

APPENDIX B
Historical Maps



Site Details:

ASSOCIATED BRITISH
PORTS, DOCKS, BARRY, CF62
5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series
Map date: 1878
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1878
Revised 1878
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1878
Revised 1878
Edition N/A
Copyright N/A
Levelled N/A

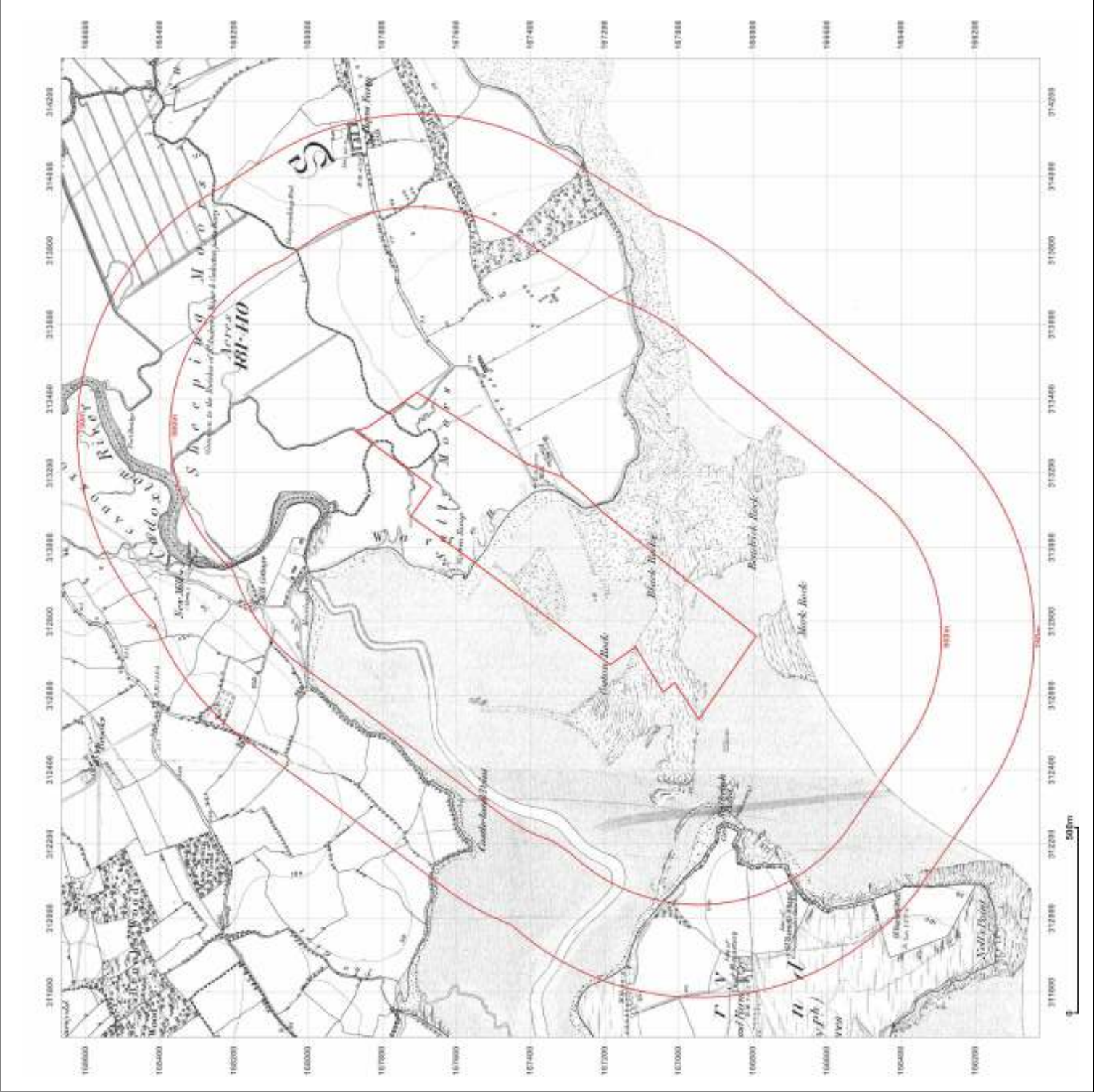


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Production date: 15 July 2014

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Site Details:

ASSOCIATED BRITISH
PORTS, DOCKS, BARRY, CF62
5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series

Map date: 1898

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A

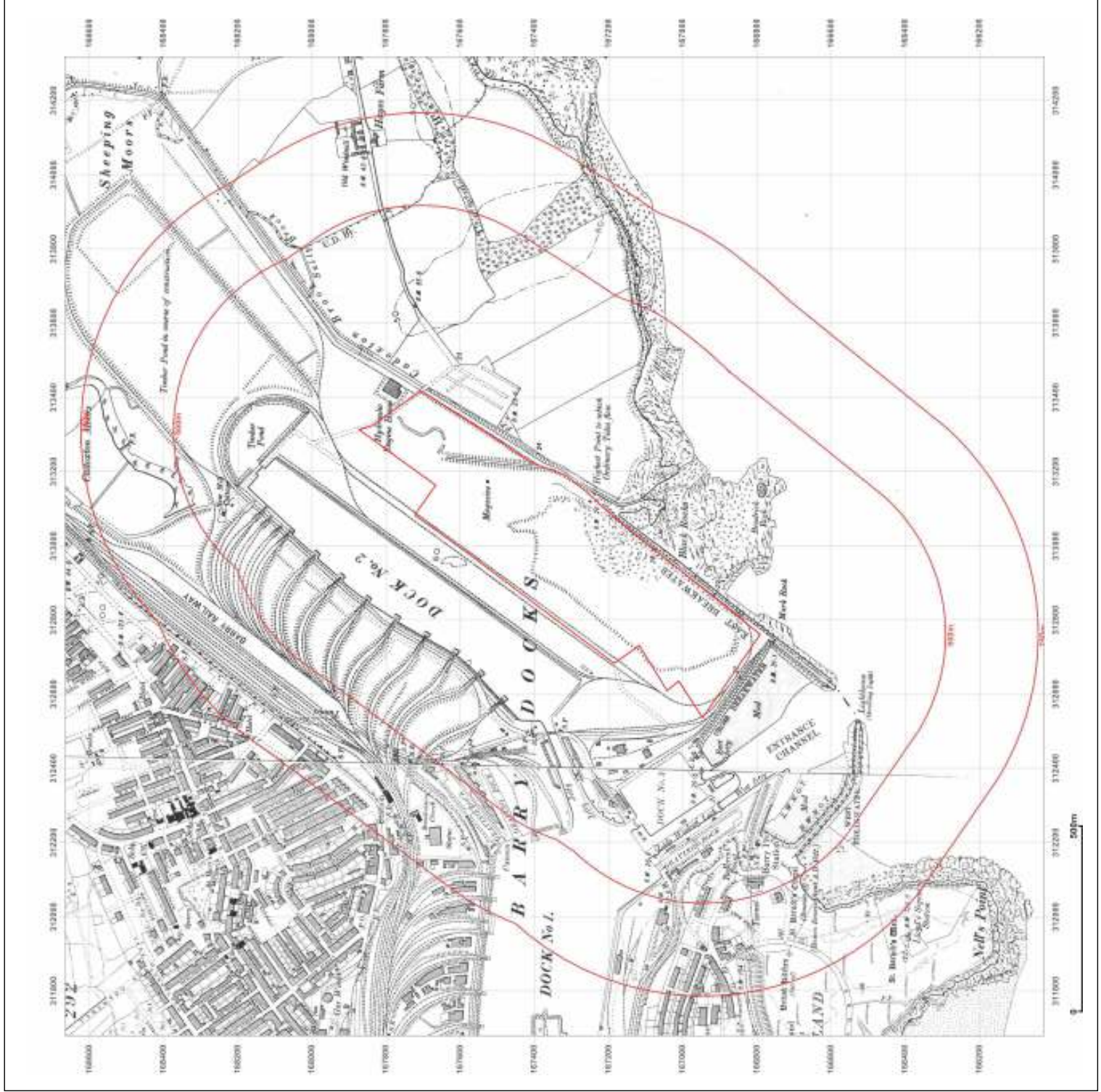


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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series

