



N O R T H F A L L S

Offshore Wind Farm

Flood Risk Assessment (Updated NaFRA2 dataset) - Technical Note

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NORTH FALLS

Offshore Wind Farm

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Glossary of Acronyms

AEP	Annual Exceedance Probability
DCO	Development Consent Order
ES	Environmental Statement
FRA	Flood Risk Assessment
LLFA	Lead Local Flood Authority
NaFRA	National Flood Risk Assessment
NCERM	National Coastal Erosion Risk Map
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
RoFSW	Risk of Flooding from Surface Water

Glossary of Terminology

Term	Definition
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Fluvial flooding	When flows within watercourses exceed the capacity of the watercourse causing out of bank flows.
Landfall	The location where the offshore export cables come ashore at Kirby Brook
Onshore cable route	Onshore route within which the onshore export cables and associated infrastructure would be located.
Onshore project area	The boundary within which all onshore infrastructure required for the Project will be located (i.e. landfall; onshore cable route, accesses, construction compounds; onshore substation and cables to the National Grid substation)
Onshore substation	A compound containing electrical equipment required to transform and stabilise electricity generated by the Project so that it can be connected to the National Grid.
Ordinary watercourse	Rivers which are not Main Rivers are called 'ordinary watercourses'. Lead Local Flood Authorities, District Councils and Internal Drainage Boards carry out flood risk management work on ordinary watercourses.
Surface water flooding	Surface water flooding occurs when rainwater does not drain away through normal drainage systems or soak into the ground, but lies on or flows over the ground instead.
The Project Or 'North Falls'	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.

1 Introduction

1. Within Environmental Statement (ES) Appendix 21.3 Flood Risk Assessment (FRA) **[APP-121]**, produced to support the Development Consent Order (DCO) application for North Falls Offshore Wind Farm (hereafter referred to as 'North Falls' or 'the Project'), a number of different publicly available datasets were utilised to assess the flood risk from all sources to the onshore elements of the Project infrastructure. This included datasets from the Environment Agency, as well as from Essex County Council, in their role as the Lead Local Flood Authority (LLFA).
2. Following submission of the North Falls DCO application in July 2024, the Environment Agency published new national risk information for flooding and coastal erosion. This includes the following updates:
 - 17 December 2024: A 'National assessment of flood and coastal erosion risk in England 2024' report was published, which provides a summary of the new data.
 - 28 January 2025: New National Flood Risk Assessment (NaFRA) 'Risk of flooding from rivers and sea' and 'Risk of flooding from surface water' data was released.
 - 28 January 2025: New National Coastal Erosion Risk Map (NCERM) data was released.
 - 25 March 2025: New NaFRA Flood Zone data on Flood Map for Planning was made available on data.gov.uk.
3. This Technical Note presents a comprehensive review of the new datasets, in order to determine whether the updated datasets affect the conclusions of ES Appendix 21.3 Flood Risk Assessment (FRA) **[APP-121]**. Section 2 presents a summary of the updates to the datasets; Sections 3 and 4 then present an assessment of whether the updated datasets affect the conclusions of ES Appendix 21.3 Flood Risk Assessment (FRA) **[APP-121]**, for fluvial / tidal flood risk and for surface water flood risk respectively. Figures showing the changes in the datasets are also provided.

2 Environment Agency's New National Flood and Coastal Erosion Risk Information

4. As noted above, the Environment Agency recently published new national risk information for flooding and coastal erosion. This section of the Technical Note provides a summary of the key changes to the relevant datasets.

2.1 NaFRA 'Risk of flooding from rivers and sea' and 'Risk of flooding from surface water'

5. The new NaFRA 'Risk of flooding from rivers and sea' and 'Risk of flooding from surface water' data, is shown online in 'Check your long-term flood risk' (accessed via this website: <https://check-long-term-flood-risk.service.gov.uk/map>).

6. A comparison has been made between the previous flood risk datasets and the new NaFRA dataset (released 28 January 2025). A summary of the key similarities and differences is provided below.
- The new NaFRA dataset provides a present day and future scenario representation of flood risk for flooding from rivers and sea and flooding from surface water. This is different to the previous flood risk datasets, which only provided present day scenarios when presenting flood risk.
 - The new NaFRA dataset provides the future scenario as a representation of climate change, for flooding from rivers and sea and flooding from surface water.
 - For the climate change scenarios, the Environment Agency selected the scenarios which were considered to be most relevant to the expected users.
 - As the 'Check your long-term flood risk' tool is aimed at supporting users with short and medium term decisions to manage future flood risk, the following scenarios have been chosen:
 - the 'Central' allowance for the 2050s epoch (2040 – 2069) for risk of flooding from rivers;
 - the 'Higher Central' allowance for risk of flooding from the sea, accounting for cumulative sea level rise to 2065; and
 - the 'Central' allowance for the 2050s epoch (2040 – 2060) for risk of flooding from surface water.
 - In addition, the representation of the flood depth information in the new NaFRA dataset has changed since the previous flood risk datasets:
 - The previous Risk of Flooding from Surface Water (RoFSW) Depth datasets showed the maximum depth of flooding from surface water that could result from an event with a 0.1%, 1% and 3.3% chance of happening in any given year.
 - The new RoFSW Depth datasets show the annual chance of flooding beyond a specific depth, for depths at intervals from 20cm to 120cm.

2.2 National Coastal Erosion Risk Map

7. The Environment Agency's new NCERM data (released 28 January 2025) provides the following information:
- The most up to date representation of coastal erosion for England.
 - Climate change scenarios based on UK Climate Change Projections 2018 (UKCP18) sea level rise allowances. The UK Climate Change Projections 2018 are a set of climate change projections developed by the Met Office, to provide information on how the UK's climate might change in the future. This includes projections for sea level rise. The Environment Agency's new NCERM data includes the 'Higher Central' and 'Upper End' allowances between now and 2055, and between now and 2105.

- It reflects the latest coastal management approaches set out in the Shoreline Management Plans for a range of time periods (2005 – 2025, 2025 – 2055 and 2055 – 2105).
- Supports coastal managers and planners making short and long-term decisions to manage current and future coastal erosion risk through *The National Coastal Erosion Risk Map* (accessed via this website: <https://www.gov.uk/check-coastal-erosion-management-in-your-area>) and the *Shoreline Management Plan Explorer* (accessed via this website: <https://environment.data.gov.uk/shoreline-planning>).
- The new NCERM data is available from the following website: <https://www.data.gov.uk/>

2.3 NaFRA Flood Zone data on Flood Map for Planning

8. The new NaFRA Flood Zone data and Flood Map for Planning have been updated, as of 25 March 2025, and are a replacement for the old Flood Map for Planning. The following notable differences / updates from the previous data are:

- The new Flood Zones and Flood Map for Planning were updated using the latest flood modelling and data.

However, the updated mapping / dataset comprise no change in the definitions of Flood Zones – these remain the same as those provided in the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) for Flood Risk and Coastal Change.

- The updated Flood Map for Planning has been extended so that it shows river and sea flood risk extents both with and without the presence of defences.

For reference, the previous Flood Map for Planning, and the Flood Zones, were only presented for the scenario assuming there were no defences in place.

- The dataset now includes an allowance for climate change, which were not previously available online.
- The updated Flood Map for Planning is aimed at supporting planners and developers with making long-term decisions regarding development and, as such, these decisions need to account for the full lifetime of development. Therefore, the Environment Agency has selected the following scenarios:
 - The ‘Central’ allowance for the 2080s epoch (2070 – 2125) for risk of flooding from rivers; and
 - The ‘Upper End’ allowance for risk of flooding from the sea, accounting for cumulative sea level rise to 2125.

