

Rampion 2 Wind Farm

Category 6: Environmental Statement

Volume 3, Chapter 3: Alternatives - Figures

Date: August 2023

Revision A

Document Reference: 6.3.3

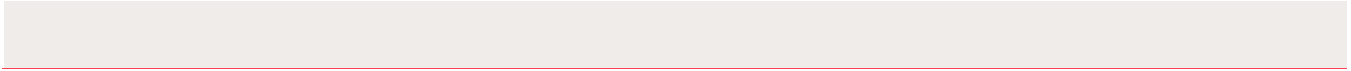
Pursuant to: APFP Regulation 5 (2) (a)

Ecodoc number: 004883038-01



Document revisions

Revision	Date	Status/reason for issue	Author	Checked by	Approved by
A	04/08/2023	Final for DCO Application	WSP	RED	RED



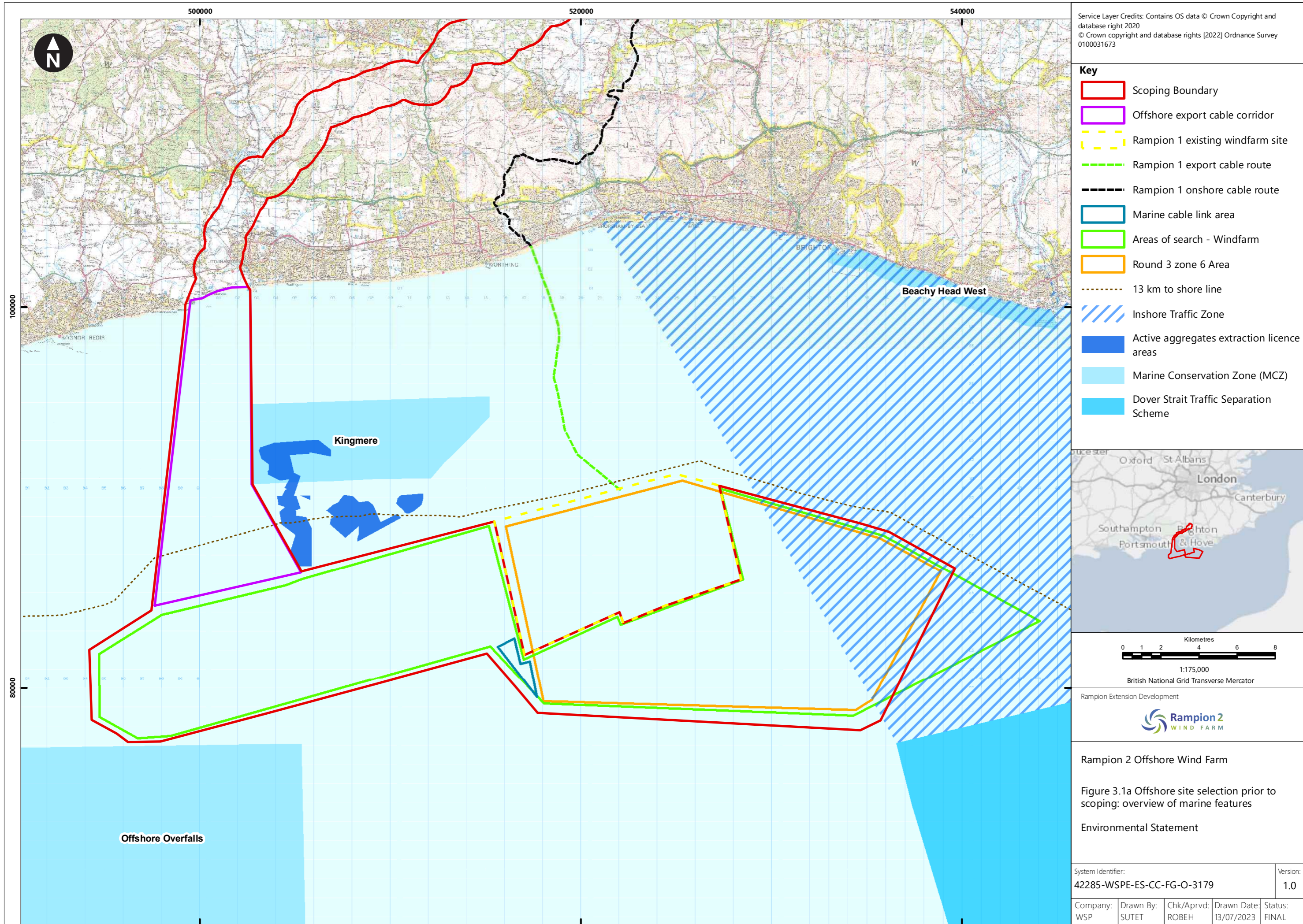
Contents

List of Figures

Figure number	Figure Title	APFP number	Ecodoc number	Revision	Revision Date
Figure 3.1a	Offshore site selection prior to scoping: overview of marine features	5(2)(a)	004866057-01	A	04/08/2023
Figure 3.1b	Overview of offshore constraints	5(2)(a)	004866057-01	A	04/08/2023
Figure 3.2	Offshore design refinement between Scoping and Statutory Consultation	5(2)(a)	004866058-01	A	04/08/2023
Figure 3.3	PEIR Assessment Boundary and proposed DCO Order Limits	5(2)(a)	004866059-01	A	04/08/2023
Figure 3.4	Landfall to connection point options	5(2)(a)	004866060-01	A	04/08/2023
Figure 3.5	Overview of Onshore cable route refinements considered between Scoping and Statutory Consultation 2021	5(2)(a)	004866061-01	A	04/08/2023
Figure 3.6	Longer Alternative Cable Routes presented at Supplementary Statutory consultation	5(2)(a)	004866062-01	A	04/08/2023
Figure 3.7	Other modifications and alternatives	5(2)(a)	004866063-01	A	04/08/2023

presented at
 Supplementary
 Statutory
 Consultation

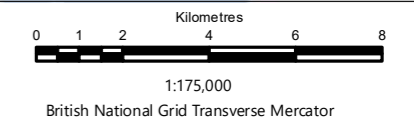
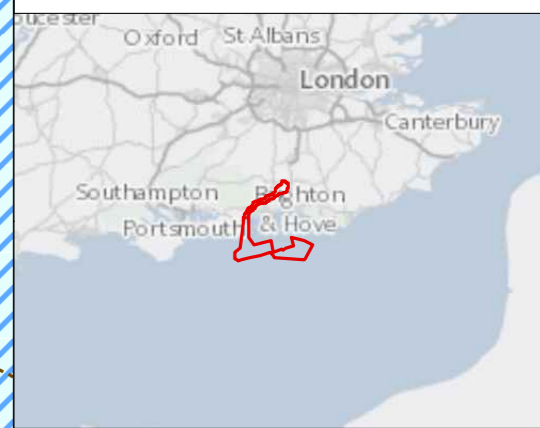
Figure 3.8	Alternatives presented in third Statutory Consultation exercise	5(2)(a)	004866064-01	A	04/08/2023
Figure 3.9	Offshore export cable corridor changes	5(2)(a)	004866067-01	A	04/08/2023
Figure 3.10a	Substation search areas at Scoping	5(2)(a)	004866067-01	A	04/08/2023
Figure 3.10b	Substation search areas at Statutory consultation and DCO submission	5(2)(a)	004866067-01	A	04/08/2023
Figure 3.11	Onshore Cable route options to onshore substation search areas	5(2)(a)	004866068-01	A	04/08/2023
Figure 3.12	Cable route options to Bolney substation	5(2)(a)	004879244-01	A	04/08/2023
Figure 3.13	National Grid Bolney substation extension options	5(2)(a)	004892368-01	A	04/08/2023



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights [2022] Ordnance Survey 0100031673

Key

- Scoping Boundary
- Offshore export cable corridor
- Rampion 1 existing windfarm site
- Rampion 1 export cable route
- Rampion 1 onshore cable route
- Marine cable link area
- Areas of search - Windfarm
- Round 3 zone 6 Area
- 13 km to shore line
- Inshore Traffic Zone
- Active aggregates extraction licence areas
- Marine Conservation Zone (MCZ)
- Dover Strait Traffic Separation Scheme



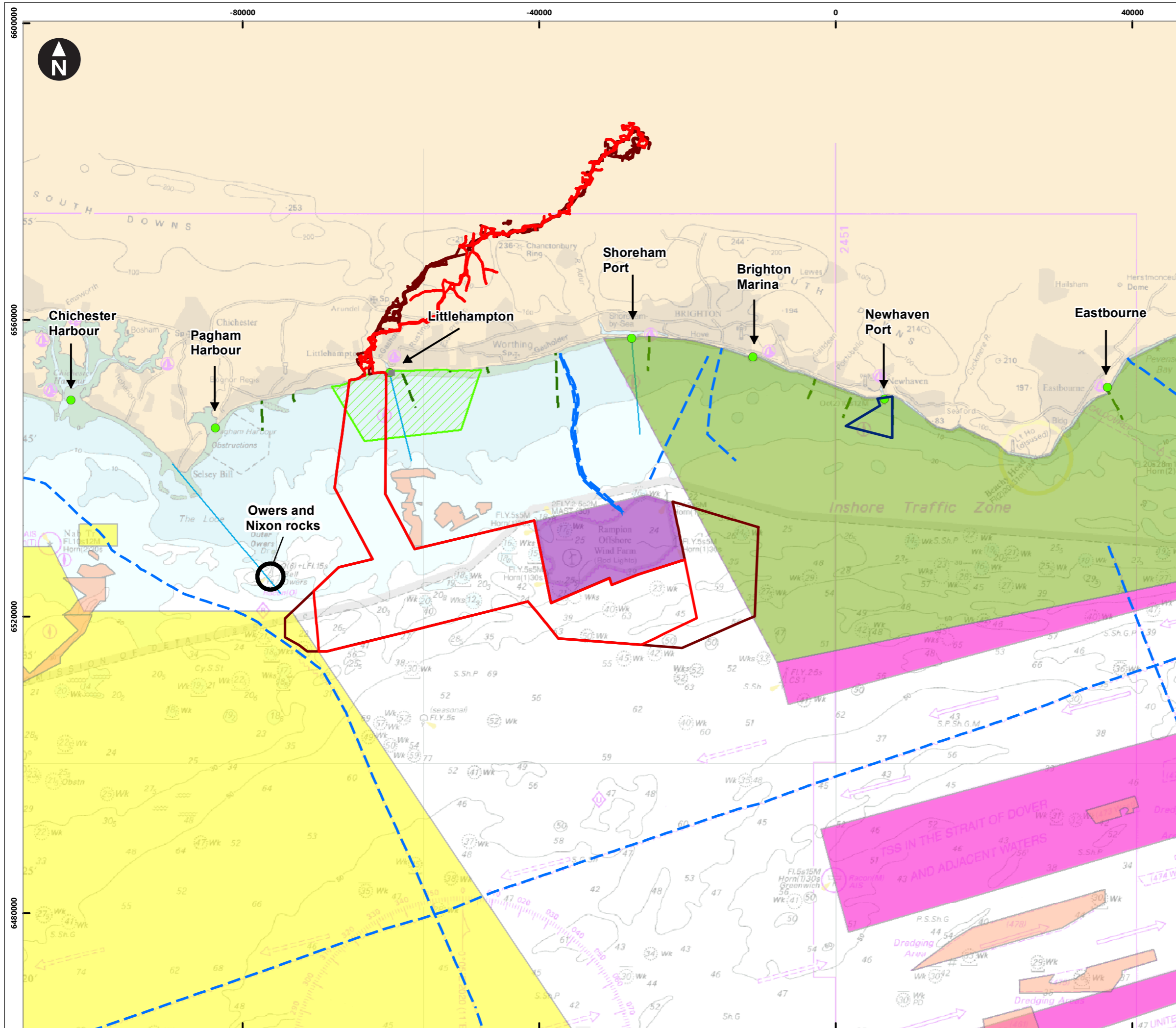
Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3.1a Offshore site selection prior to scoping: overview of marine features

