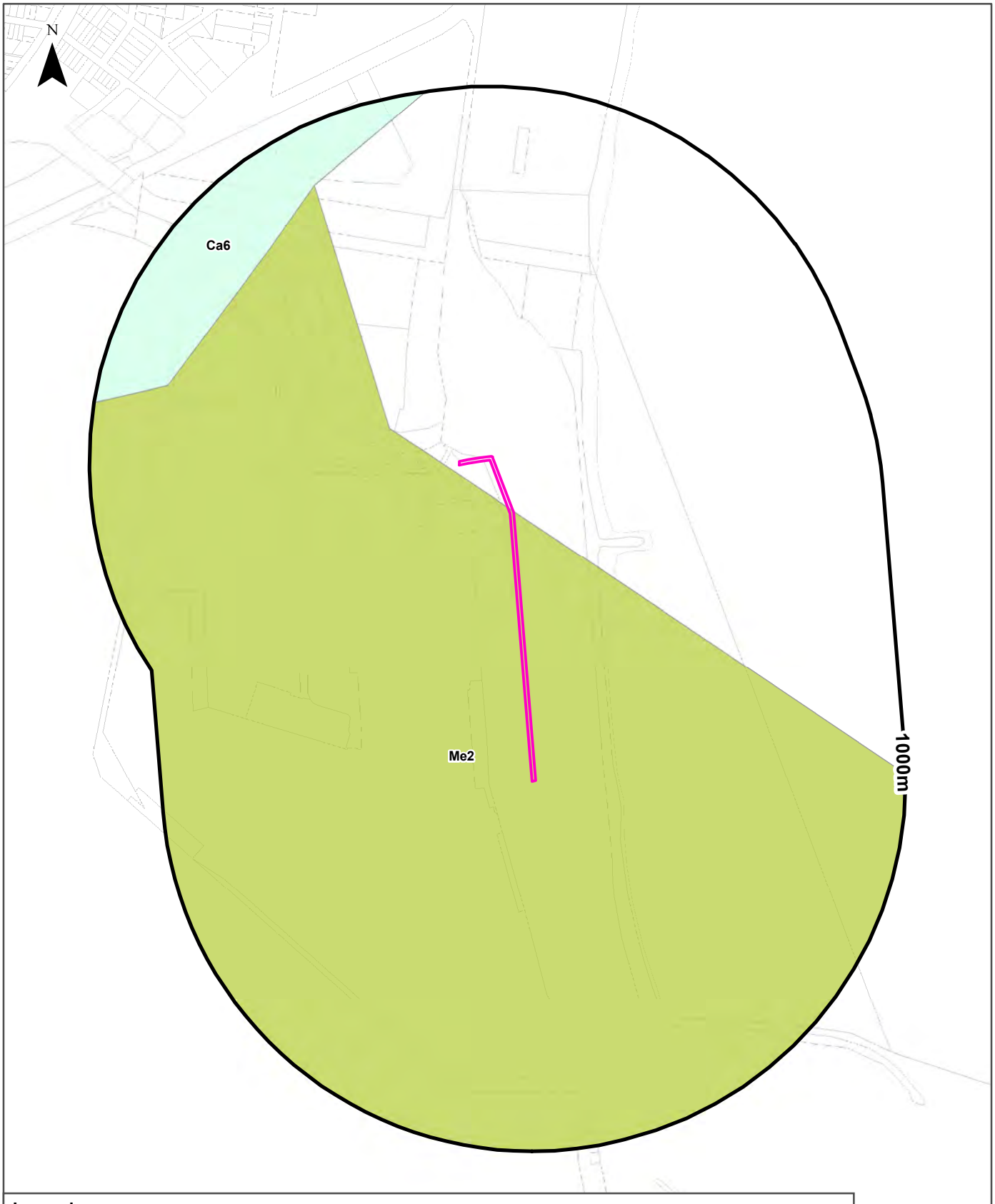
What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
BEwg	WOLLONGONG		BEACH	Wollongong & Port Hacking	1:100,000
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Legend

Site Boundary
Report Buffer
Property Boundary

Australian Soil Classification Orders

Anthroposol	Dermosol	Kandosol	Podosol	Tenosol	No Data
Calcarosol	Ferrosol	Kurosol	Rudosol	Vertosol	
Chromosol	Hydrosol	Organosol	Sodosol	Lake	