3 Fluvial / Tidal Flood Risk

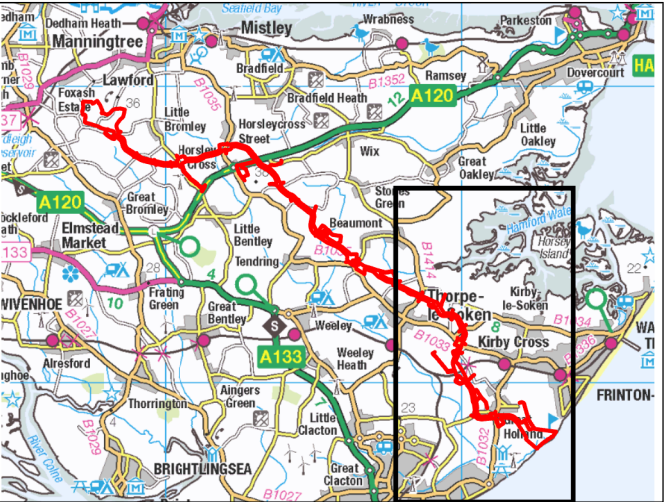
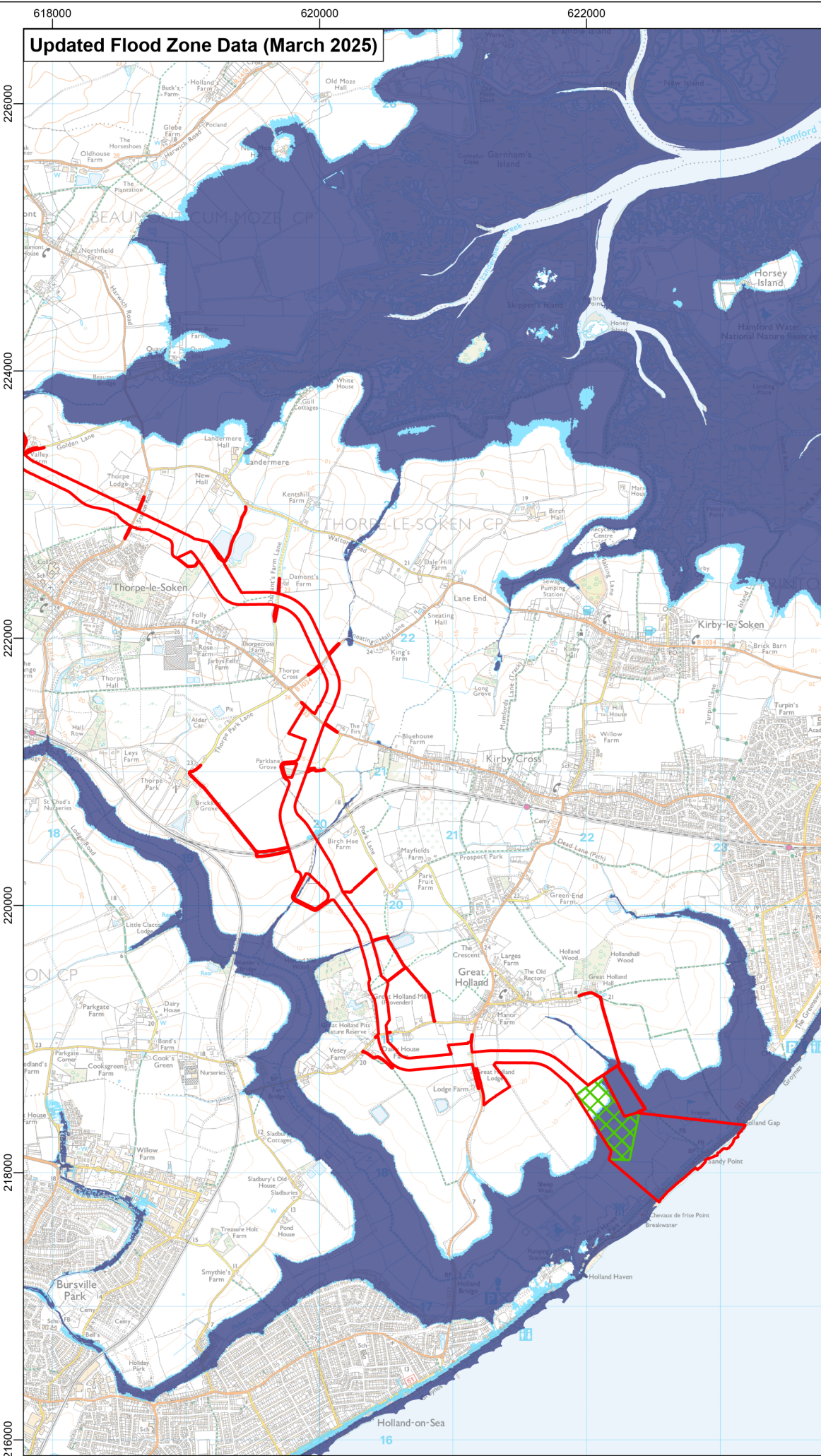
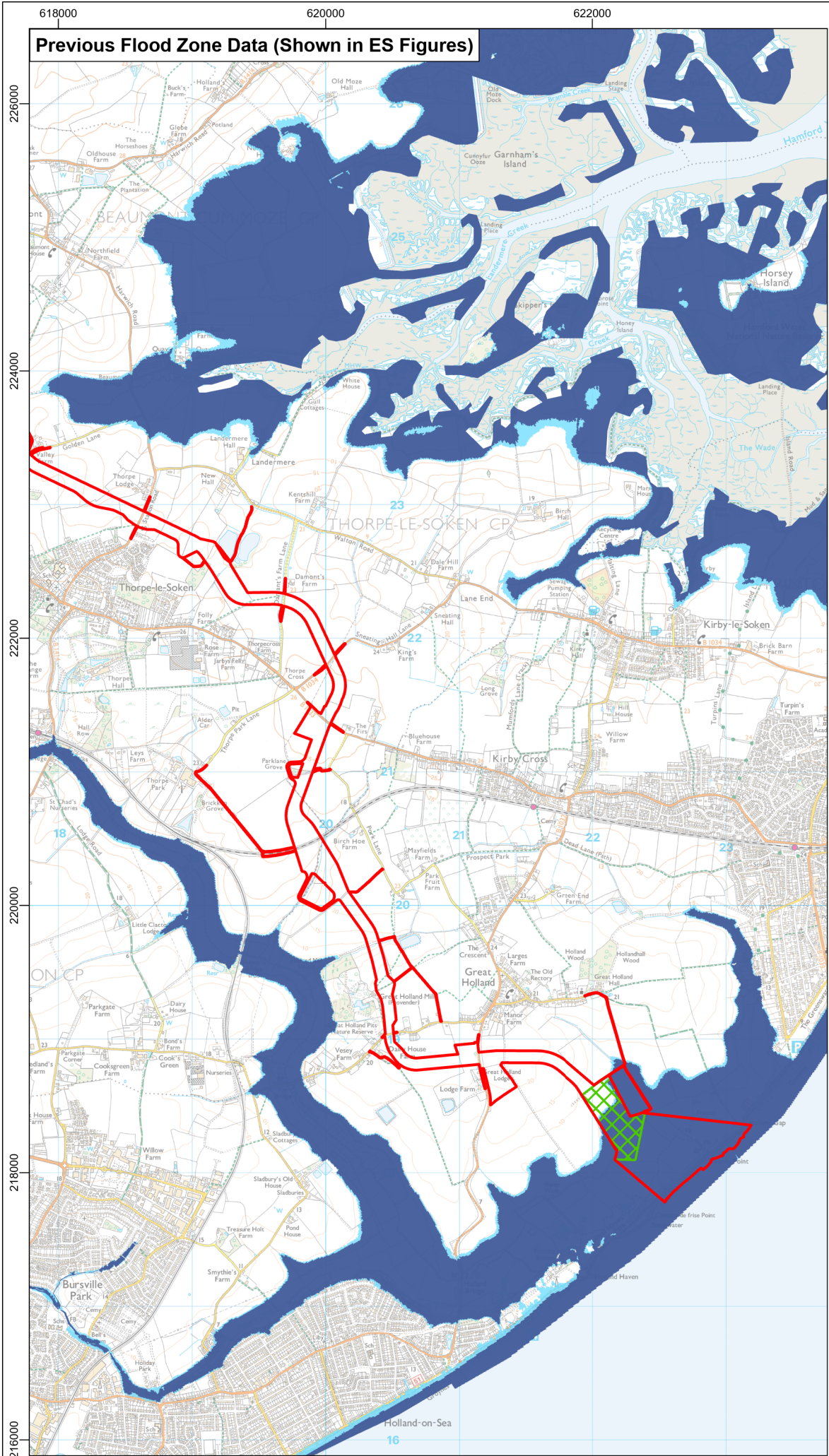
3.1 Flood Zone maps

9. To understand how the updated Flood Zone extents could impact the Project, the previous Flood Zone extents which were used in the DCO application

documentation, in ES Appendix 21.3 Flood Risk Assessment [**APP-121**], have been compared against the updated Flood Zone extents (March 2025).