Environmental Statement

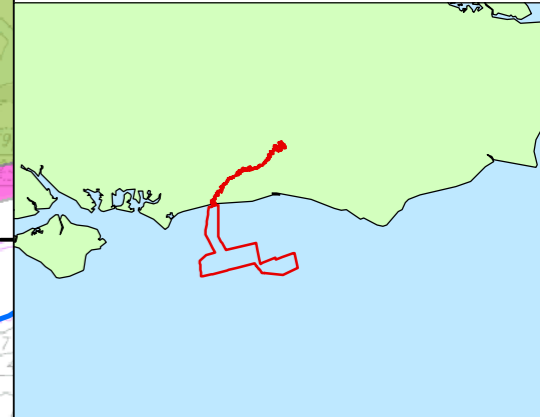
System Identifier: 42285-WSPE-ES-CC-FG-O-3179	Version: 1.0
--	-----------------

Company: WSP	Drawn By: SUTET	Chk/Prvd: ROBEH	Drawn Date: 13/07/2023	Status: FINAL
-----------------	--------------------	--------------------	---------------------------	------------------



Service Layer Credits:
 © Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.uk/UKHO). License number 36279.

- Key**
- Proposed DCO Order Limits
 - Rampion 2 PEIR Boundary
 - Rampion 1
 - Littlehampton SHA
 - Newhaven limits
 - Port/harbour
 - - - Subsea cable
 - Marine aggregate dredging area
 - TSS
 - Inshore traffic zone
 - Firing practice area
 - - - Pipeline
 - Leading line
 - Littlehampton CHA



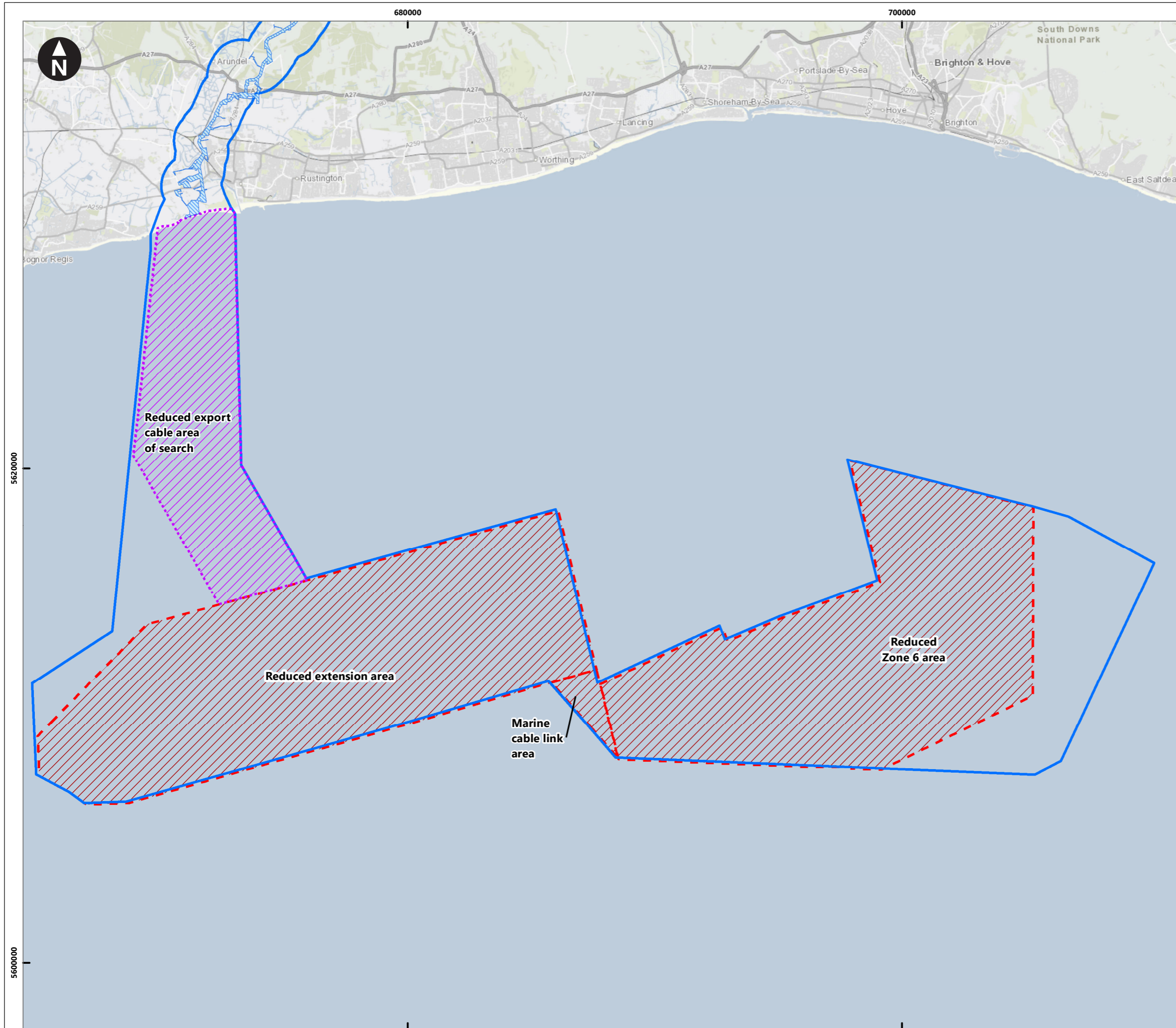
0 2.5 5 10 15 20
 Kilometres
 1:500,000
 WGS 1984 World Mercator Mercator

Rampion Extension Development


Rampion 2 Offshore Wind Farm
 Figure 3.1b Overview of offshore constraints
 Environmental Statement

System Identifier: 42285-GOBE-ES-OF-FG-16-8126	Version: 1.0
---	-----------------

Company: ANATEC/GoBe	Drawn By: DS/SWM	Chk/Prvrd: MB	Drawn Date: 25/07/2023	Status: FINAL
-------------------------	---------------------	------------------	---------------------------	------------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key

- PEIR Assessment Boundary onshore cable corridor
- PEIR Assessment Boundary Offshore export cable corridor
- PEIR Assessment Boundary Offshore Array Areas
- Scoping Boundary

0 0.75 1.5 3 4.5 6
Kilometres
1:150,000
WGS 1984 UTM Zone 30N Transverse Mercator

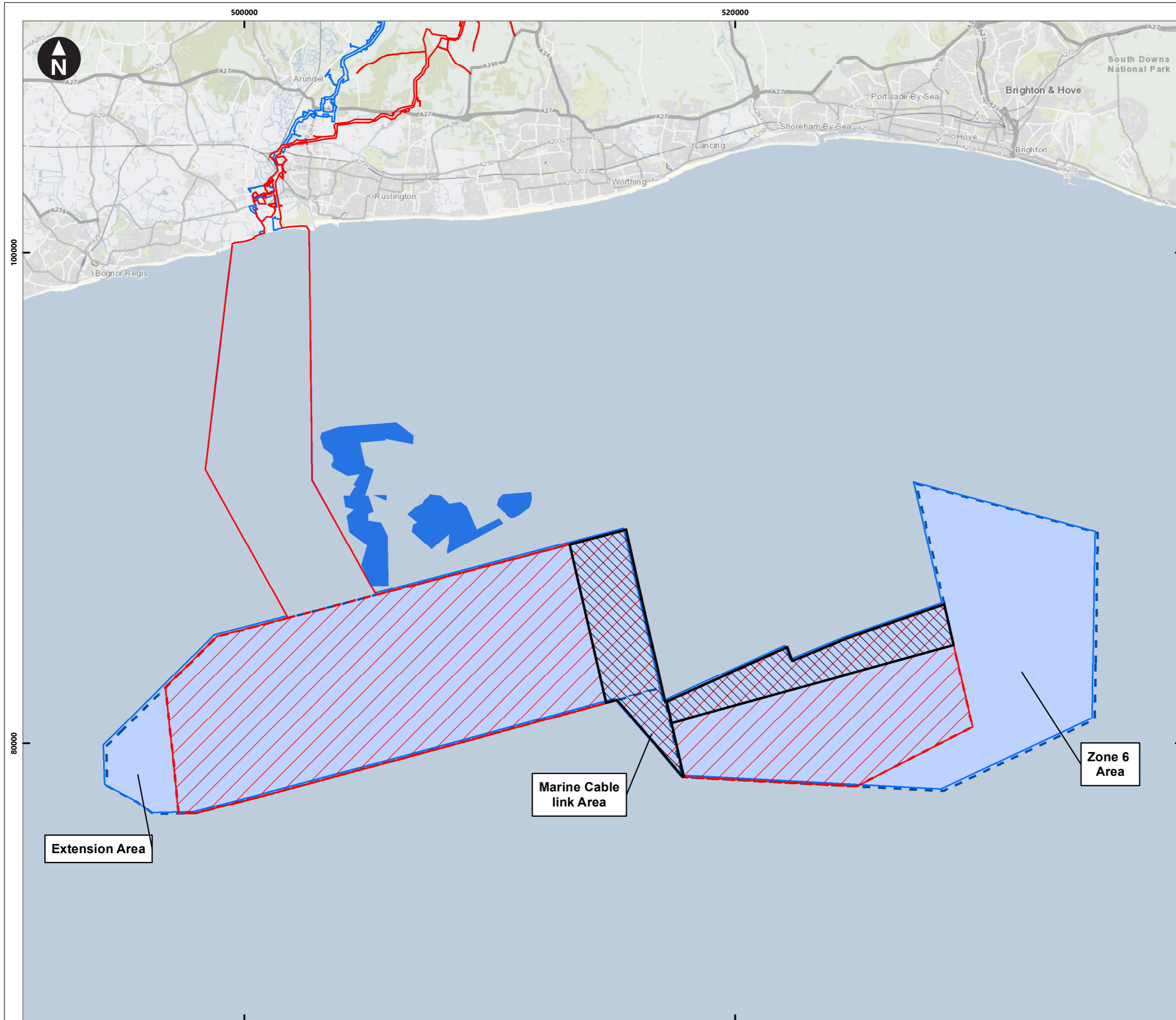
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3.2 Offshore design refinement between Scoping and Statutory Consultation

Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-5844		Version: 1.0	
Company: WSP	Drawn By: SUTET	Chk/Aprvd: ROBEH	Drawn Date: Status: 01/06/2023 FINAL



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key

- Proposed DCO Order Limits
- Proposed DCO Order Limits Offshore Array Areas
- PEIR Assessment Boundary
- PEIR Assessment Boundary Offshore Array Area
- Active marine aggregate licence areas
- Wind farm separation zones

0 0.75 1.5 3 4.5 6
Kilometres
1:150,000
British National Grid Transverse Mercator

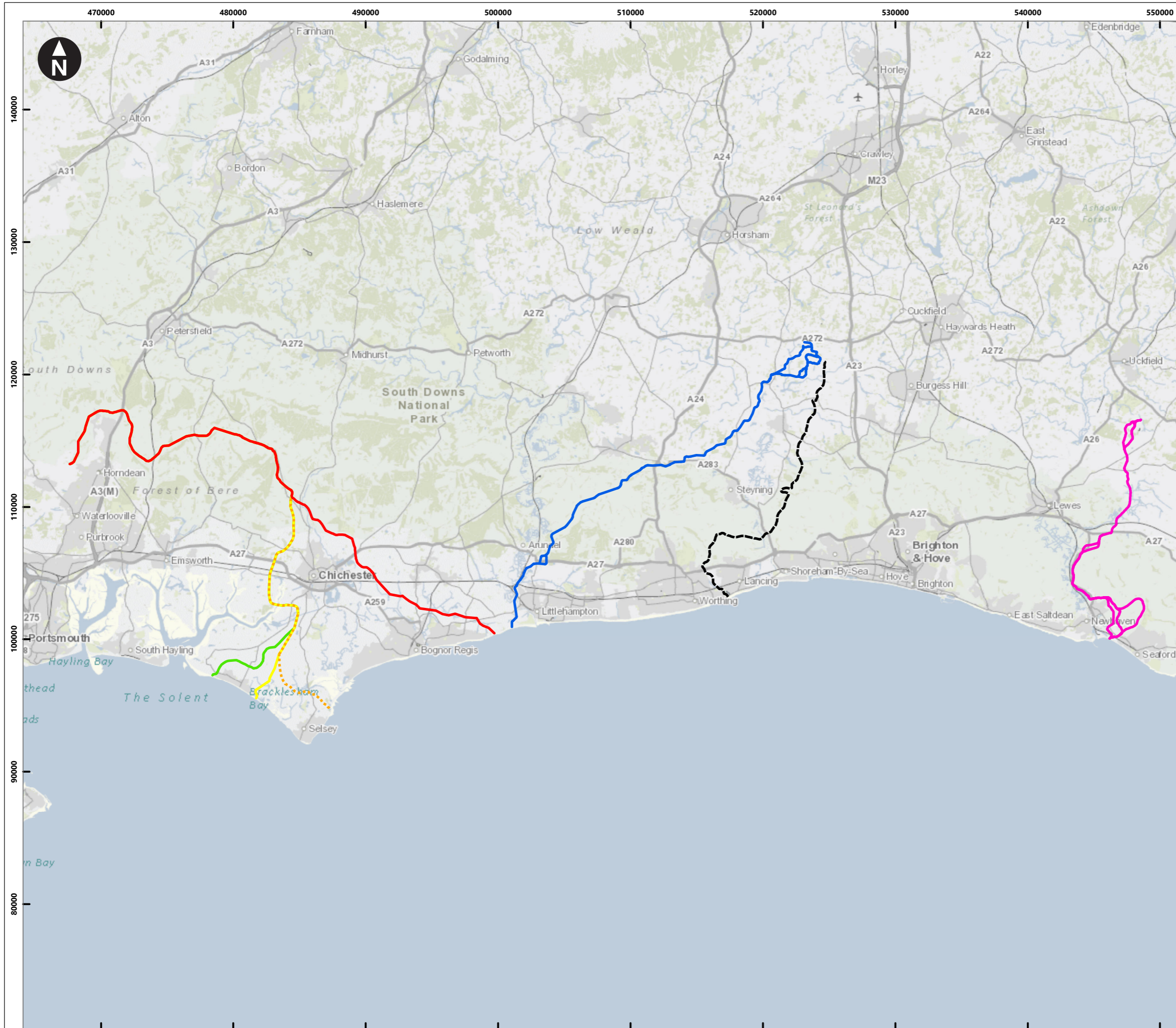
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3.3 PEIR Assessment Boundary and proposed DCO Order Limits

Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-3096		Version: 1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: ROBEH
Drawn Date: 27/07/2023	Status: FINAL	



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key

Landfall to connection point options

- - - Brooklands to Bolney (Rampion 1 onshore cable route)
- Climping to Lovedean
- . . . Church Norton to Lovedean
- Bracklesham to Lovedean
- East Wittering to Lovedean
- Climping to Bolney
- Tide Mills to Little Horsted

0 1.25 2.5 5 7.5 10
Kilometres
1:280,000
British National Grid Transverse Mercator

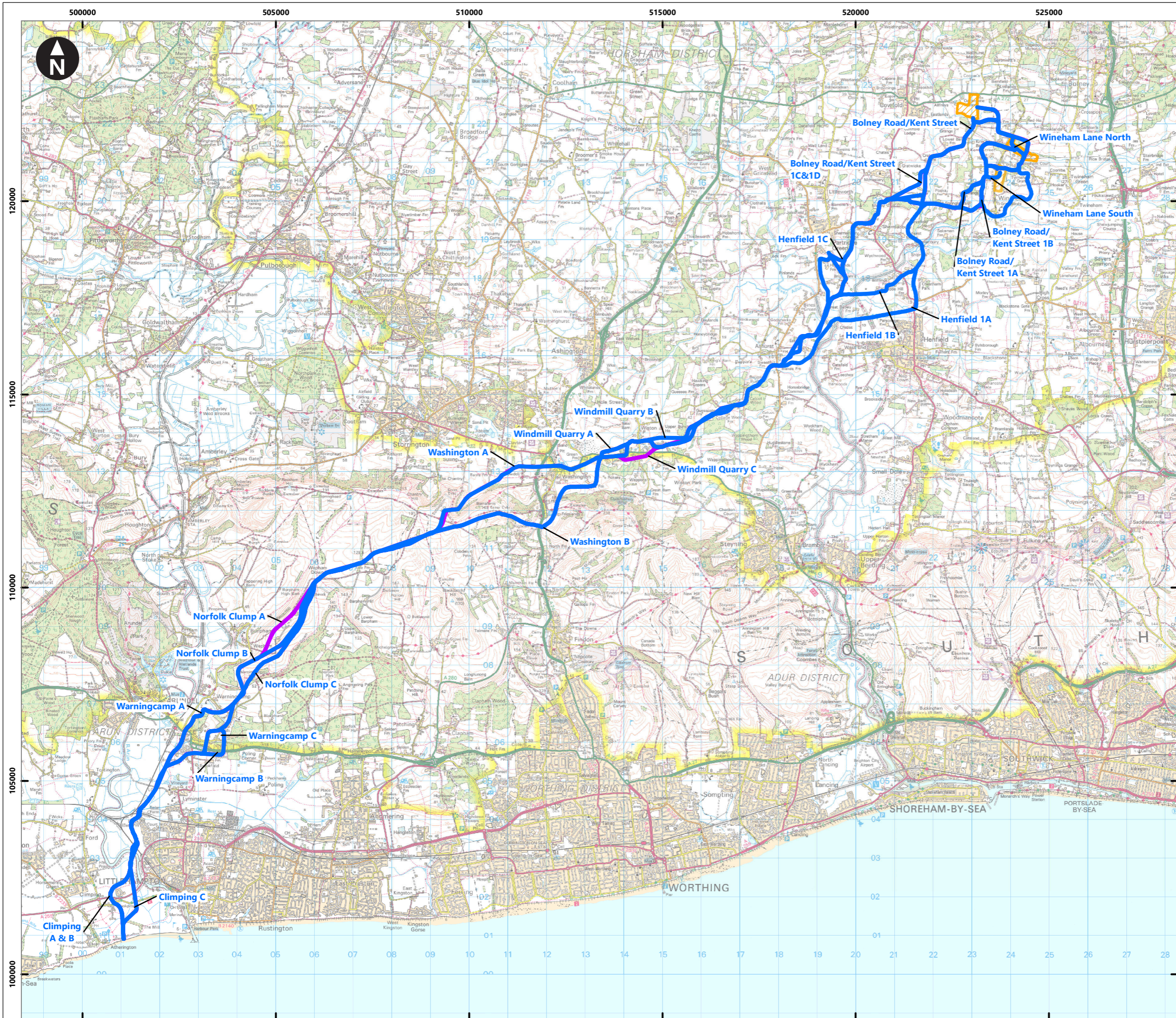
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3.4 Landfall to connection point options

Environmental Statement

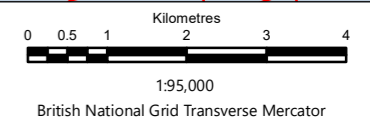
System Identifier: 42285-WSPE-ES-CC-FG-O-7945		Version: 1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: ROBEH Drawn Date: 25/07/2023 Status: FINAL



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights [2022] Ordnance Survey 0100031673

- Key**
- Onshore cable route corridor options
 - Onshore cable route corridor options (discounted)
 - Onshore substation search areas

Note. Onshore substation search areas shown were taken to Statutory Consultation 2021