Map date: 1915

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1915
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1915
Edition N/A
Copyright N/A
Levelled N/A

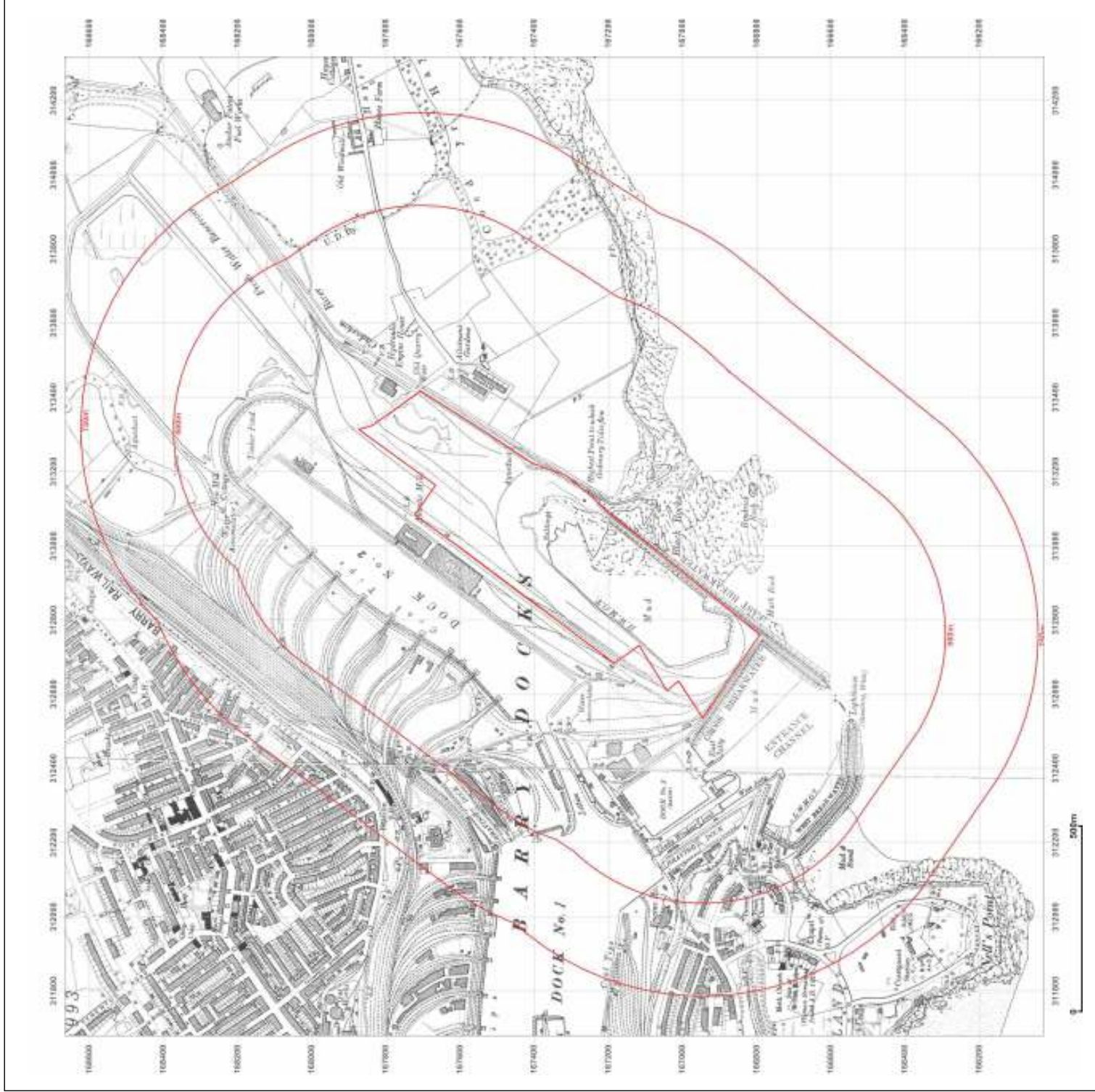


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PORTS, DOCKS, BARRY, CF62
5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series

Map date: 1921

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

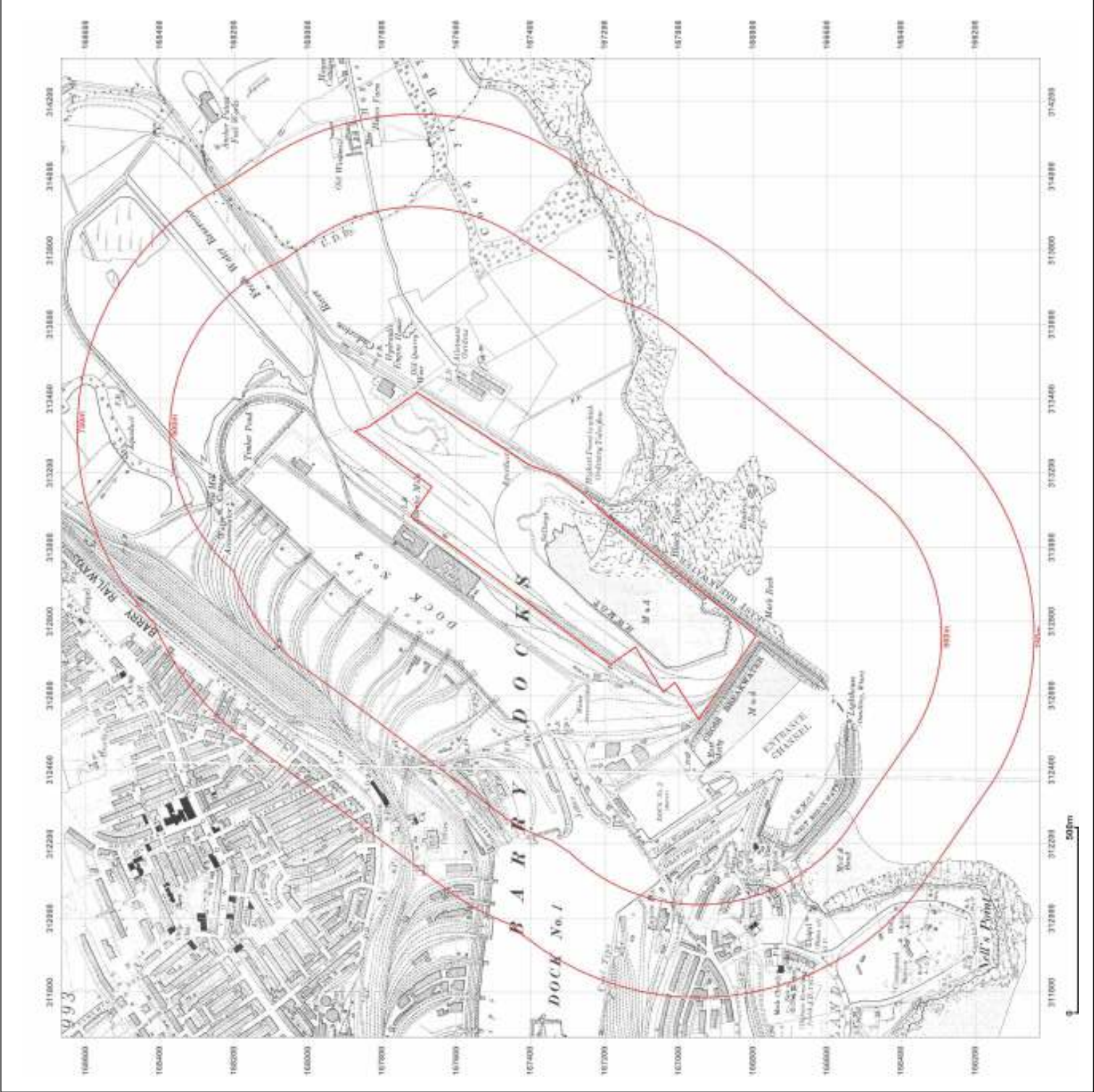


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PORTS, DOCKS, BARRY, CF62
5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series