10. The revised Flood Zone mapping has been provided as **Figure 3.1**.
11. From reviewing **Figure 3.1**, it is considered that there are no significant changes in the Flood Zone extents across the entire Project area. This includes the landfall, onshore cable route and onshore substation works area.

Figure 3.1: Flood Zones

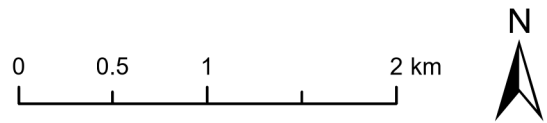


Legend

- Onshore Project Area
- Landfall Compound

Flood Zones

- Flood Zone 3
- Flood Zone 2



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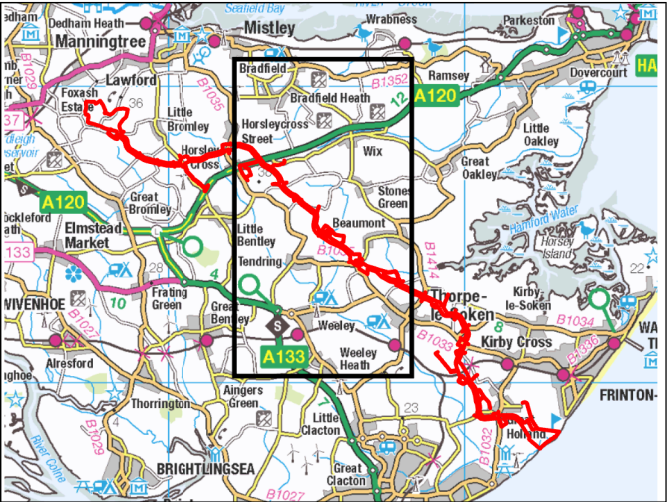
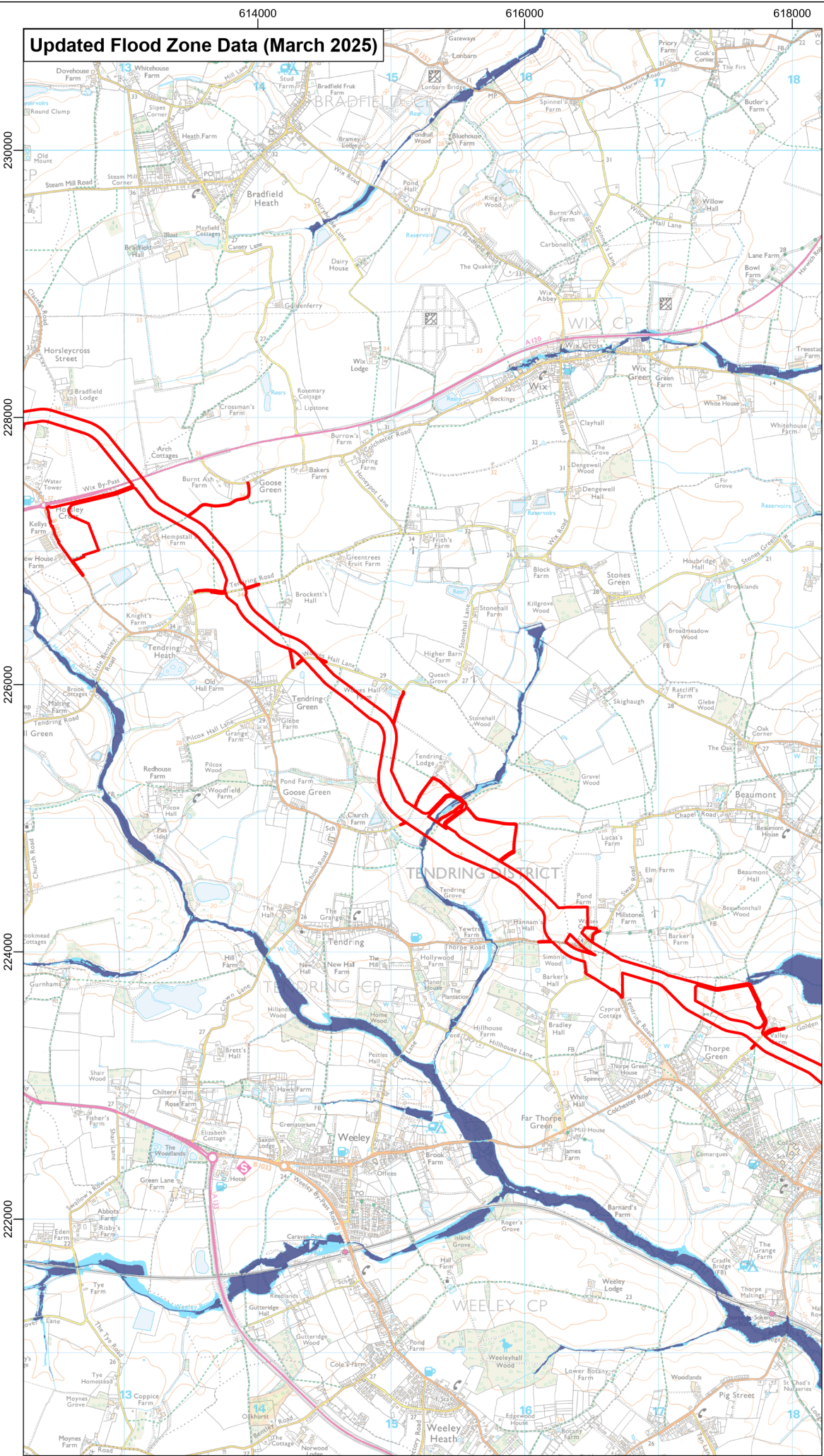
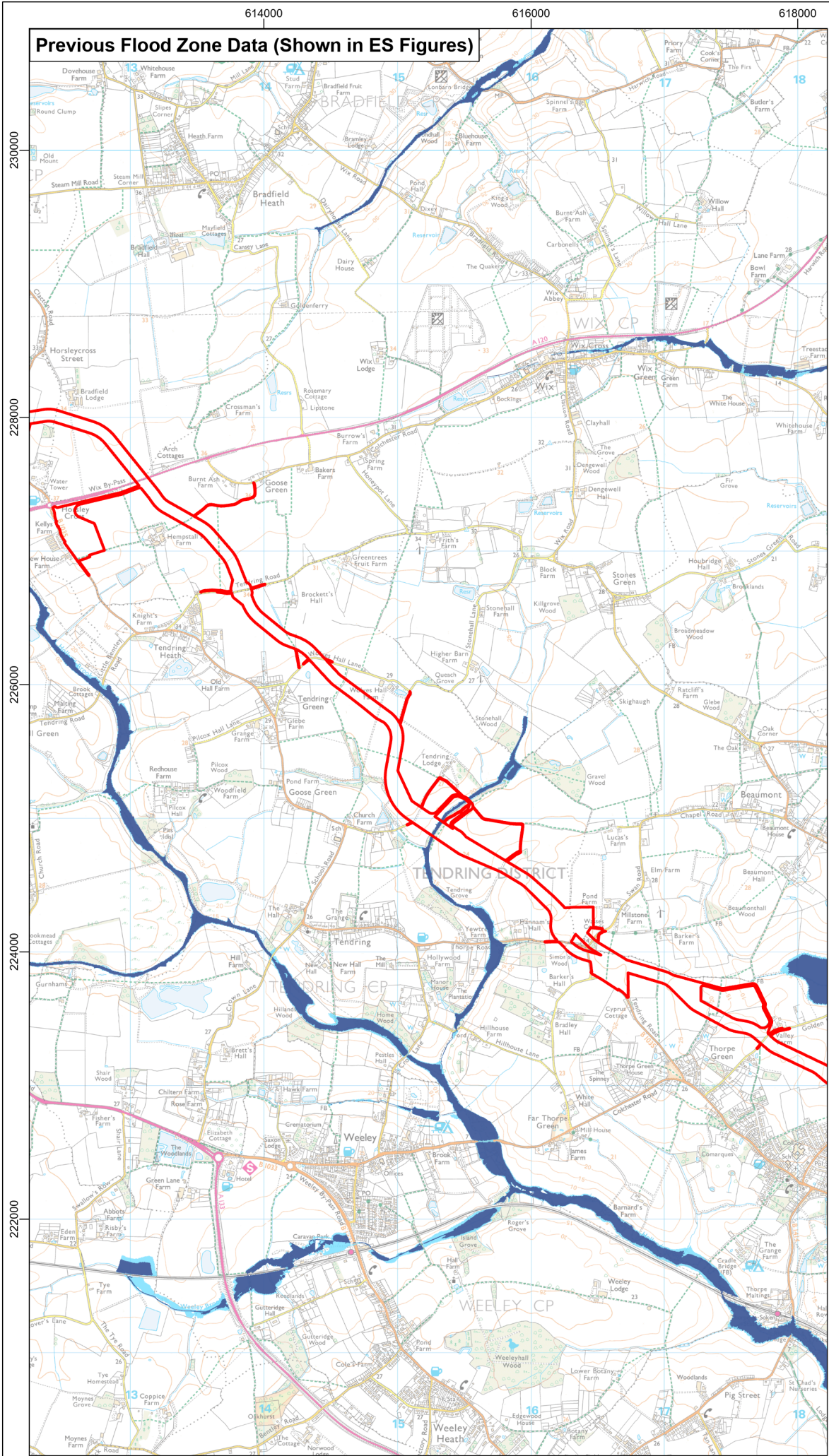
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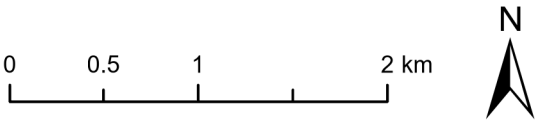
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Legend