Rampion Extension Development



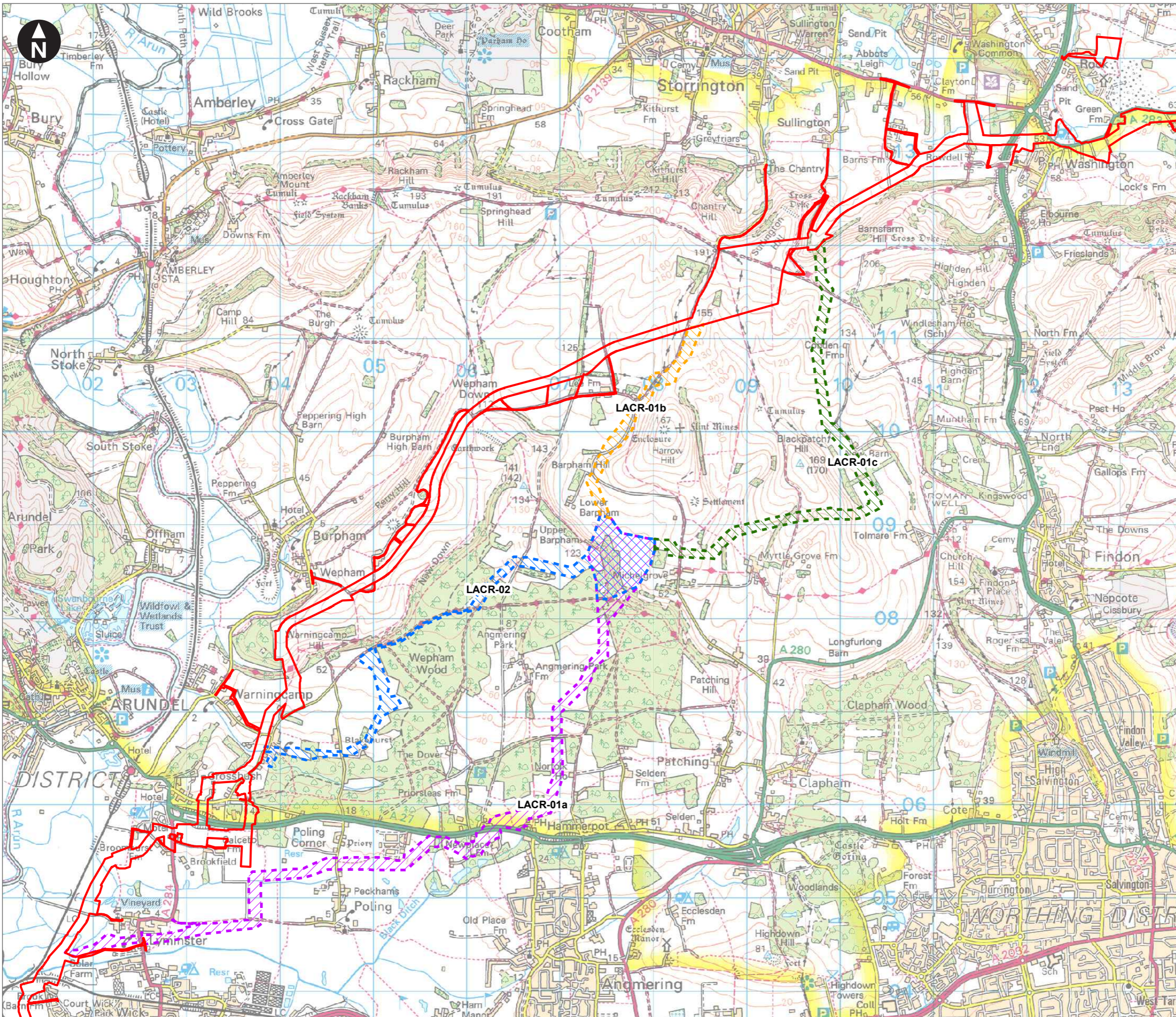
Rampion 2 Offshore Wind Farm

Figure 3.5 Overview of Onshore cable route refinements considered between Scoping and Statutory Consultation 2021

Environmental Statement

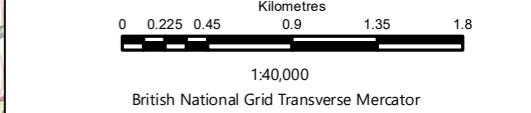
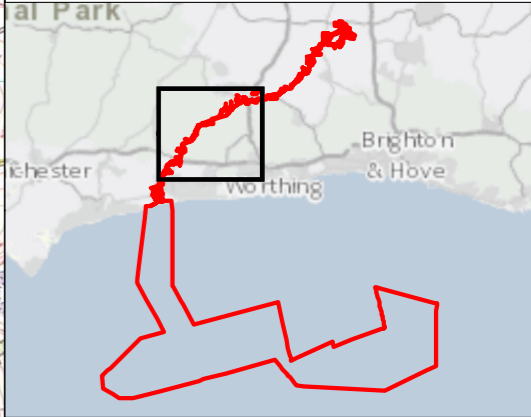
System Identifier: 42285-WSP-ES-CC-FG-O-8505 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvrd: ROBEH	Drawn Date: 25/07/2023	Status: FINAL
--------------	-----------------	------------------	------------------------	---------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights [2022] Ordnance Survey 0100031673

- Key**
- PEIR Assessment Boundary
 - Longer Alternative Cable Route 1a (LACR-01a)
 - Longer Alternative Cable Route 1b (LACR-01b)
 - Longer Alternative Cable Route 1c (LACR-01c)
 - Longer Alternative Cable Route 2 (LACR-02)



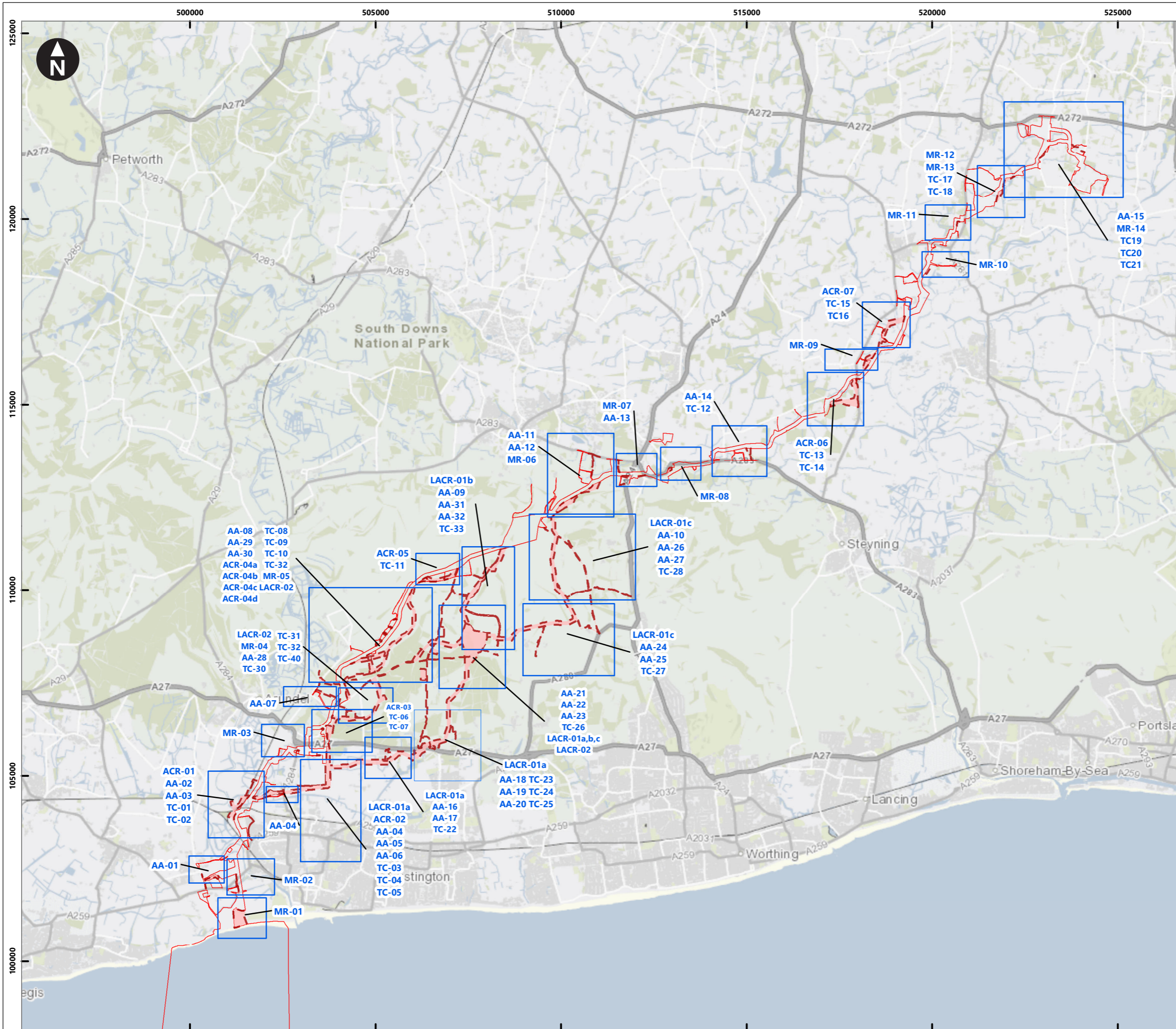
Rampion 2 Offshore Wind Farm

Figure 3.6 Longer Alternative Cable Routes presented at Supplementary Statutory consultation

Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-9059 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvrd: ROBEH	Drawn Date: 03/01/2023	Status: FINAL
--------------	-----------------	------------------	------------------------	---------------

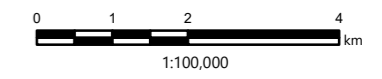
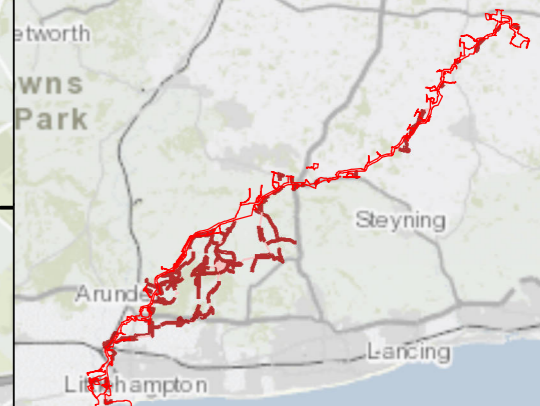


Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key

- PEIR Assessment Boundary
- New areas of land affected

Label Abbreviations:
 LACR - Longer Alternative Cable Route
 ACR - Alternative Cable Route
 MR - Modified Route
 AA - Alternative Access
 TC - Trenchless Crossing