Map date: 1936

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1936
Edition N/A
Copyright N/A
Landed N/A

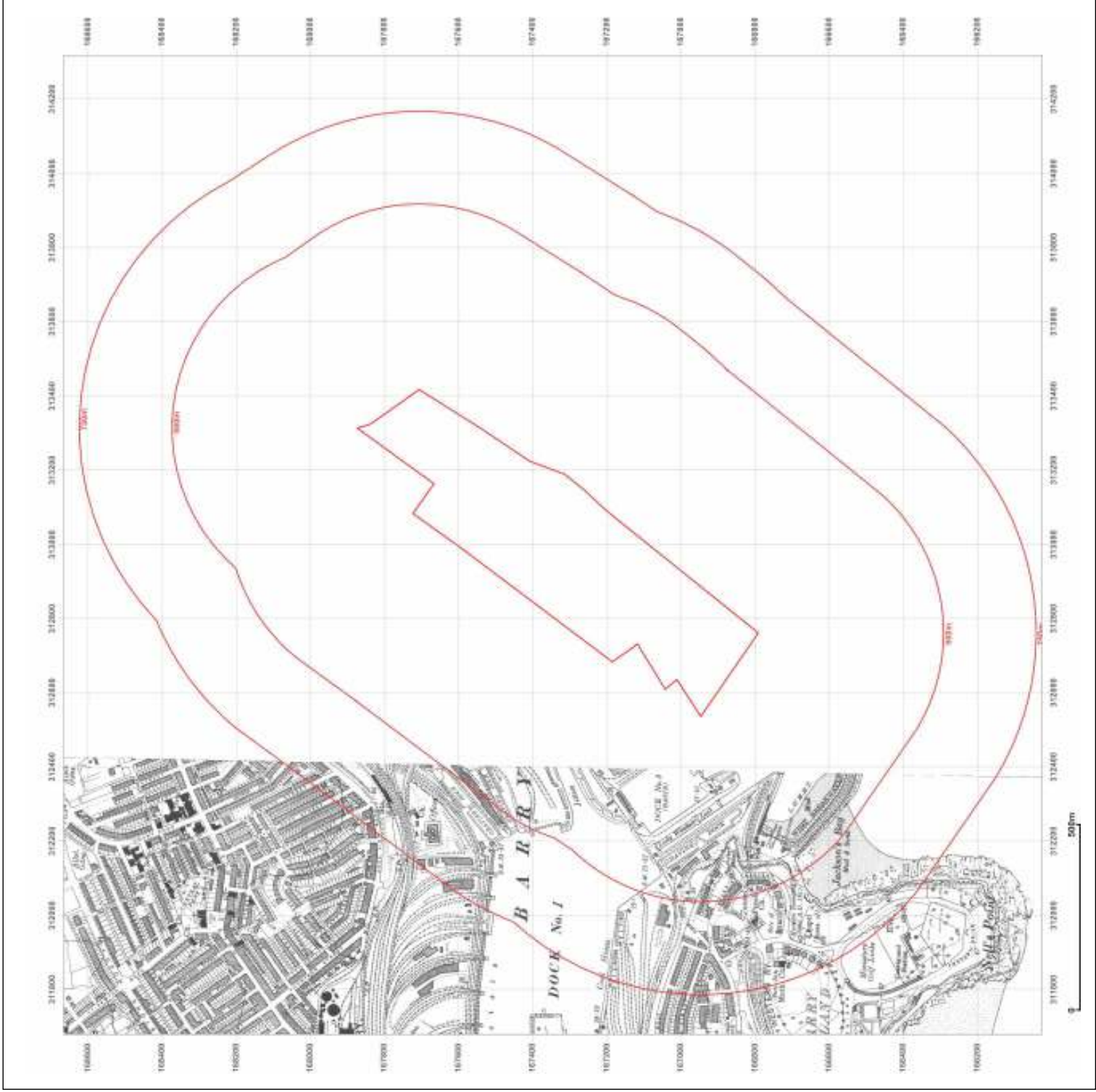
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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1938
Edition N/A
Copyright N/A
Landed N/A

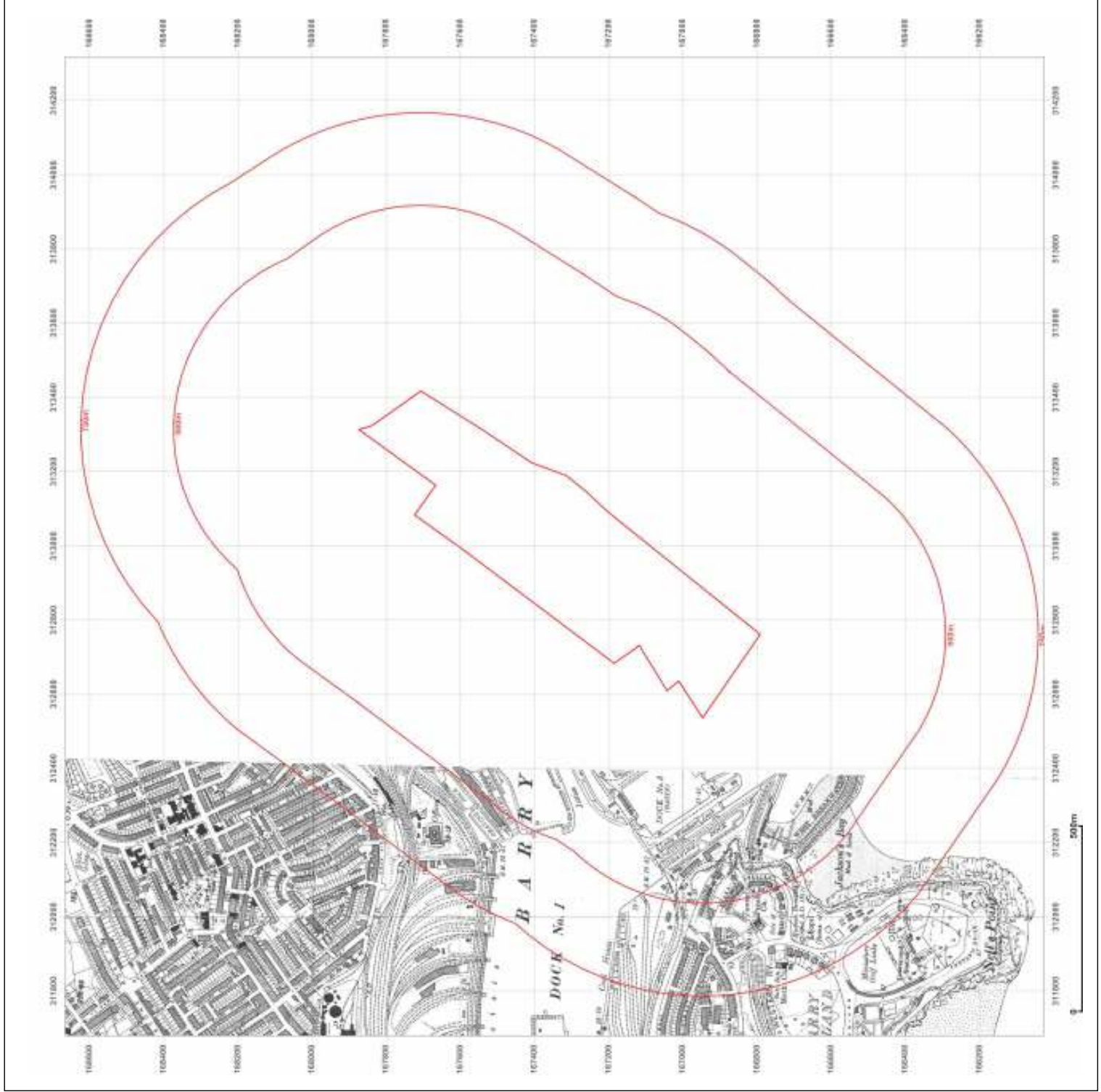
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Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: County Series
Map date: 1947
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1978
Revised 1947
Edition N/A
Copyright N/A
Unrevised N/A