- Onshore Project Area
- Flood Zones**
- Flood Zone 3
- Flood Zone 2



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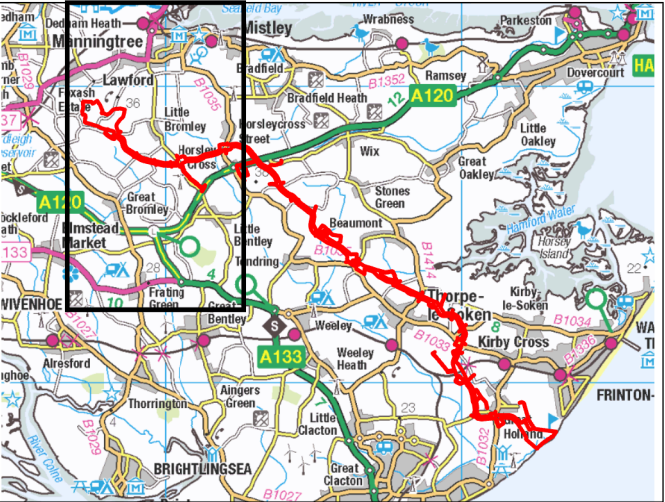
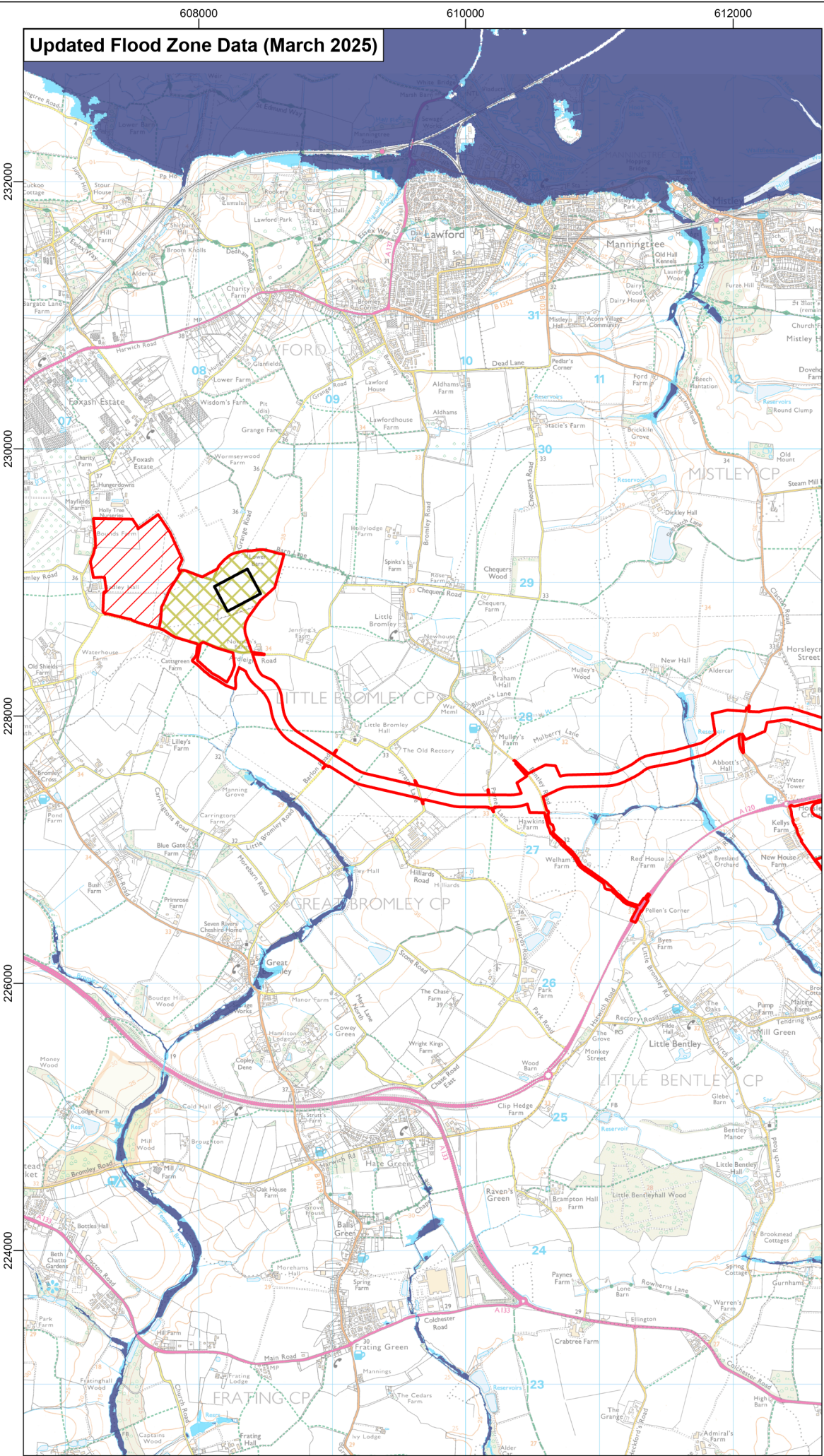
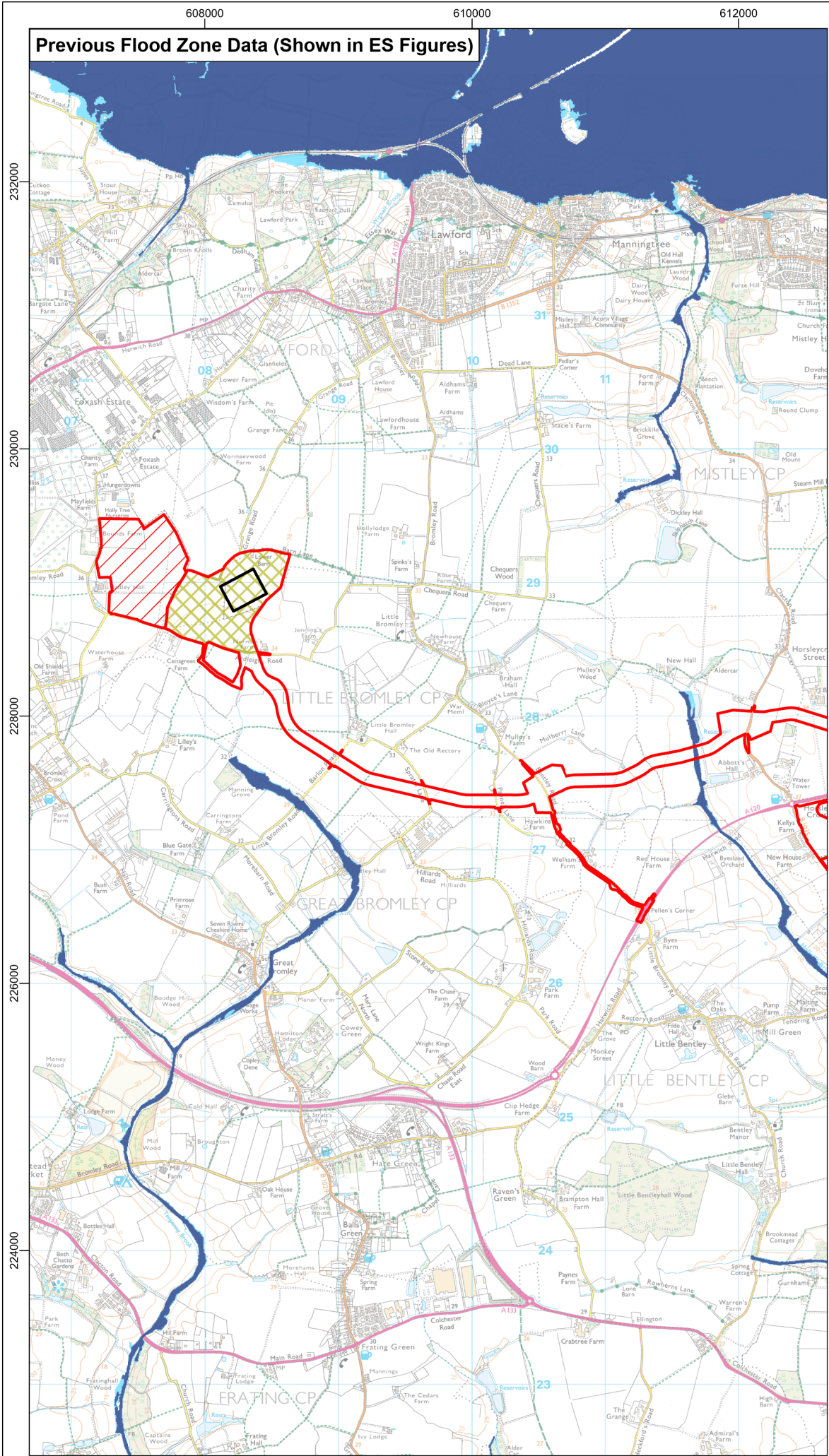
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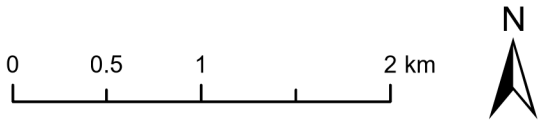
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- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)
 - Substation Works Area
- Flood Zones**
- Flood Zone 3
 - Flood Zone 2