Scale: 0 100 200 400 600 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 19 July 2018

Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Me2	Dermosol	Steep hilly to mountainous with incised stream valleys: steep but more or less rounded hill slopes of brown friable earths (Gn3.21 and Gn3.22) and possibly some (Gn4) soils, in association with: at the higher altitudes, steep hill slopes of sandy soils (Uc4.2), loamy soils having an A2 horizon (Um4.2) with yellow-brown earths (Gn2.44), and possibly (Uc6.11) and (Um5.41) soils; and at the lower altitudes, moderate to steep slopes of hard acidic yellow mottled soils (Dy3 21 and Dy3.41), hard acidic red soils (Dr2.21), and yellow leached friable earths (Gn3.54); and narrow incised stream valleys of various soils including (Um6.11) and (Dy) soils. This unit is a broad one. In some areas the (Um4.2) and (Gn2.44) soils and in others the (Dy) and (Dr) soils rather than the (Gn3 soils could be dominant.	0m
Ca6	Podosol	Dunes of leached sands (Uc2.2) with some areas of (Uc2.3) soils in low-lying situations, also (Dy5.41) soils in some localities, and flanked by some dunes of calcareous sands (Uc1.11) along the coast.	753m

Atlas of Australian Soils Data Source: CSIRO
Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Standard Local Environmental Plan Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	LEP
N/A		

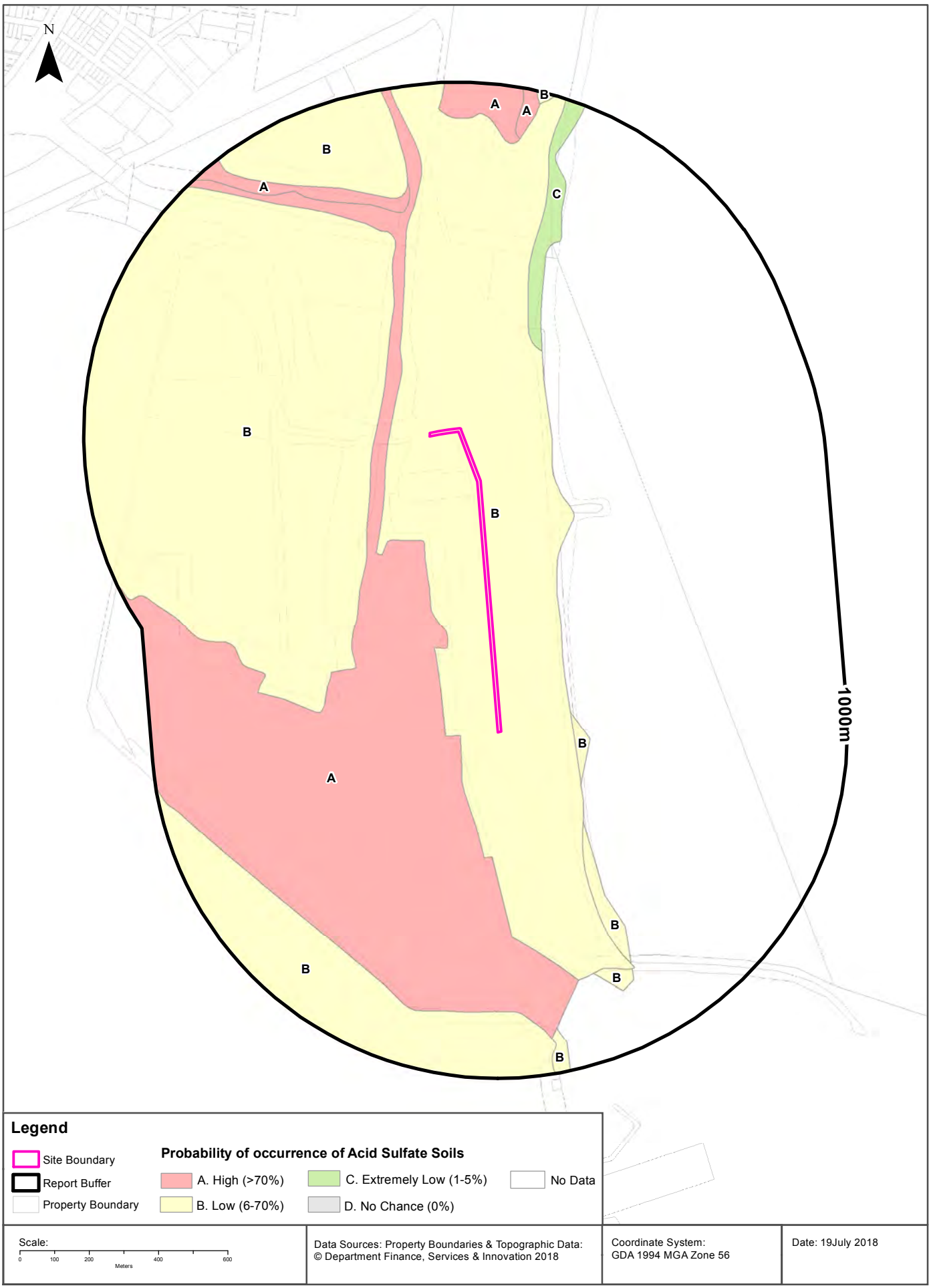
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	LEP	Distance	Direction
N/A				