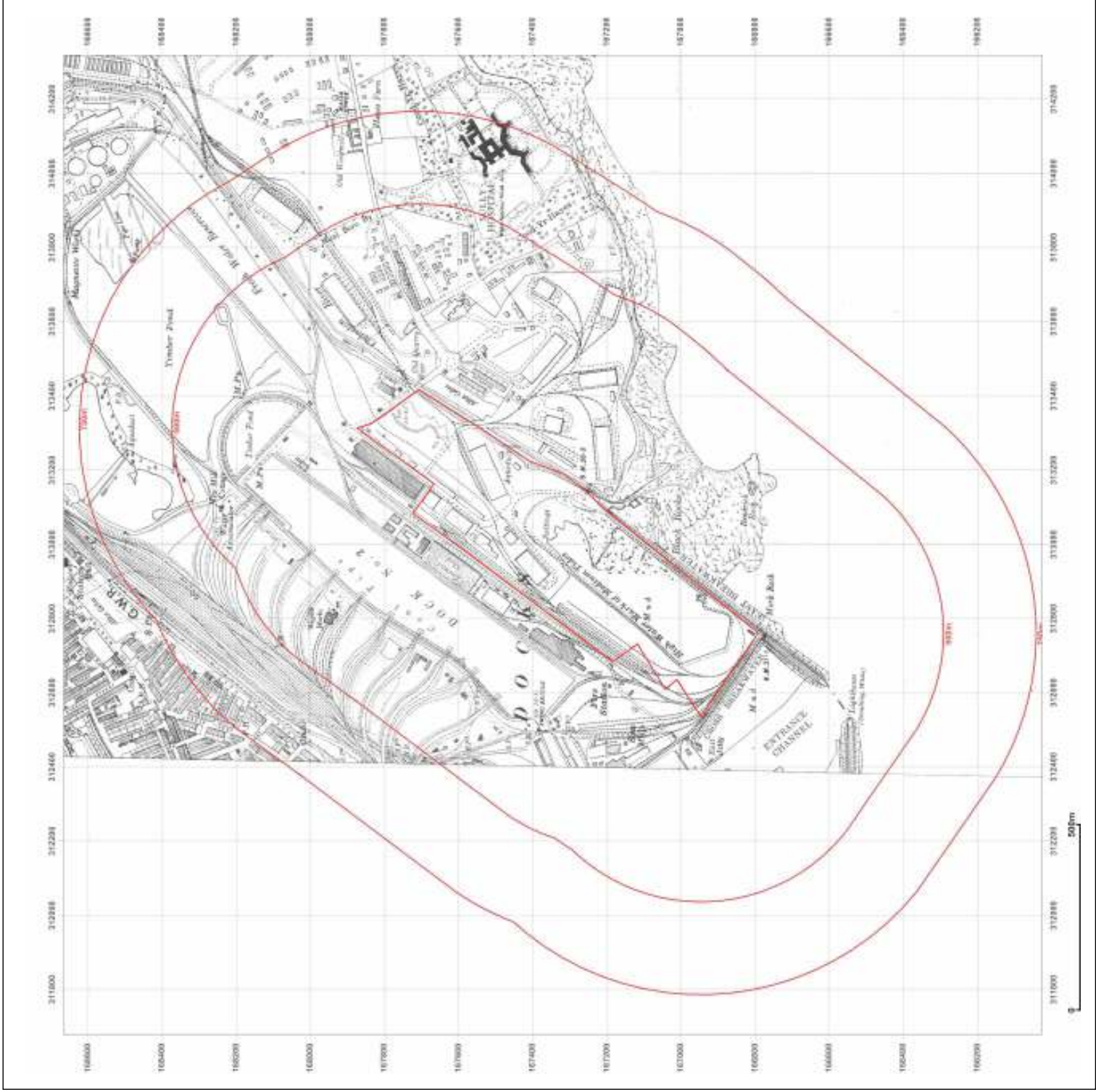
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 5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: Provisional
Map date: 1965
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1877
 Revised 1947
 Edition N/A
 Copyright 1965
 Levelled N/A

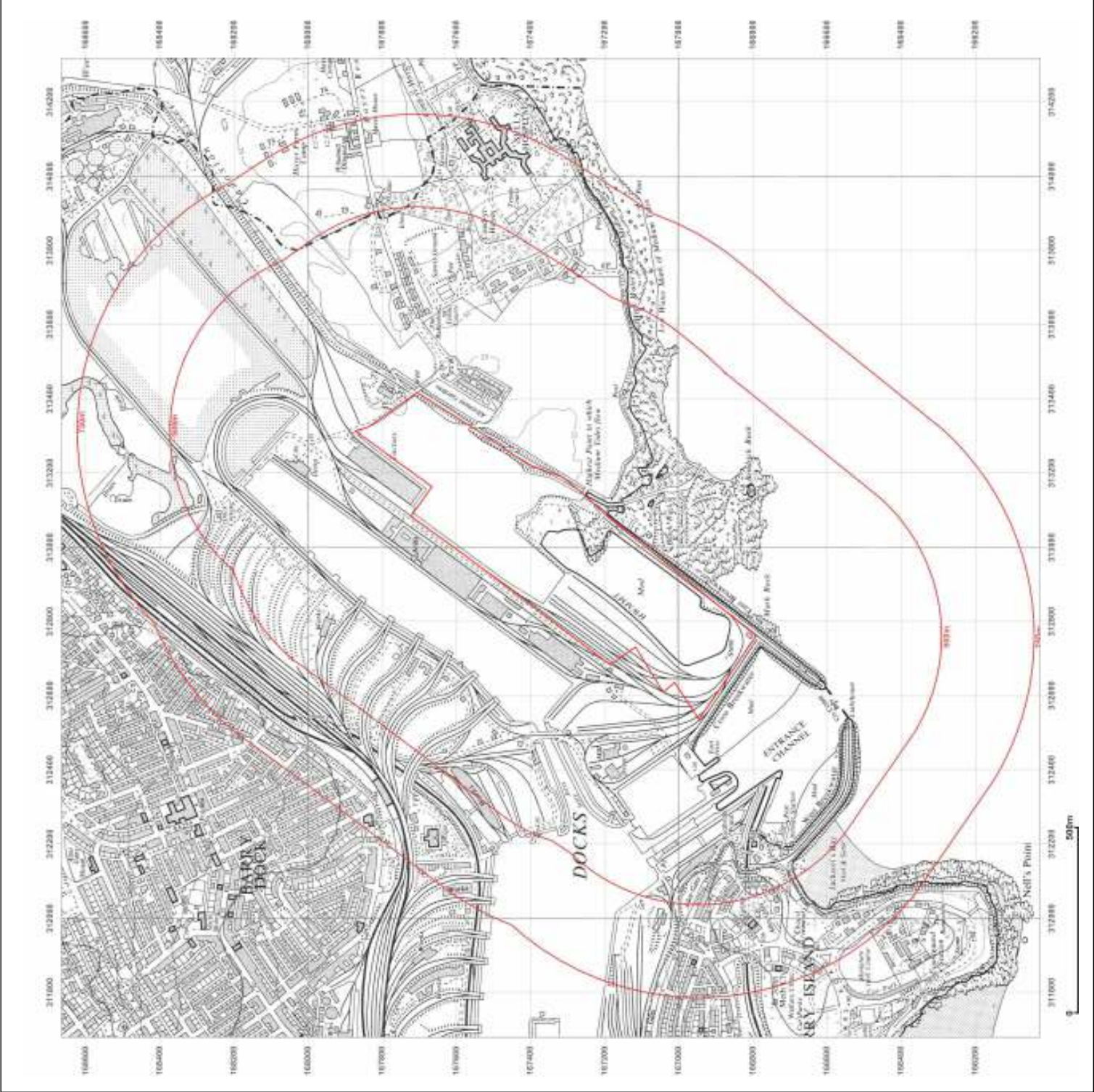
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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: National Grid