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Drawing Title

Flood Zones

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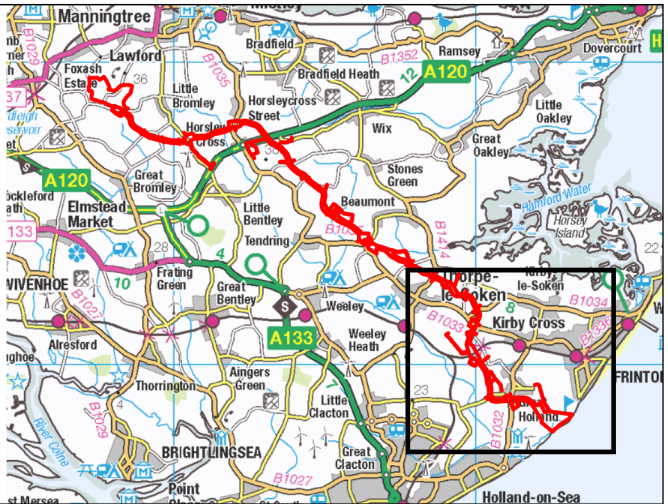
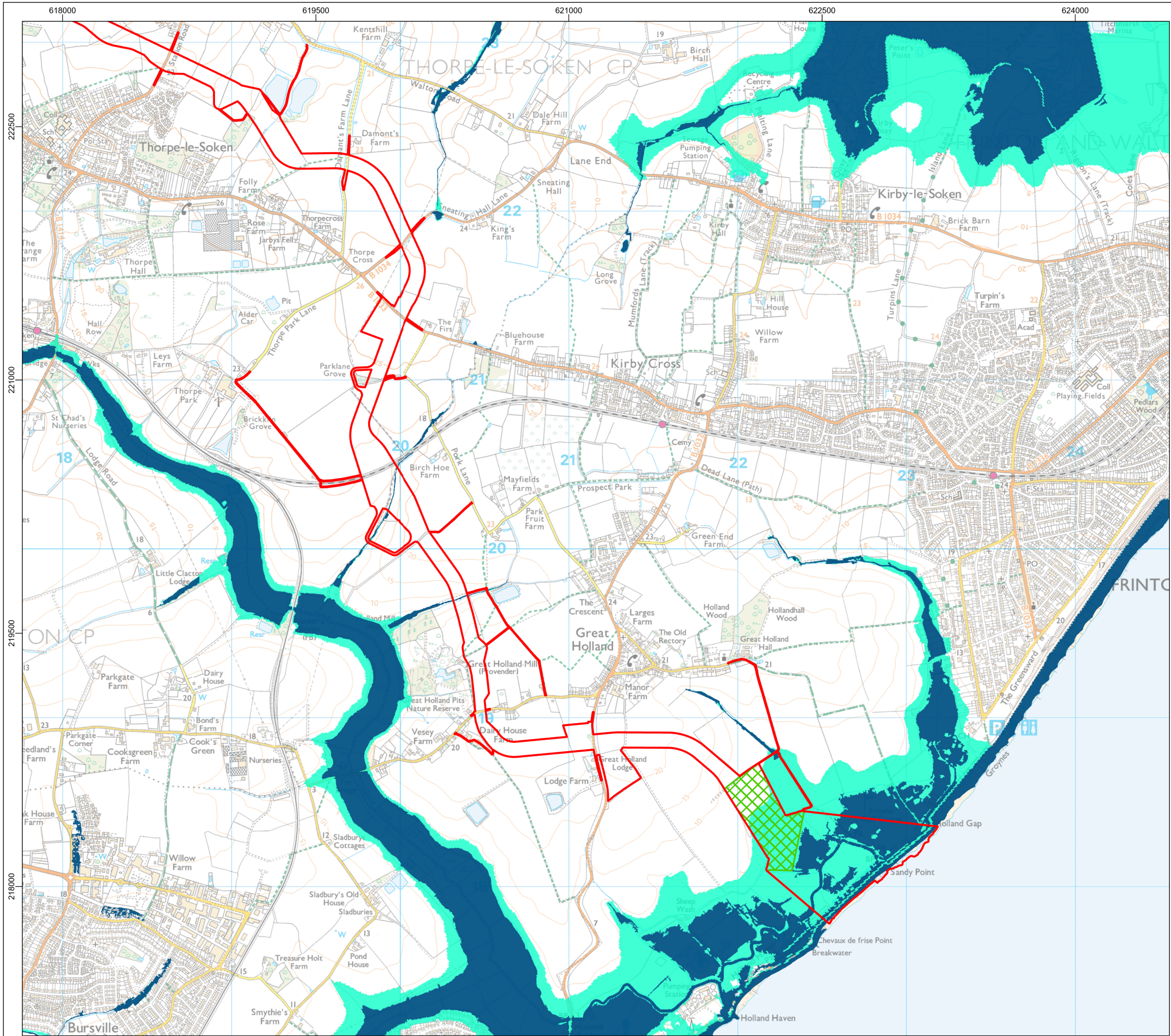
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3.2 New Datasets