Rampion Extension Development

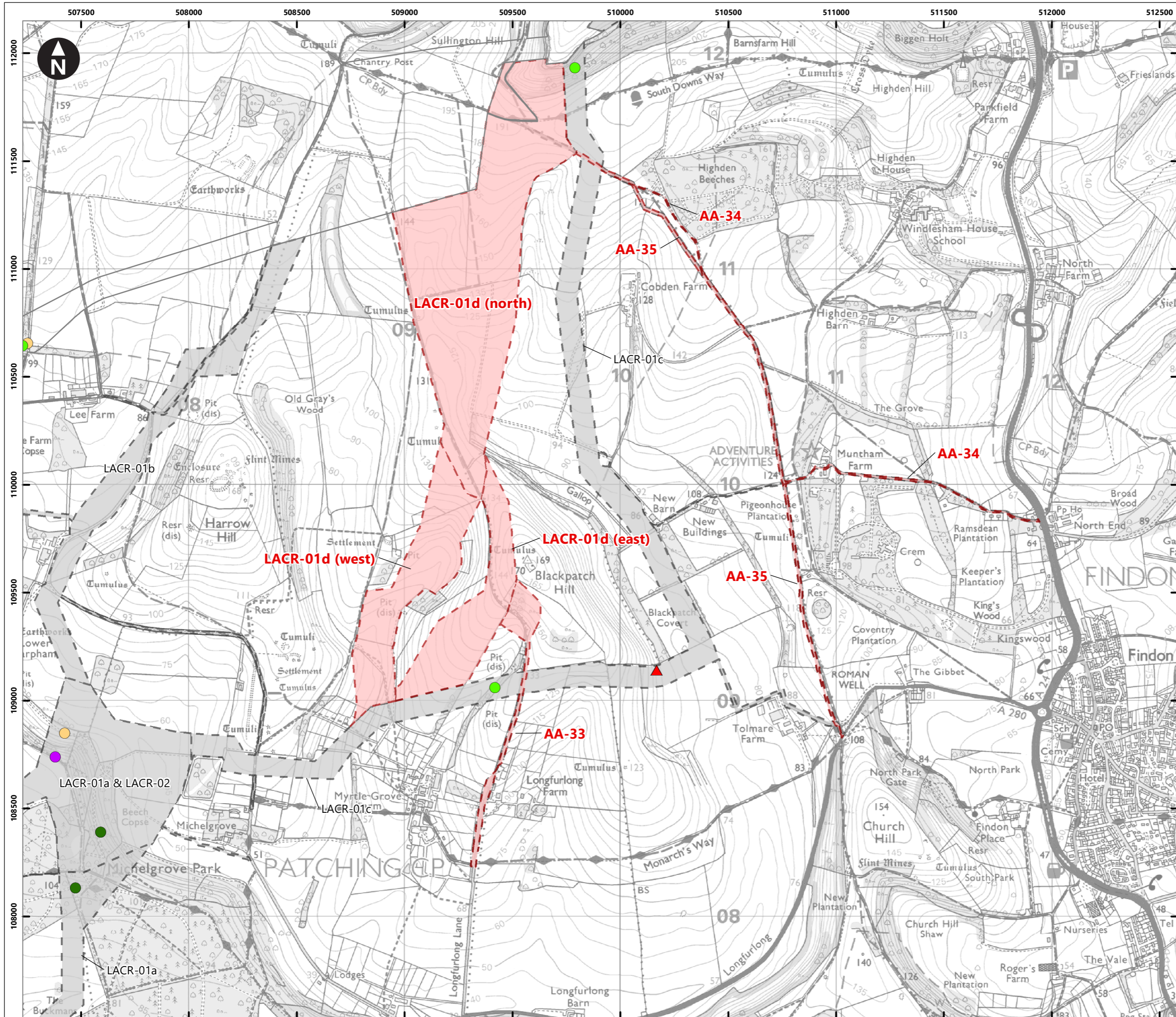
Rampion 2 Offshore Wind Farm

Figure 3.7 Other modifications and alternatives presented at Supplementary Statutory consultation

Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-3228 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvd: ROBEH	Drawn Date: 03/08/2023	Status: FINAL
--------------	-----------------	-----------------	------------------------	---------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

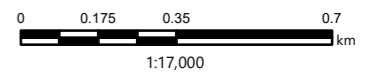
© Crown copyright and database rights 2023 Ordnance Survey 0100031673

Label Abbreviations:
 LACR - Longer Alternative Cable Route
 AA - Alternative Access

- PEIR Assessment Boundary
- New areas of land affected (assessed in the PEIR FSIR)
- New areas of land affected (previously assessed in the PEIR SIR)

Features crossed by trenchless crossings

- Steep Slope
- Track
- Woodland
- Ancient Woodland
- Public Right of Way

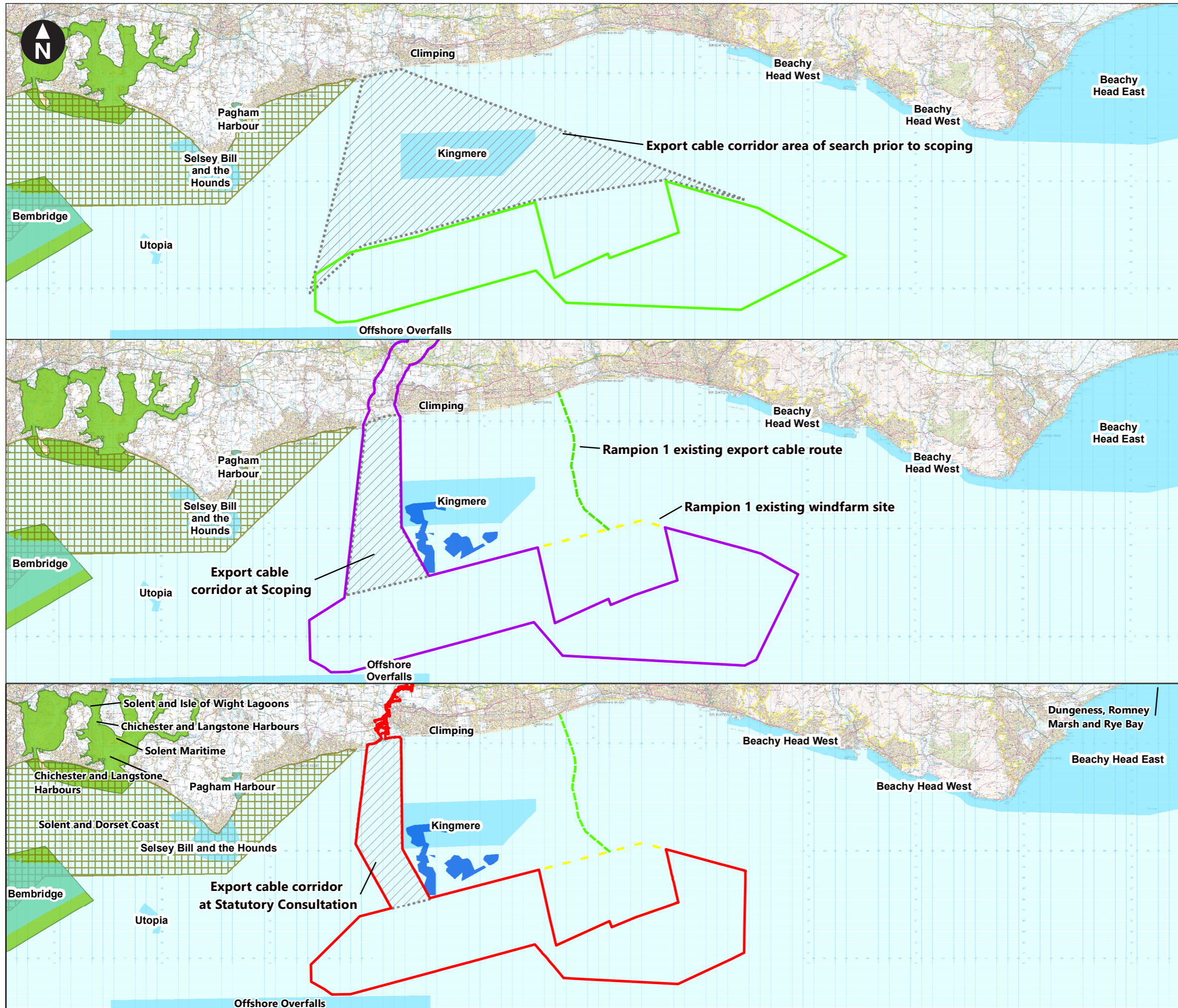


Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3.8 Alternatives presented in third Statutory Consultation exercise
 Environmental Statement

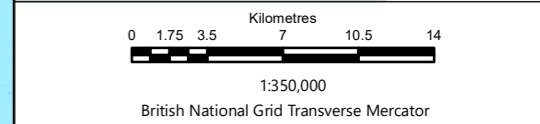
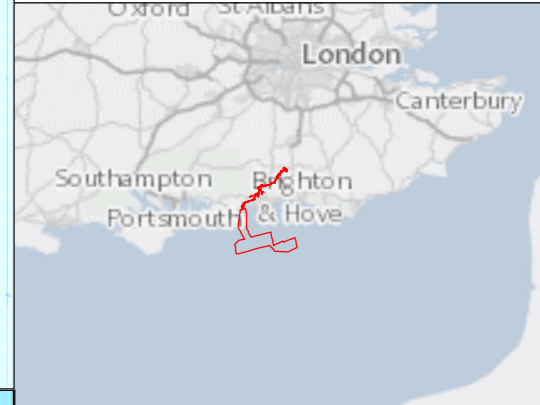
System Identifier: 42285-WSPE-ES-CC-FG-O-7832
 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvrd: ROBEH	Drawn Date: 03/08/2023	Status: FINAL
--------------	-----------------	------------------	------------------------	---------------



Key

- PEIR Assessment Boundary
- Scoping Boundary
- Areas of search - Windfarm
- Offshore export cable corridor
- Rampion 1 existing export cable route
- Rampion 1 Existing Windfarm Site
- Active aggregates extraction licence areas
- Marine Conservation Zone (MCZ)
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)