Map date: 1973

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1972
Revised 1973
Edition N/A
Copyright N/A
Landed N/A

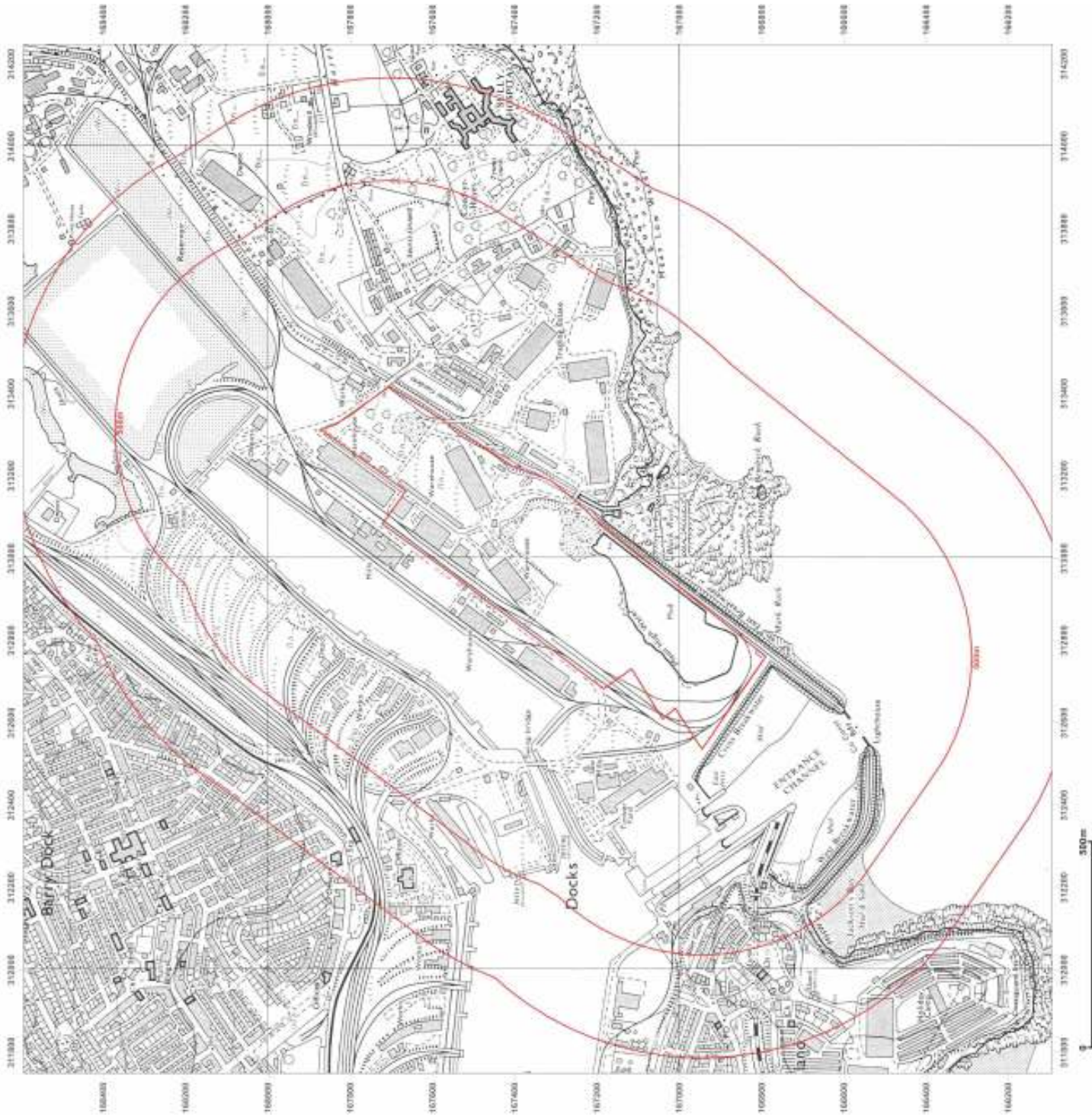
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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: National Grid

Map date: 1982

Scale: 1:10,000

Printed at: 1:10,000



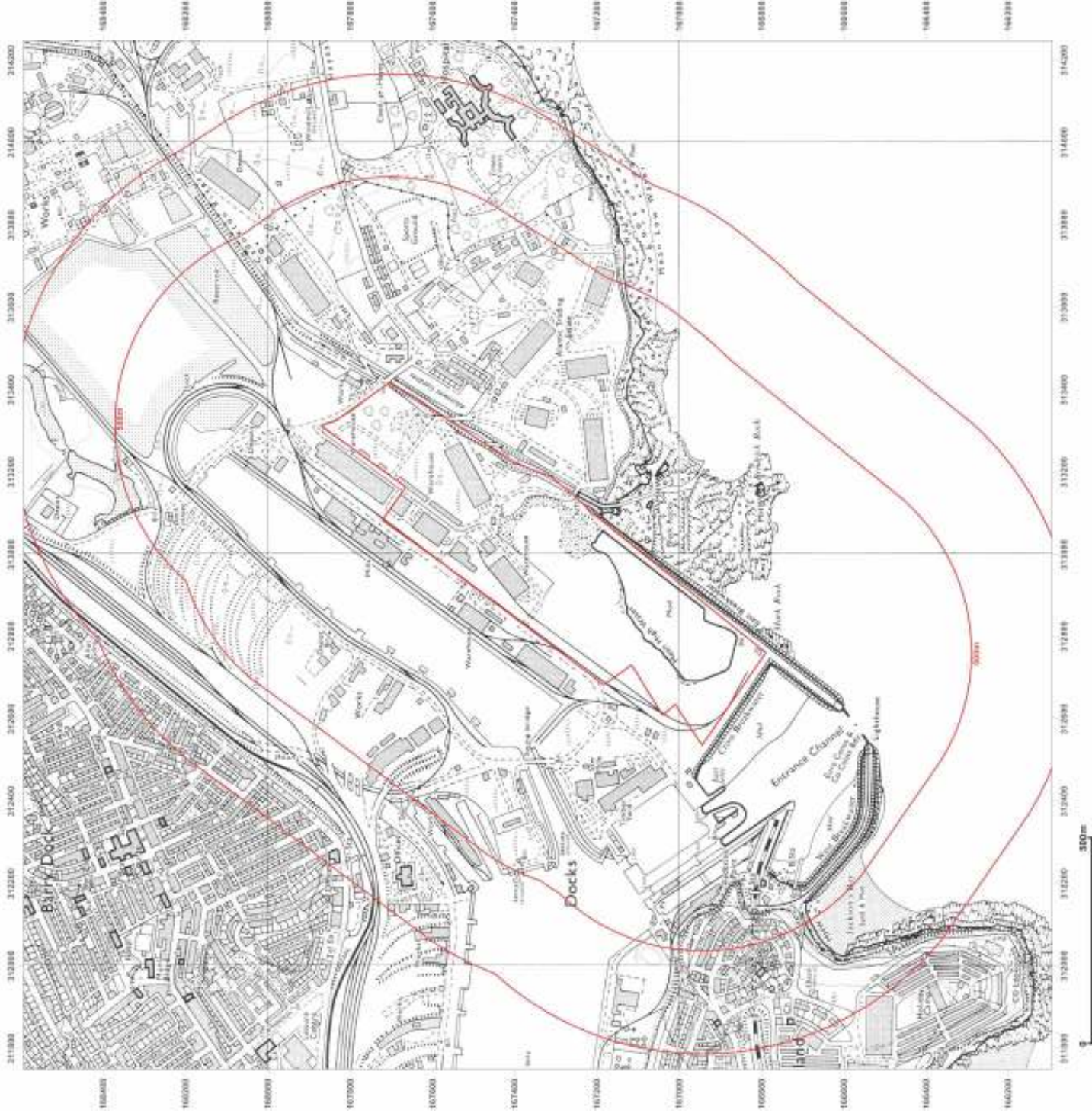
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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: National Grid