Acid Sulfate Data Source Accessed 07/10/2016: NSW Crown Copyright - Planning and Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Acid Sulfate Soils

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m
A	High Probability of occurrence. >70% chance of occurrence.	109m
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	320m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Dryland Salinity

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Mining Subsidence Districts

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Environmental Zoning

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

State Environmental Planning Policy Protected Areas

Are there any State Environmental Planning Policy Protected Areas onsite or within the dataset buffer?

Dataset	Onsite	Within Site Buffer	Distance
SEPP14 - Coastal Wetlands	No	No	N/A
SEPP26 - Littoral Rainforests	No	No	N/A
SEPP71 - Coastal Protection Zone	Yes - SEPP71 covers 100% of the site	Yes	0m

SEPP Protected Areas Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Major Developments (2005)

State Environmental Planning Policy Major Developments within the dataset buffer:

Map Id	Feature	Effective Date	Distance	Direction
68269	Three Ports - Port Kembla	24/07/2009	0m	Onsite

SEPP Major Development Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

State Environmental Planning Policy Strategic Land Use Areas

State Environmental Planning Policy Strategic Land Use Areas onsite or within the dataset buffer:

Strategic Land Use	SEPPNo	Effective Date	Amendment	Amendment Year	Distance	Direction
No records within buffer						

SEPP Strategic Land Use Data Source: NSW Department of Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

LEP Planning Zones

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Land Zoning

What Local Environmental Plan Land Zones exist within the dataset buffer?

Zone	Description	Purpose	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
SP2	Infrastructure	Sewerage System	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		335m	North
RE1	Public Recreation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		654m	North
SP2	Infrastructure	Heliport and Parking	Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		725m	North
E2	Environmental Conservation		Wollongong Local Environmental Plan 2009	26/02/2010	26/02/2010	16/02/2018		976m	North West

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Environmental Plan

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Minimum Subdivision Lot Size

What are the onsite Local Environmental Plan Minimum Subdivision Lot Sizes?

Symbol	Minimum Lot Size	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Maximum Height of Building

What are the onsite Local Environmental Plan Maximum Height of Buildings?

Symbol	Maximum Height of Building	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Floor Space Ratio

What are the onsite Local Environmental Plan Floor Space Ratios?

Symbol	Floor Space Ratio	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data							

Land Application

What are the onsite Local Environmental Plan Land Applications?

Application Type	LEP or SEPP	Published Date	Commenced Date	Currency Date	Amendment	Percentage of Site Area
No Data						

Land Reservation Acquisition

What are the onsite Local Environmental Plan Land Reservation Acquisitions?