Rampion Extension Development

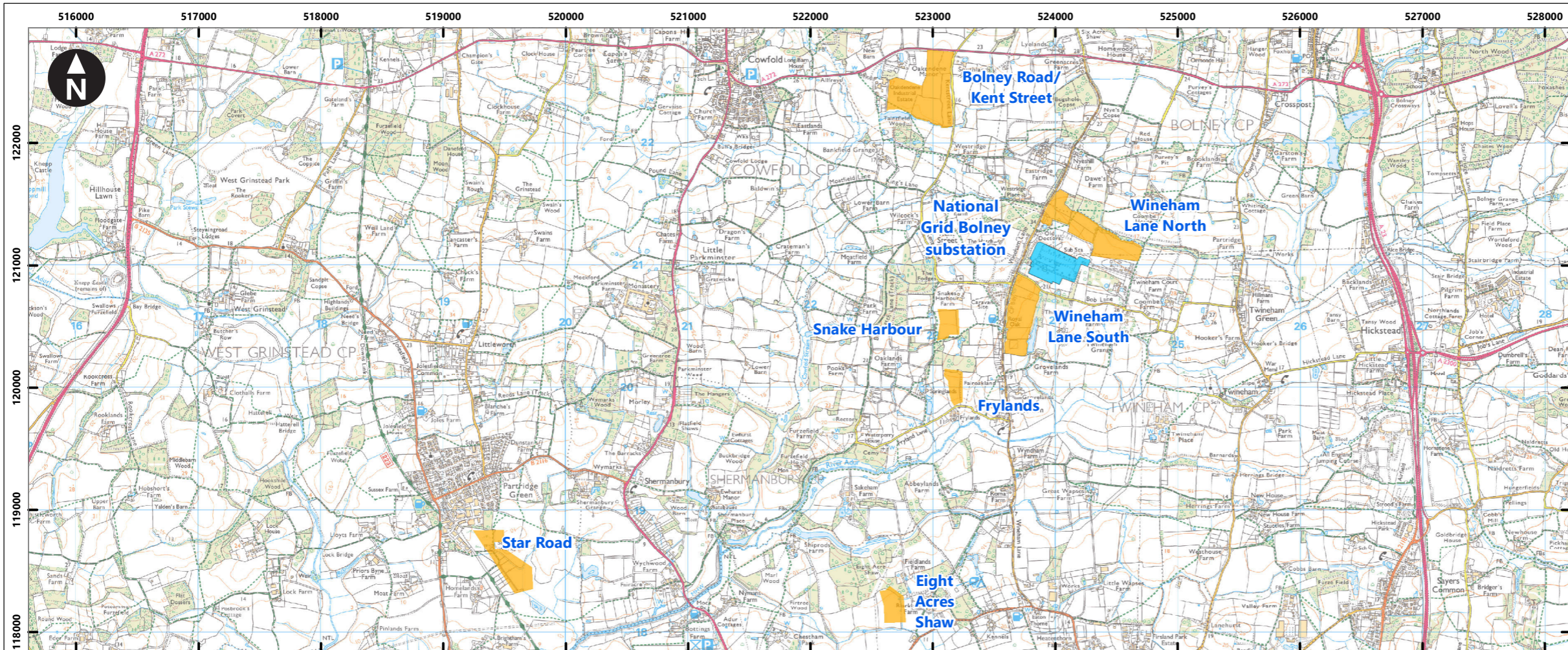
Rampion 2 Offshore Wind Farm

Figure 3.9 Offshore export cable corridor changes

Environmental Statement

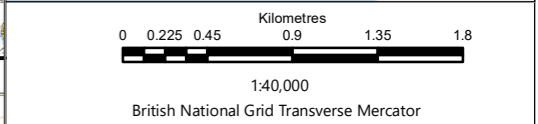
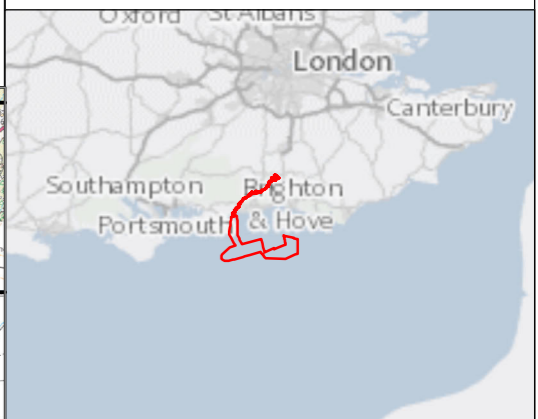
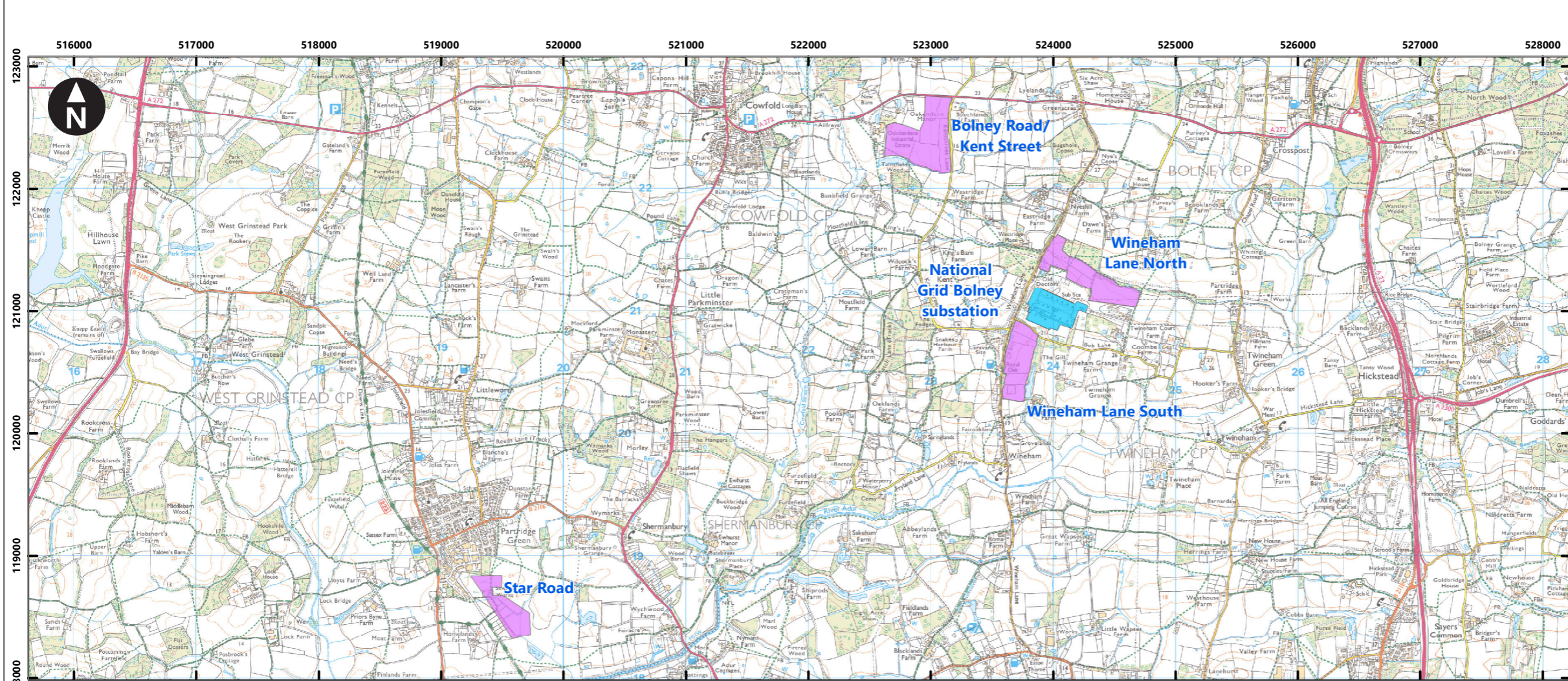
System Identifier: 42285-WSPE-ES-CC-FG-O-4205	Version: 1.0
--	-----------------

Company: WSP	Drawn By: SUTET	Chk/Aprvd: ROBEH	Drawn Date: 26/07/2023	Status: FINAL
-----------------	--------------------	---------------------	---------------------------	------------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights [2022] Ordnance Survey 0100031673

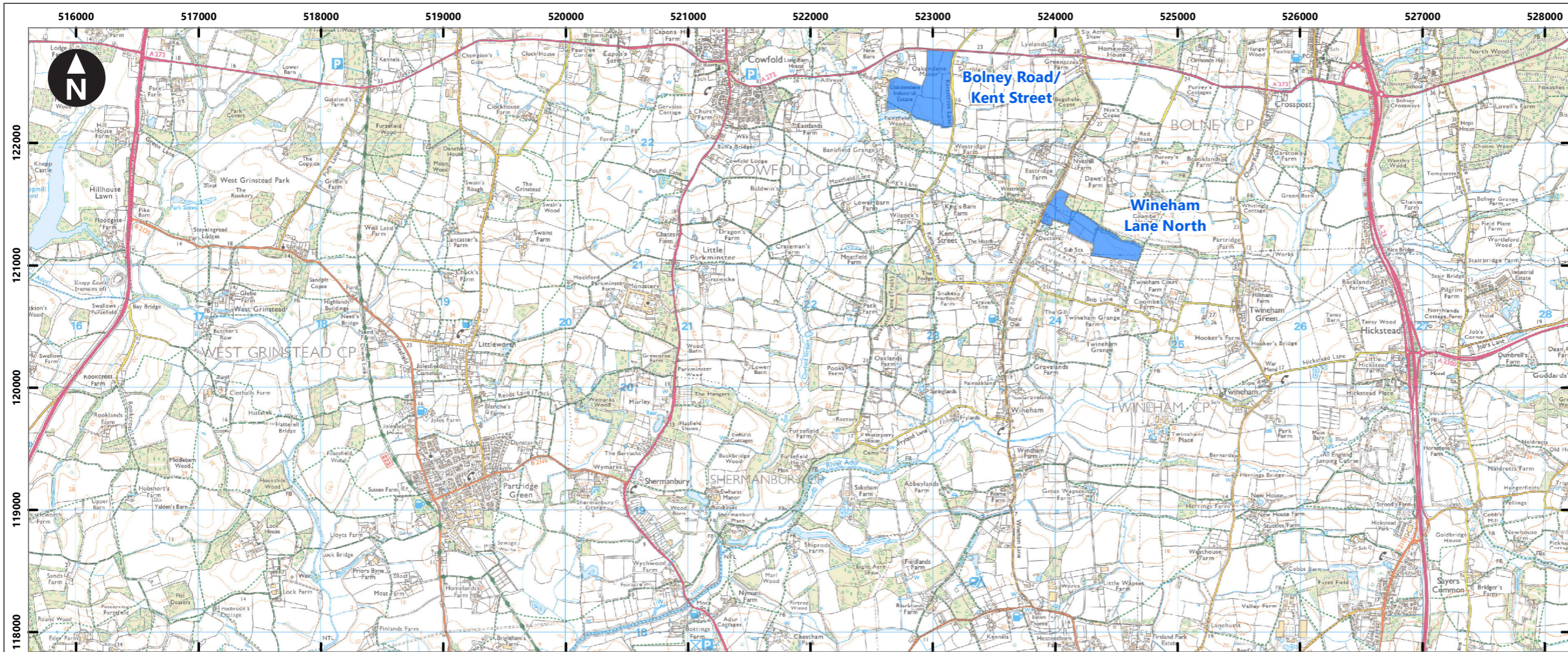
- Key**
- Initial substation search areas at Scoping stage
 - Potential substation search areas considered following Scoping
 - National Grid Bolney substation