Map date: 1991

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1960
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A

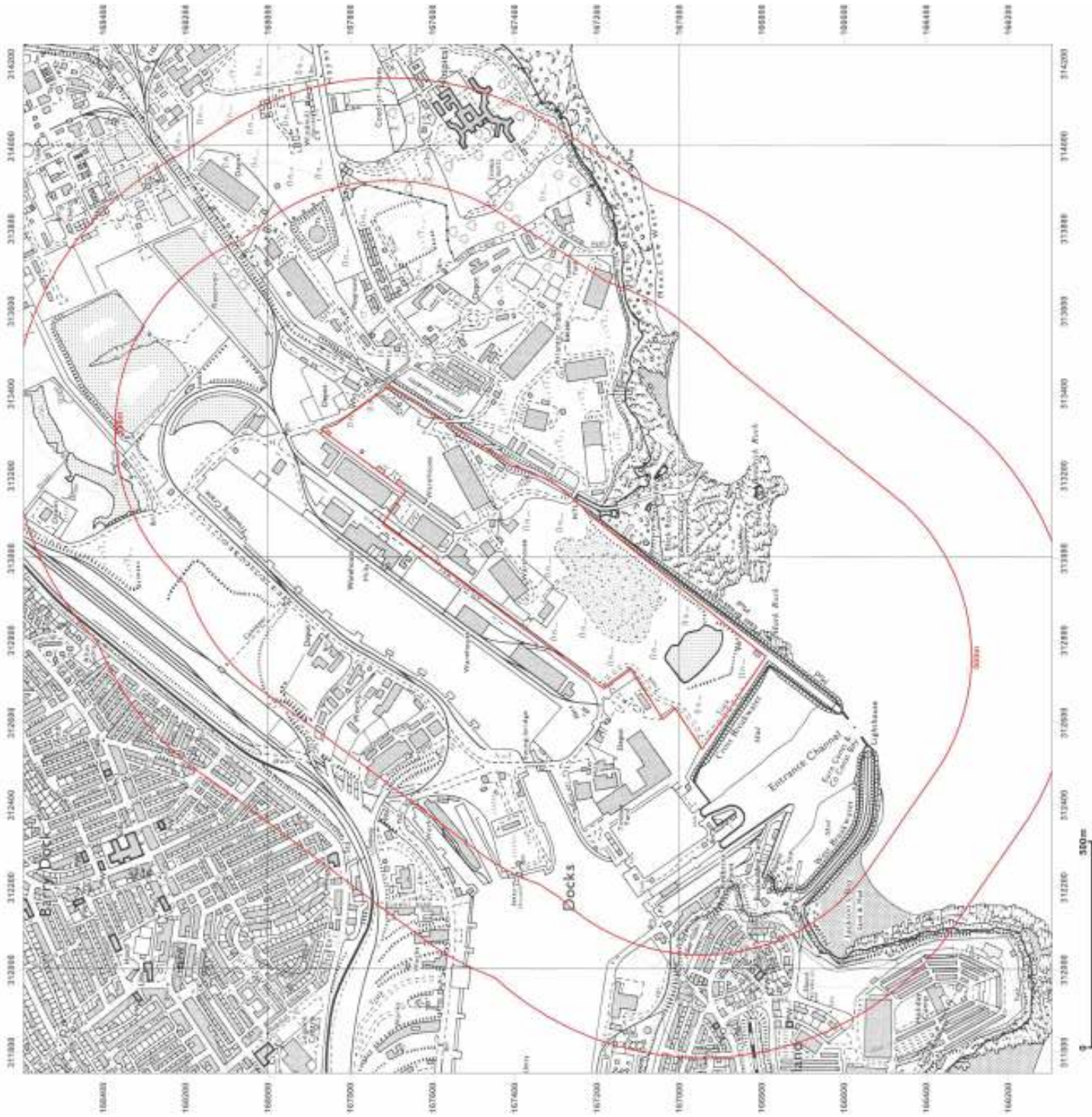
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PORTS, DOCKS, BARRY, CF62
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Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



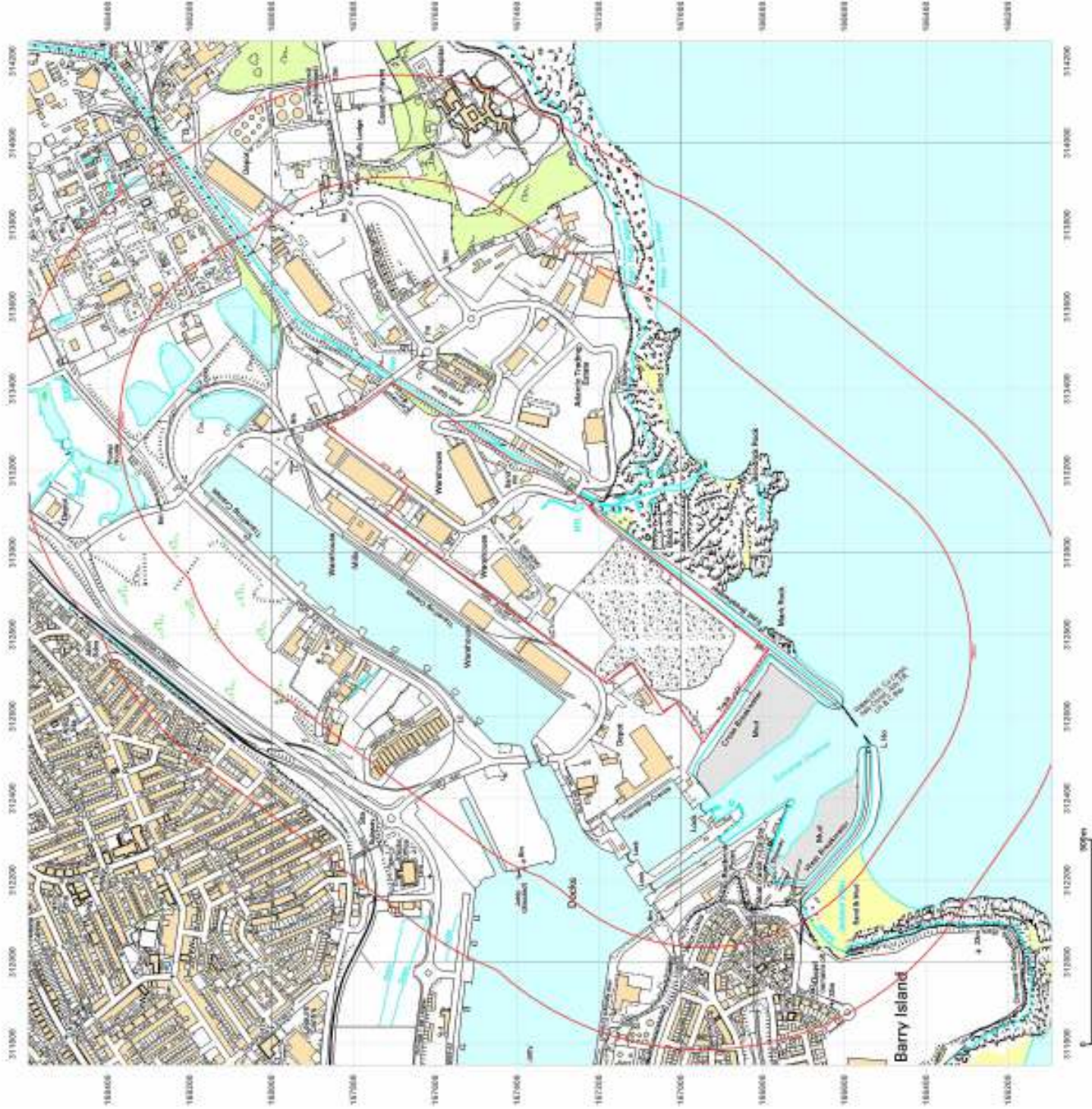
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Site Details:

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5QS

Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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Client Ref: 234-02-01
Report Ref: HMD-142-1562456
Grid Ref: 312998, 167344

Map Name: National Grid
Map date: 2014
Scale: 1:10,000
Printed at: 1:10,000



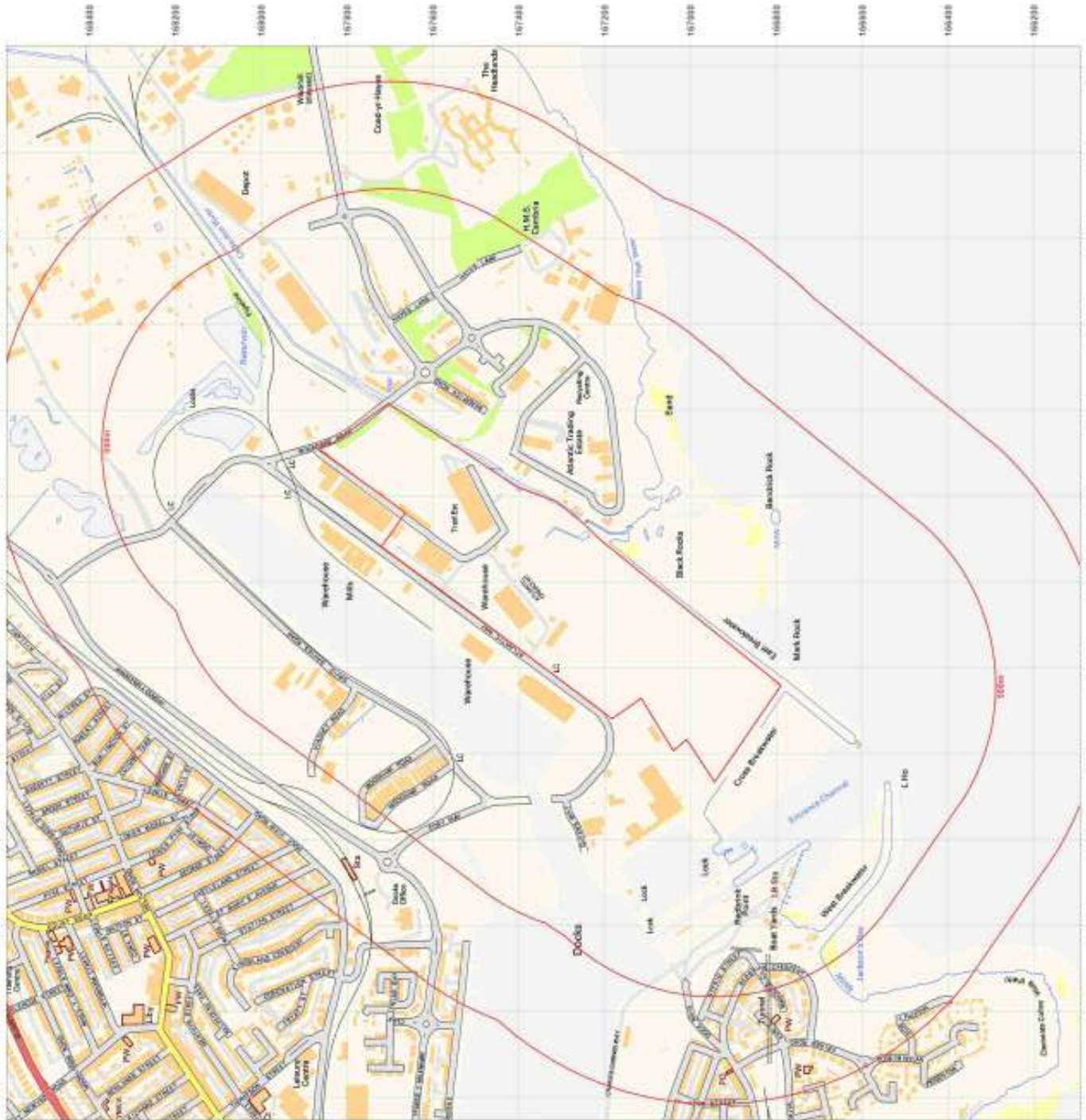
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APPENDIX C
Analysis Certificate



Dan Simons
ExCAL Ltd
ExCAL House
Capel Hendre Industrial Estate
Ammanford
SA18 3SJ

Decus Research Limited
ExCAL House
Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ

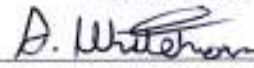
Tel: 01269 844558
Fax: 01269 841867
Email: info@decusuk.com

Certificate of Analysis Number: 1114

Project/Site name:	ABP Barry	Samples Taken:	21-07-2014
Job Number:	234-02-01	Samples Received:	22-07-2014
Order Number:	EC2351	Analysis Complete:	05-08-2014
Sample Matrix:	Soil and Water	Report Issued:	05-08-2014
		Sampled By:	D. Simons

Disposal Times:

All water samples will be retained for a period of two weeks and all soil samples retained for a period of one month following the date of the issued certificate.