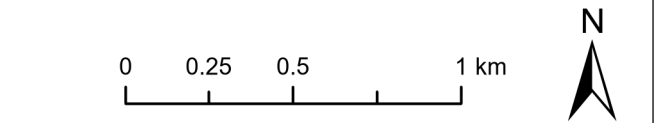
12. As part of the update, the Environment Agency has also published a suite of new mapping. This includes both defended and undefended mapping, for the present-day and climate change scenarios.
13. These have been included as a number of supplementary figures to this Technical Note as follows:
 - **Figure 3.2:** 3.3% Annual Exceedance Probability (AEP) Defended (Present Day and Climate Change).
 - **Figure 3.3:** Present day extents (Defended and Undefended).
 - **Figure 3.4:** Climate Change Extents (Defended and Undefended).
14. From reviewing the maps, the defended 3.3% AEP climate change extent (**Figure 3.2**) is similar to the updated Flood Zone 3 shown in **Figure 3.1**. The defended 3.3% AEP present day extent is a smaller extent.
15. Similarly, the present day extents, both defended and undefended (shown in **Figure 3.3**), are similar to the updated Flood Zones, with increased granularity.
16. As such, it is considered that the areas affected by flood risk in the present day defended and undefended mapping are already largely covered by the flooding shown in the Flood Zone extents (**Figure 3.1**).
17. The onshore cables are only likely to be at risk of flooding during the present day scenario because the permanent infrastructure will be predominantly located below ground level once operational. Due to this, it is concluded that, following review of the updated mapping, there is no change to or increased flood risk to this element of the Project.
18. At the onshore substation works area, the mapping for both the defended and undefended, and present day and with climate change allowance scenarios indicate that it would not be affected by flooding either now or in the future.
19. The climate change extent mapping provided in **Figure 3.4** shows the onshore substation works area as not at risk of flooding in the future. Therefore, there are no changes in the conclusions in relation to the flood risk in this location.

Figure 3.2: 3.3% Annual Exceedance Probability Defended (Present Day and Climate Change)



Legend

- Onshore Project Area
- Landfall Compound
- 3.3% AEP Defended**
- Defended: 3.3% AEP (1 in 30) Rivers/Sea (Present Day)
- Defended: 3.3% AEP (1 in 30) Rivers/Sea (Climate Change)



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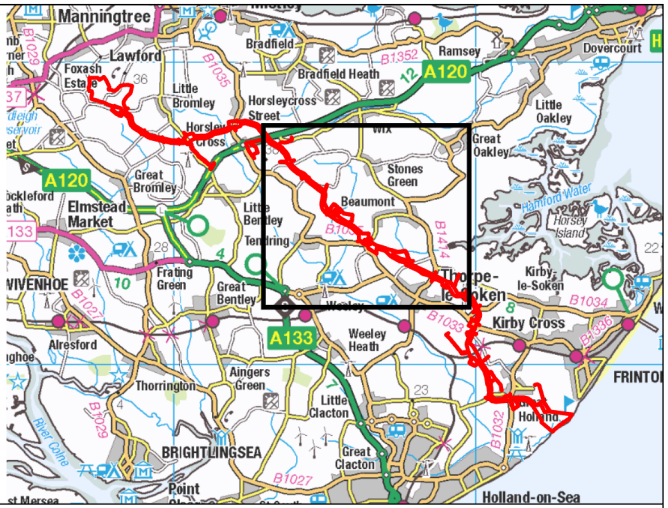
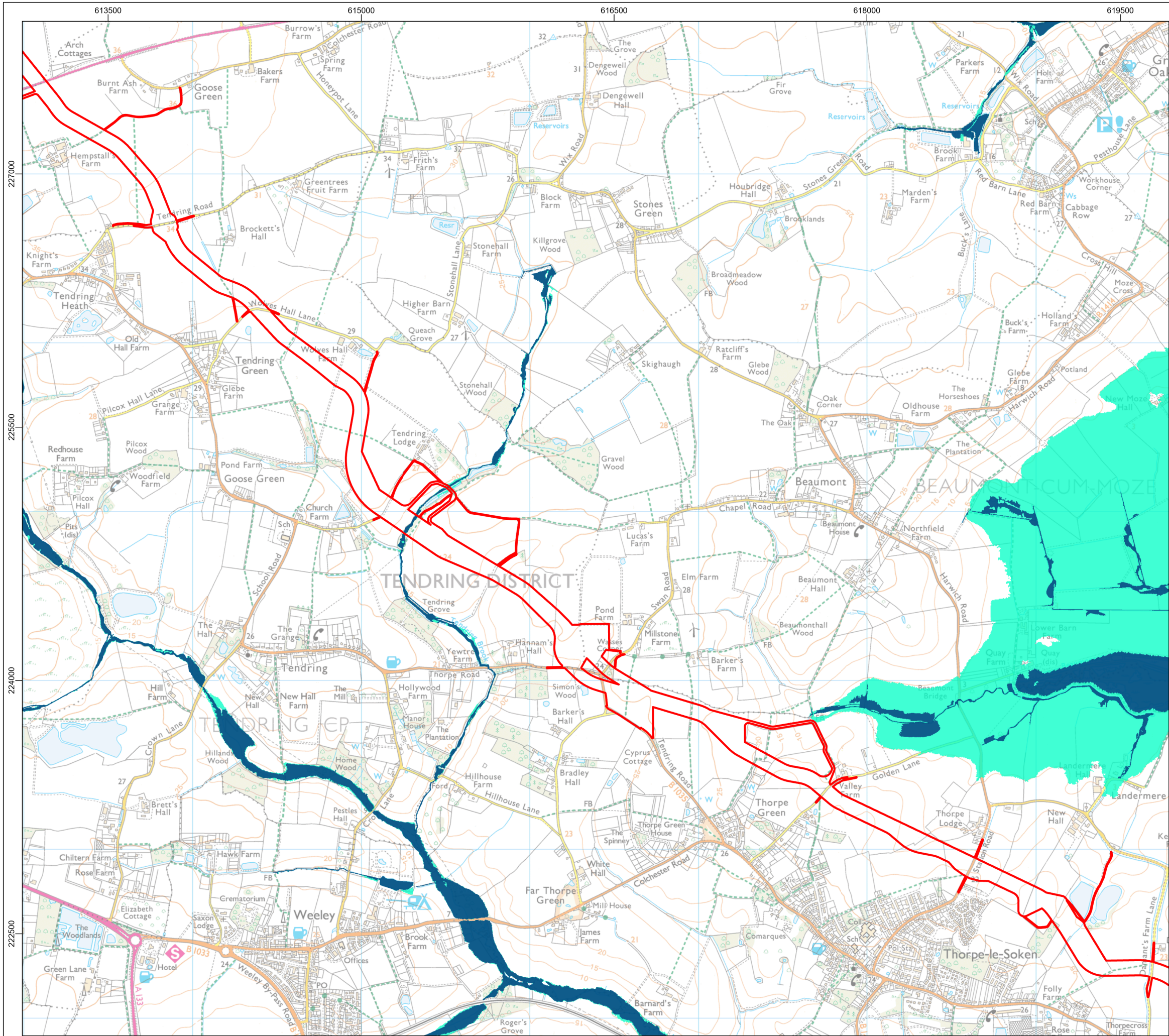
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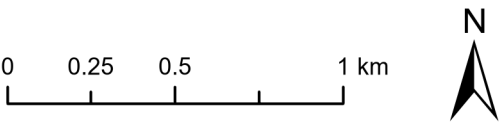
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Legend

- Onshore Project Area
- 3.3% AEP Defended**
- Defended: 3.3% AEP (1 in 30) Rivers/Sea (Present Day)
- Defended: 3.3% AEP (1 in 30) Rivers/Sea (Climate Change)