Rampion 2 Offshore Wind Farm
 Figure 3.10a Substation search areas at Scoping
 Environmental Statement

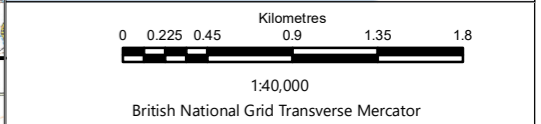
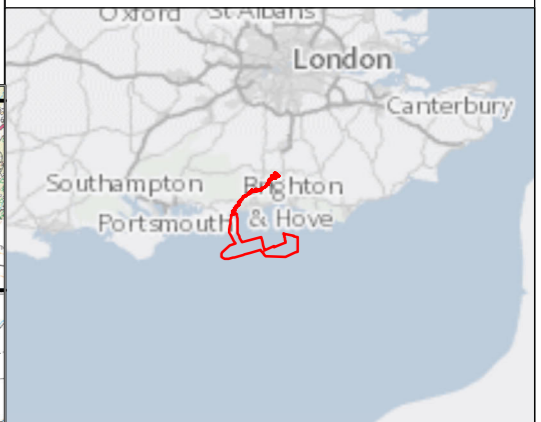
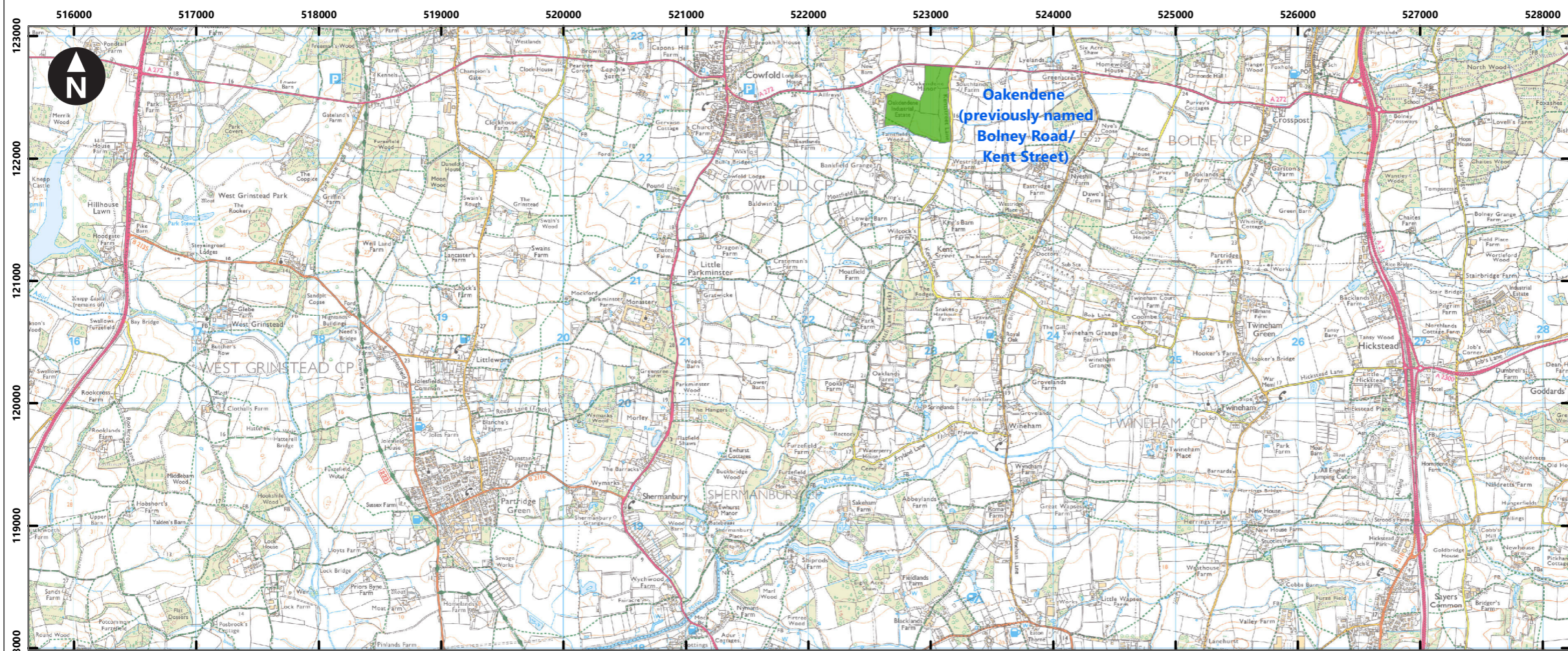
System Identifier: 42285-WSP-ES-CC-FG-O-2483a
 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvd: ROBEH	Drawn Date: 05/04/2023	Status: FINAL
--------------	-----------------	-----------------	------------------------	---------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights (2022) Ordnance Survey 0100031673

- Key**
- Substation search areas presented at Statutory consultation
 - Onshore substation location in DCO submission



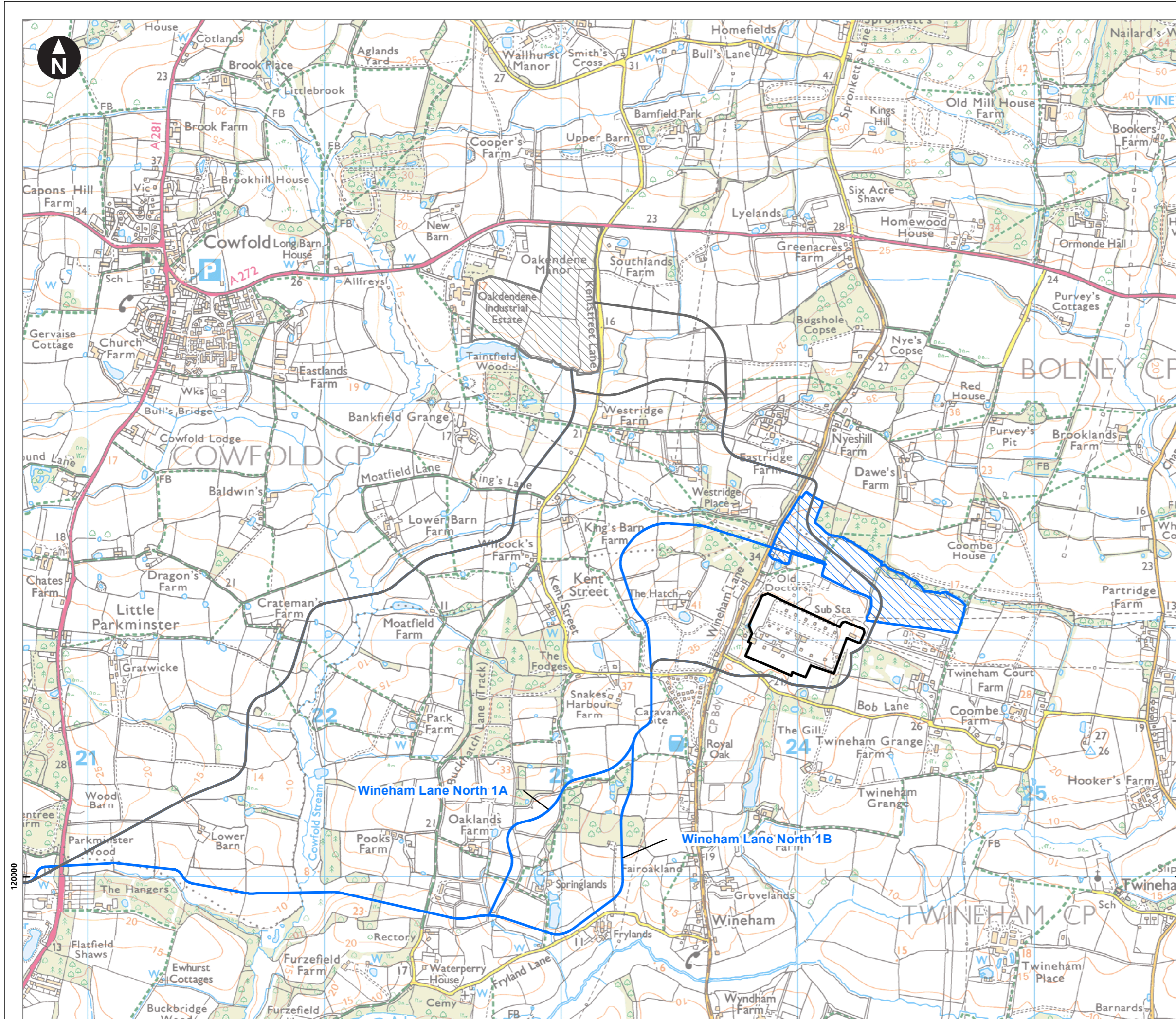
Rampion 2 Offshore Wind Farm

Figure 3.10b Substation search areas at Statutory consultation and DCO Submission






Environmental Statement

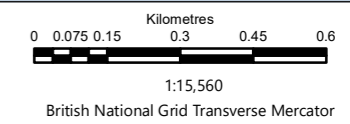
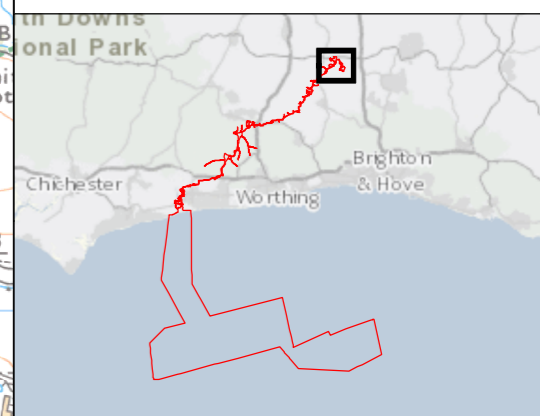
System Identifier: 42285-WSP-ES-CC-FG-O-2483b
 Version: 1.0

Company: WSP	Drawn By: SUTET	Chk/Prvd: ROBEH	Drawn Date: 05/04/2023	Status: FINAL
--------------	-----------------	-----------------	------------------------	---------------