Approved by: Adam Whitehouse
Signature: 
Title: Quality Manager

ExCAL Ltd
 ExCAL House
 Capel Hendre Industrial Estate
 Ammanford
 SA18 3SJ

CERTIFICATE OF ANALYSIS 1114

Report Date
 05th August 2014

Results of analysis of 9 samples received
 on the 22/07/14

F.A.O: Dan Simons

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				230714001	230714002	230714003	230714004
Client Sample Reference:				Sample 1	Sample 2	Sample 3	Sample 4
Sample Date:				21.07.14	21.07.14	21.07.14	21.07.14
Sample Depth:				N/A	N/A	N/A	N/A
Sample Matrix:				Sandy Loam	Loam	Loam	Loam
ORG-S01	TPH	mg.kg ⁻¹	N	<1.00	<1.00	<1.00	<1.00
INORG-S01	pH	pH units	N	8.90	8.28	9.00	8.12
METALS-S	Arsenic (Total)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	<5.00
METALS-S	Arsenic (Leachable)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	<5.00
METALS-S	Cadmium (Total)	mg.kg ⁻¹	M	1.80	6.54	1.56	2.43
METALS-S	Cadmium (Leachable)	mg.kg ⁻¹	N	<0.20	<0.20	<0.20	<0.20
METALS-S	Chromium (Total)	mg.kg ⁻¹	M	84.43	53.46	34.01	37.45
METALS-S	Chromium (Leachable)	mg.kg ⁻¹	N	<1.00	<1.00	<1.00	<1.00
METALS-S	Copper (Total)	mg.kg ⁻¹	M	51.89	388.7	73.23	147.6
METALS-S	Copper (Leachable)	mg.kg ⁻¹	N	<1.00	<1.00	<1.00	<1.00
METALS-S	Nickel (Total)	mg.kg ⁻¹	M	15.19	41.39	23.47	29.2
METALS-S	Nickel (Leachable)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	<5.00
METALS-S	Zinc (Total)	mg.kg ⁻¹	M	154.9	1193	235.4	379.1
METALS-S	Zinc (Leachable)	mg.kg ⁻¹	N	<2.00	<2.00	<2.00	<2.00
METALS-S	Lead (Total)	mg.kg ⁻¹	M	118.3	1941	106.3	431.1
METALS-S	Lead (Leachable)	mg.kg ⁻¹	N	<1.50	<1.50	<1.50	<1.50

* Accreditation Status

Tests marked 'A' hold UKAS accreditation
 Tests marked 'M' hold MCERTS accreditation
 Tests marked 'N' do not hold UKAS accreditation
 Tests marked 'S' were sub-contracted to an approved laboratory
 Any comments or interpretations are beyond the scope of UKAS accreditation

ExCAL Ltd
ExCAL House
Capel Hendre Industrial Estate
Ammanford
SA18 3SJ

CERTIFICATE OF ANALYSIS 1114

Report Date
05th August 2014

Results of analysis of 9 samples received
on the 22/07/14

F.A.O: Dan Simons

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				230714005	230714006	230714007	
Client Sample Reference:				Sample 5	Sample 6	Sample 7	
Sample Date:				21.07.14	21.07.14	21.07.14	
Sample Depth:				N/A	N/A	N/A	
Sample Matrix:				Loam	Loam	Loam	
ORG-S01	TPH	mg.kg ⁻¹	N	6.14	<1.00	1.83	
INORG-S01	pH	pH units	N	8.52	8.69	9.02	
METALS-S	Arsenic (Total)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	
METALS-S	Arsenic (Leachable)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	
METALS-S	Cadmium (Total)	mg.kg ⁻¹	M	6.28	28.25	2.31	
METALS-S	Cadmium (Leachable)	mg.kg ⁻¹	N	<0.20	<0.20	<0.20	
METALS-S	Chromium (Total)	mg.kg ⁻¹	M	35.42	68.83	31.69	
METALS-S	Chromium (Leachable)	mg.kg ⁻¹	N	<1.00	<1.00	<1.00	
METALS-S	Copper (Total)	mg.kg ⁻¹	M	150.7	220.2	53.73	
METALS-S	Copper (Leachable)	mg.kg ⁻¹	N	<1.00	<1.00	<1.00	
METALS-S	Nickel (Total)	mg.kg ⁻¹	M	28.58	37.31	20.47	
METALS-S	Nickel (Leachable)	mg.kg ⁻¹	N	<5.00	<5.00	<5.00	
METALS-S	Zinc (Total)	mg.kg ⁻¹	M	272.0	618.0	156.7	
METALS-S	Zinc (Leachable)	mg.kg ⁻¹	N	<2.00	<2.00	<2.00	
METALS-S	Lead (Total)	mg.kg ⁻¹	M	241.4	462.2	110.7	
METALS-S	Lead (Leachable)	mg.kg ⁻¹	N	<1.50	<1.50	<1.50	

* Accreditation Status

Tests marked 'A' hold UKAS accreditation

Test marked 'M' hold MCERTS accreditation

Tests marked 'N' do not hold UKAS accreditation

Tests marked 'S' were sub-contracted to an approved laboratory

Any comments or interpretations are beyond the scope of UKAS accreditation

ExCAL Ltd
 ExCAL House
 Capel Hendre Industrial Estate
 Ammanford
 SA18 3SJ

CERTIFICATE OF ANALYSIS 1114

Report Date
 05th August 2014

Results of analysis of 9 samples received
 on the 22/07/14

F.A.O: Dan Simons

Code	Determinand	Units	*	Sample Identification			
Laboratory Sample Number:				230714008	230714009		
Client Sample Reference:				Upstream	Downstream		
Sample Date:				21.07.14	21.07.14		
Sample Depth:				N/A	N/A		
Sample Matrix:				Water	Water		
ORG-L01	TPH	mg.l ⁻¹	N	11.96	4.16		
INORG-L01	pH	pH units	A	7.61	7.87		
METALS-L	Arsenic (Total)	ug.l ⁻¹	N	5.27	5.91		
METALS-L	Cadmium (Total)	ug.l ⁻¹	A	<5.00	<5.00		
METALS-L	Chromium (Total)	ug.l ⁻¹	A	<7.00	<7.00		
METALS-L	Copper (Total)	ug.l ⁻¹	A	20.58	6.52		
METALS-L	Nickel (Total)	ug.l ⁻¹	A	<8.00	<8.00		
METALS-L	Zinc (Total)	ug.l ⁻¹	A	9.59	3.91		
METALS-L	Lead (Total)	ug.l ⁻¹	A	<19.00	<19.00		
INORG-L12	Ammonia	mg.l ⁻¹ NH ₄	A	0.47	0.85		
INORG-L13	Chloride	mg.l ⁻¹ Cl	A	8.3	1.8		

* Accreditation Status

Tests marked 'A' hold UKAS accreditation

Tests marked 'M' hold MCERTS accreditation

Tests marked 'N' do not hold UKAS accreditation

Tests marked 'S' were sub-contracted to an approved laboratory

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ExCAL Ltd
ExCAL House
Capel Hendre Industrial Estate
Ammanford
SA18 3SJ

CERTIFICATE OF ANALYSIS 1114

Report Date
05th August 2014

Results of analysis of 9 samples received
on the 22/07/14

F.A.O: Dan Simons

Analytical Method	Method Code	Accreditation Status
Determination of Total Petroleum Hydrocarbons in soil by GC-FID (In-house method)	ORG-S01	None
The Determination of pH of soil by electrode probe meter (In-house method)	INORG-S01	None
The Determination of total metals in soil by ICP-OES (Cr, Cu, Ni, Pb, Zn, Cd) (In-house method)	METALS-S	ISO17025 MCERTS
The Determination of total metals in soil by ICP-OES (As) (In-house method)	METALS-S	None
The Determination of soluble metals in soil at L:S 10:1 by ICP-OES (Cr, Cu, Ni, Pb, Zn, Cd, As) (In-house method)	METALS-S	None
The Determination of Total Petroleum Hydrocarbons in waters by GC-FID (In-house method)	ORG-L01	None
The Determination of pH of waters by electrode probe meter (In-house method)	INORG-L01	ISO17025
The Determination of total metals in waters by ICP-OES (Cr, Cu, Ni, Pb, Zn, Cd, As) (In-house method)	METALS-L	ISO17025
The Determination of ammonia in waters by colorimetric analysis (In-house method)	INORG-L11	ISO17025
The Determination of chloride in waters by photometer (In-house method)	INORG-L13	ISO17025

*****END OF REPORT*****

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Test marked 'M' hold MCERTS accreditation
Tests marked 'N' do not hold UKAS accreditation
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Any comments or interpretations are beyond the scope of UKAS accreditation