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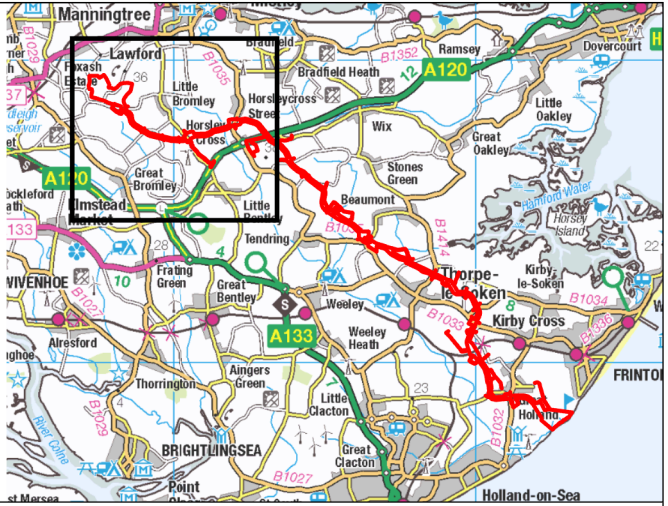
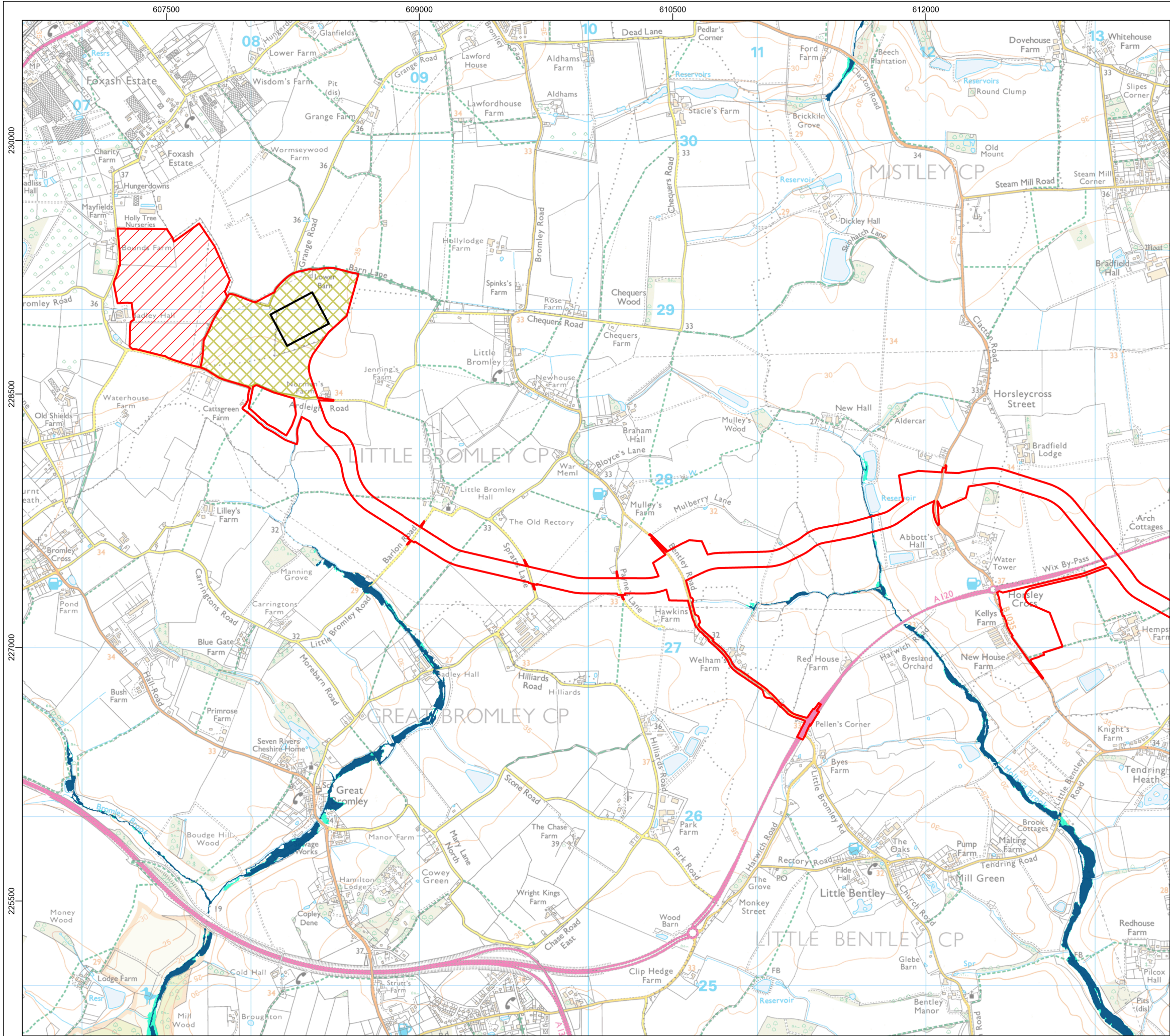
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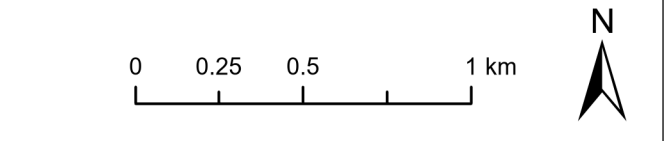
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- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)
 - Substation Works Area
- 3.3% AEP Defended**
- Defended: 3.3% AEP (1 in 30) Rivers/Sea (Present Day)
 - Defended: 3.3% AEP (1 in 30) Rivers/Sea (Climate Change)



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3.3% AEP Defended (Present Day and Climate Change)