Reservation	LEP	Published Date	Commenced Date	Currency Date	Amendment	Comments	Percentage of Site Area
No Data							

Local Environment Plan Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Heritage

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

State Heritage Items

What are the State Heritage Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Local Heritage Items

What are the Local Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	LEP or Act	Published Date	Commenced Date	Currency Date	Distance	Direction
N/A	No records in buffer								

Heritage Data Source: NSW Crown Copyright - Planning & Environment
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Natural Hazards

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
No records within buffer		

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & RAMSAR Wetlands

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Data Sources: Property Boundaries & Topographic Data: © Land and Property Information (a division of the Department of Finance and Services) 2018

Coordinate System: GDA 1994 MGA Zone 56

Date: 18July 2018

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Native Vegetation of the Illawarra Escarpment & Coastal Plain

What Native Vegetation of the Illawarra Escarpment & Coastal Plain exists within the dataset buffer?

Veg Code	Vegetation Community	Disturbance Class	Disturbance Type	Understorey	Broad Vegetation Type	Endangered Ecological Community	Distance	Direction
MU57e	Estuarine Lagoons and Channels	Unassessed			Wetlands		107m	South West
MU56e	Modified Lands	Weeds and Exotics			Cleared		155m	North West
MU55a	Seagrass Meadows and Estuarine Flats	Unassessed			Seagrass		179m	North West
MU57a	Artificial Wetlands	Unassessed			Wetlands		185m	North West
MU57i	Water	Water			Water		201m	East
MU57b	Beach Sand	Unassessed			Rocks		209m	North East
MU56c	Weeds and Exotics	Weeds and Exotics			Weeds and Exotics		316m	North
MU45	Coastal Sand Scrub	High Disturbance	Weeds	Not Described	Native Vegetation		340m	North
MU53	Estuarine Alluvial Wetland	Unassessed			Native Vegetation	Sydney Coastal Estuary Swamp Complex	566m	North

Native Vegetation of the Illawarra Escarpment & Coastal Plain : NSW Office of Environment and Heritage
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

RAMSAR Wetlands

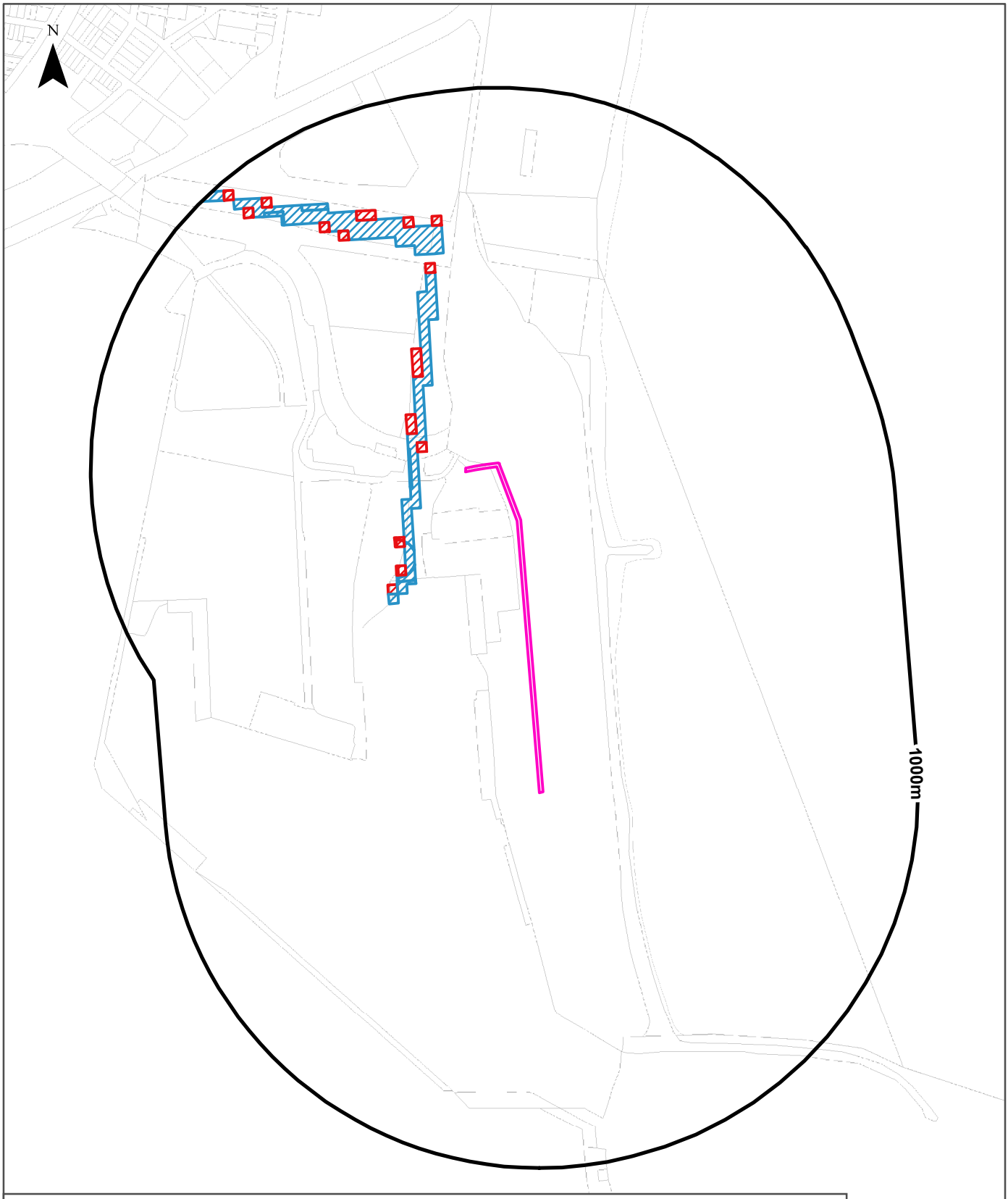
What RAMSAR Wetland areas exist within the dataset buffer?