Key

-  Existing National Grid Bolney Substation
-  Wineham Lane North onshore substation search area
-  Wineham Lane (1A/1B) cable route options
-  Bolney Road/Kent Street onshore substation search area
-  Bolney Road/Kent Street onshore cable route options



Rampion Extension Development

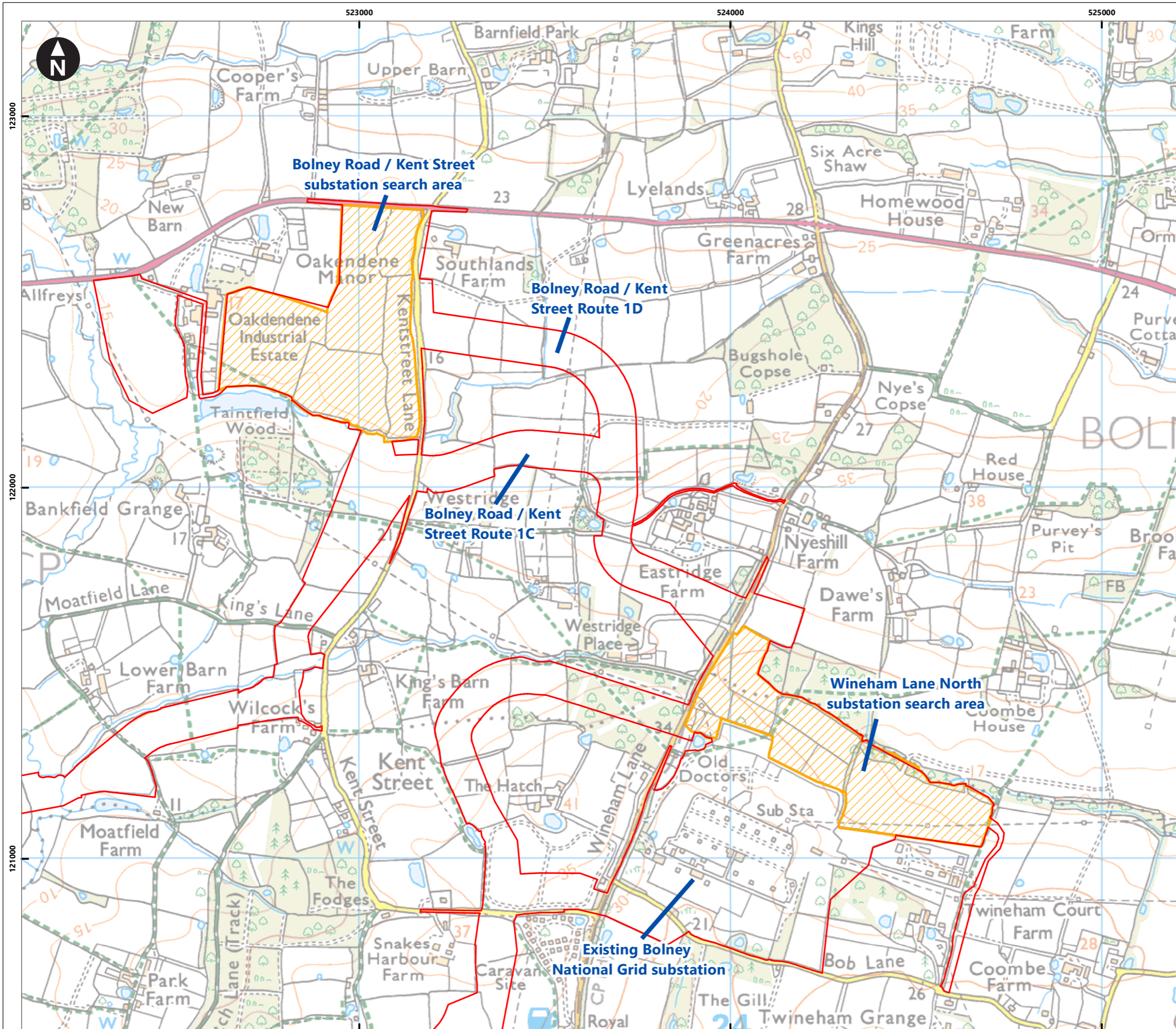


Rampion 2 Offshore Wind Farm

Figure 3.11 Onshore Cable route options to onshore substation search areas

Environmental Statement

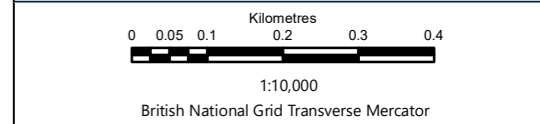
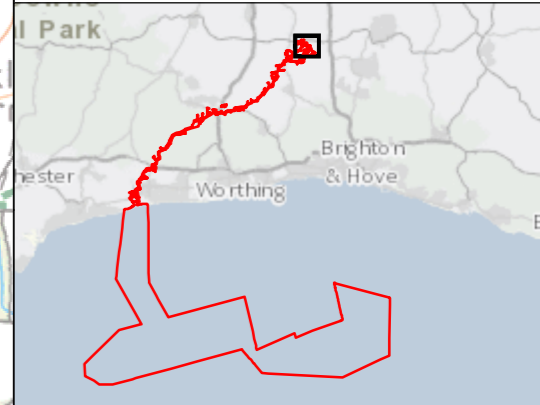
System Identifier: 42285-WSP-ES-CC-FG-O-6197		Version: 1.0
Company: WSP	Drawn By: SUTET	Chk/Prvrd: ROBEH
Drawn Date: 03/08/2023	Status: FINAL	



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights [2022]
 Ordnance Survey 0100031673

Key

- PEIR Assessment Boundary
- Onshore substation search areas

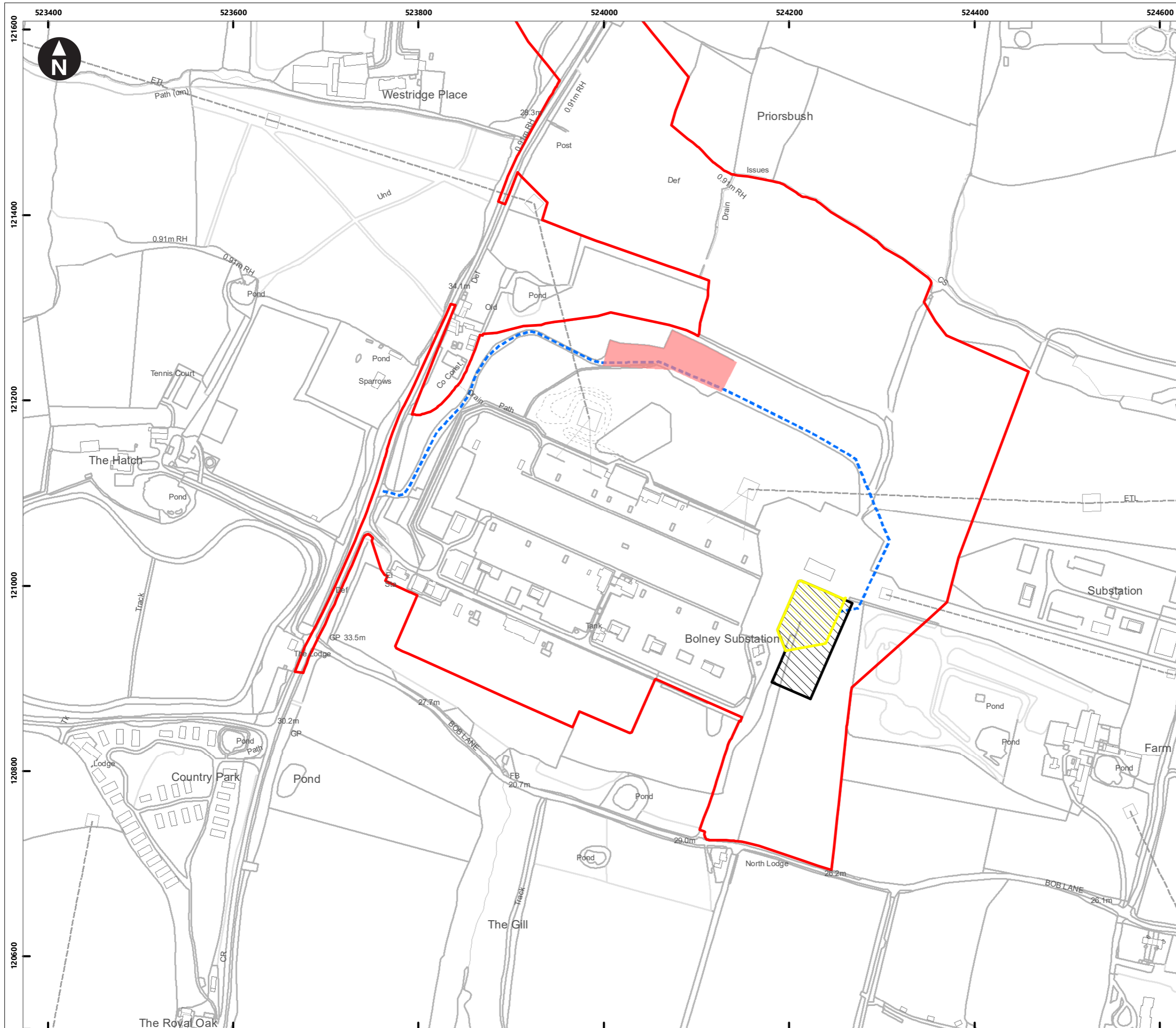


Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3.12 Cable route options to Bolney substation
 Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-3012	Version: 1.0
--	-----------------

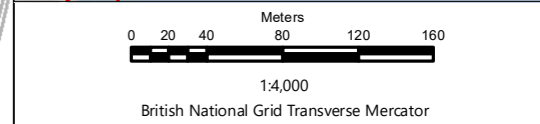
Company: WSP	Drawn By: SUTET	Chk/Prvrd: ROBEH	Drawn Date: 31/03/2023	Status: FINAL
-----------------	--------------------	---------------------	---------------------------	------------------



Service Layer Credits: Contains OS data © Crown Copyright and database right 2020
 © Crown copyright and database rights year 2023 Ordnance Survey 0100031673

- Key**
- Proposed DCO Order Limits
 - Bolney Substation extension (GIS)
 - Bolney Substation extension (AIS)
 - Temporary construction compound
 - Temporary construction access

Label Abbreviations:
 GIS - Gas Insulated Switchgear
 AIS - Air Insulated Switchgear



Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3.13 National Grid Bolney substation extension options
 Environmental Statement

System Identifier: 42285-WSPE-ES-CC-FG-O-1982		Version: 1.0
Company: WSP	Drawn By: COLLJ	Chk/Aprvd: RANDR
Drawn Date: 11/07/2023	Status: FINAL	