Map Id	RAMSAR Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

RAMSAR Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	High potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		112m
Terrestrial	Low potential GDE - from regional studies	Deeply dissected sandstone plateaus.	Vegetation		124m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)



Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation		112m
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation		124m
Terrestrial	7	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		145m
Terrestrial	6	Deeply dissected sandstone plateaus.	Vegetation		244m
Terrestrial	3	Deeply dissected sandstone plateaus.	Vegetation		246m
Terrestrial	5	Deeply dissected steeply sloping plateau margin in metamorphics and granite. Bounded in the west by the Great Escarpment.	Vegetation		326m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Ecological Constraints

Proposed Gas Pipeline & Berth 101, Port Kembla, NSW 2505 (Section 5)

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calonectris leucomelas	Streaked Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Charadrius mongolus	Lesser Sand-plover	Vulnerable	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Coracina lineata	Barred Cuckoo-shrike	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Diomedea gibsoni	Gibson's Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pachycephala olivacea	Olive Whistler	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica rodinogaster	Pink Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Ptilinopus magnificus	Wompoo Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Stercorarius pomarinus	Pomarine Jaeger	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Sula leucogaster	Brown Booby	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Thalassarche impavida	Campbell Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche salvini	Salvin's Albatross	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Miniopterus australis	Little Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Mormopterus norfolkensis	Eastern Freetail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Physeter macrocephalus	Sperm Whale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Arthropteris palisotii	Lesser Creeping Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Cynanchum elegans	White-flowered Wax Plant	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Epacris purpurascens subsp. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus largeana	Craven Grey Box	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Gossia acmenoides	Scrub Ironwood	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Solanum celatum		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Zieria granulata	Illawarra Zieria	Endangered	Not Sensitive	Endangered	

Data does not include NSW category 1 sensitive species.
NSW BioNet: © State of NSW and Office of Environment and Heritage
Data obtained 18/07/2018

USE OF REPORT – APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report. The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available (**Third Party Content Suppliers**);
      (j) content which is derived from content described in paragraph (i);
   (b) Lotsearch does not take any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**);
   (d) Lotsearch has not undertaken any physical inspection of the property;
   (e) Lotsearch does not warrant that all land uses or features whether past or current are identified in the Report;
   (f) the Report does not include any information relating to the actual state or condition of the Property;
   (g) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of a Property for any particular purpose;
   (h) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (i) the End User should undertake its own inspection s of the Property to satisfy itself that there are no defects or failures.
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
5. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
6. To the extent permitted by law and subject to paragraph 7, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these terms other than as expressly set out in these terms are excluded.
7. Subject to paragraph 8, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
8. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
9. Subject to paragraph 7, neither Lotsearch nor the End User is liable to the other for any indirect, incidental,consequential, special or exemplary damages arising out of or in relation to these terms.
10. These terms are subject to New South Wales law.