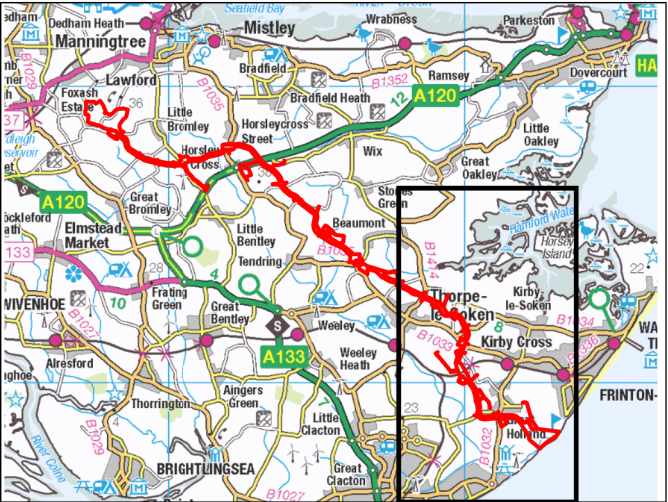
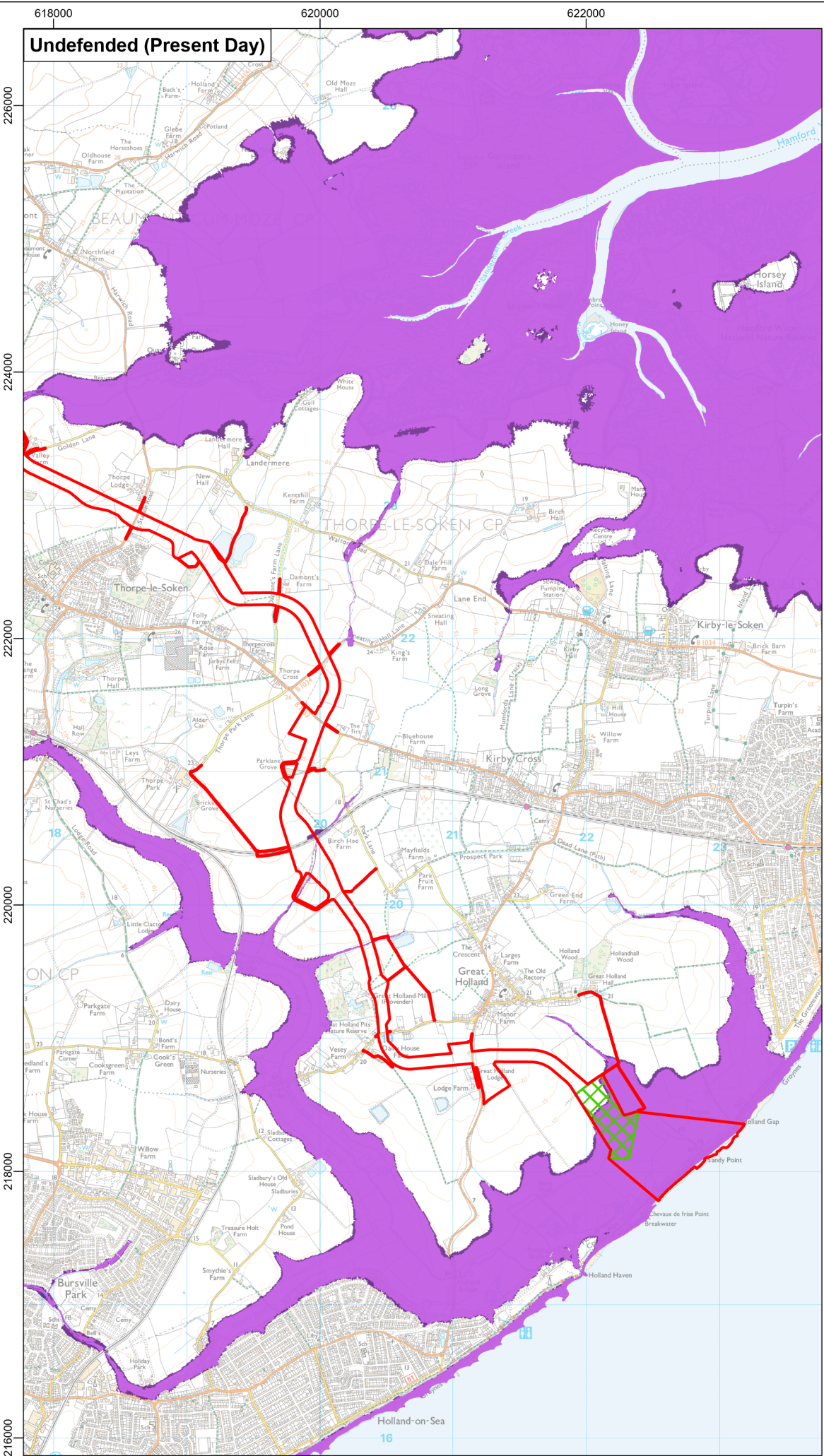
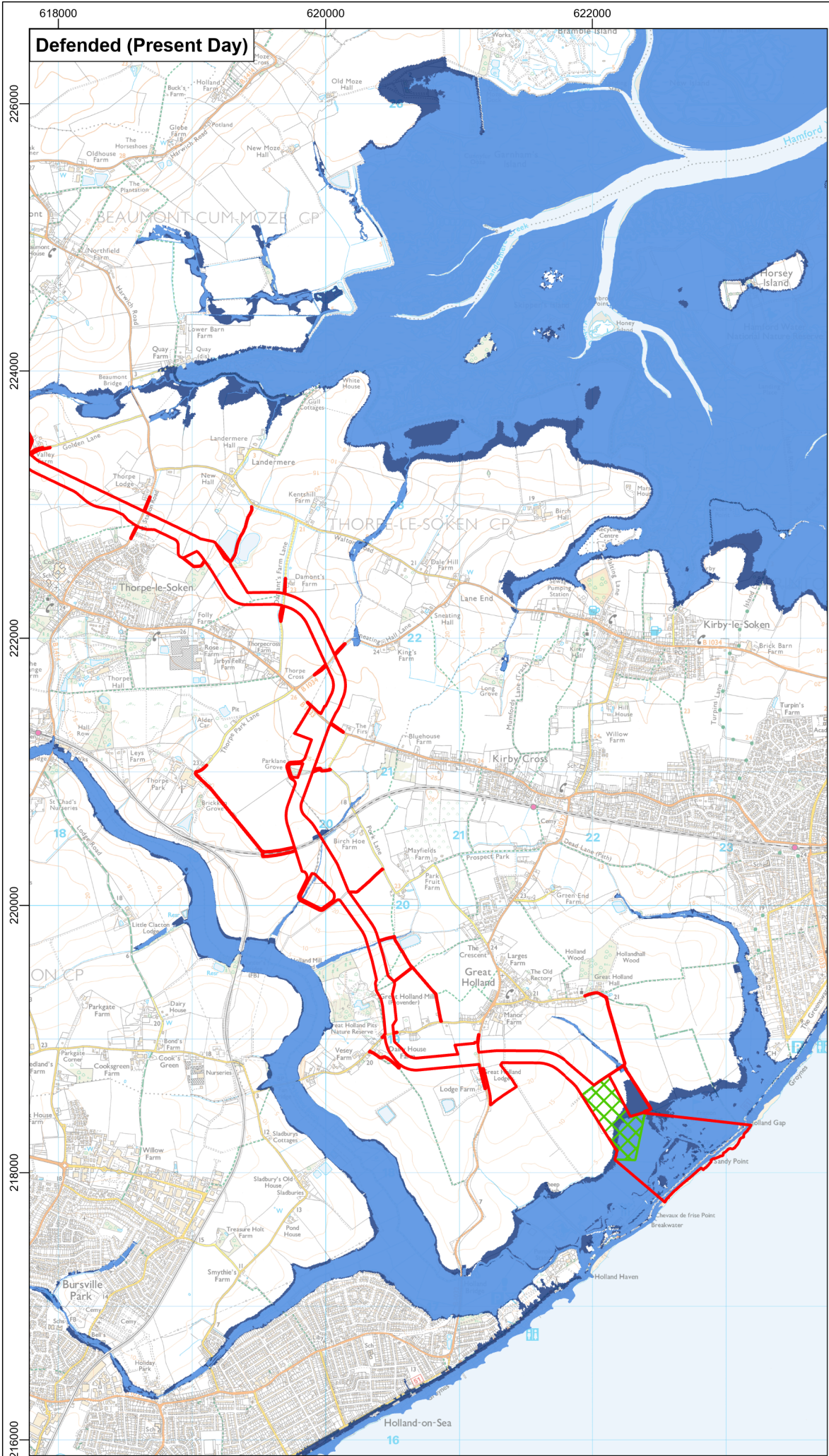
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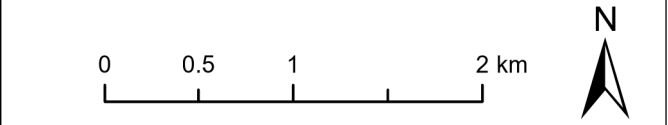
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Figure 3.3: Present day extents (defended and undefended)



- Legend**
- Onshore Project Area
 - Landfall Compound
- Present Day Extents**
- Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
 - Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Undefended: 0.1% AEP (1 in 1,000) Rivers/ Sea



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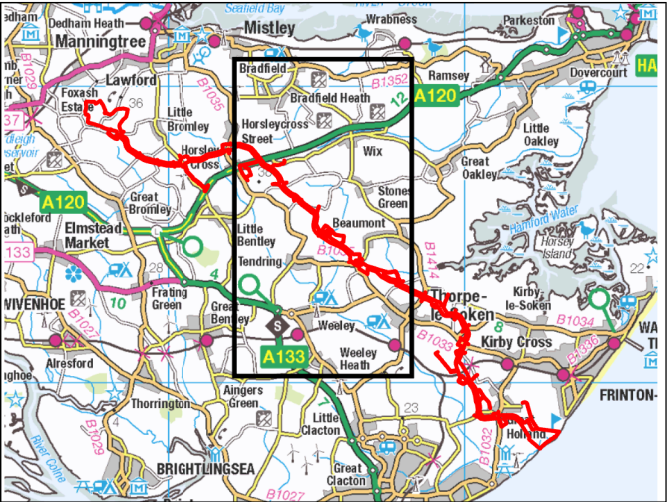
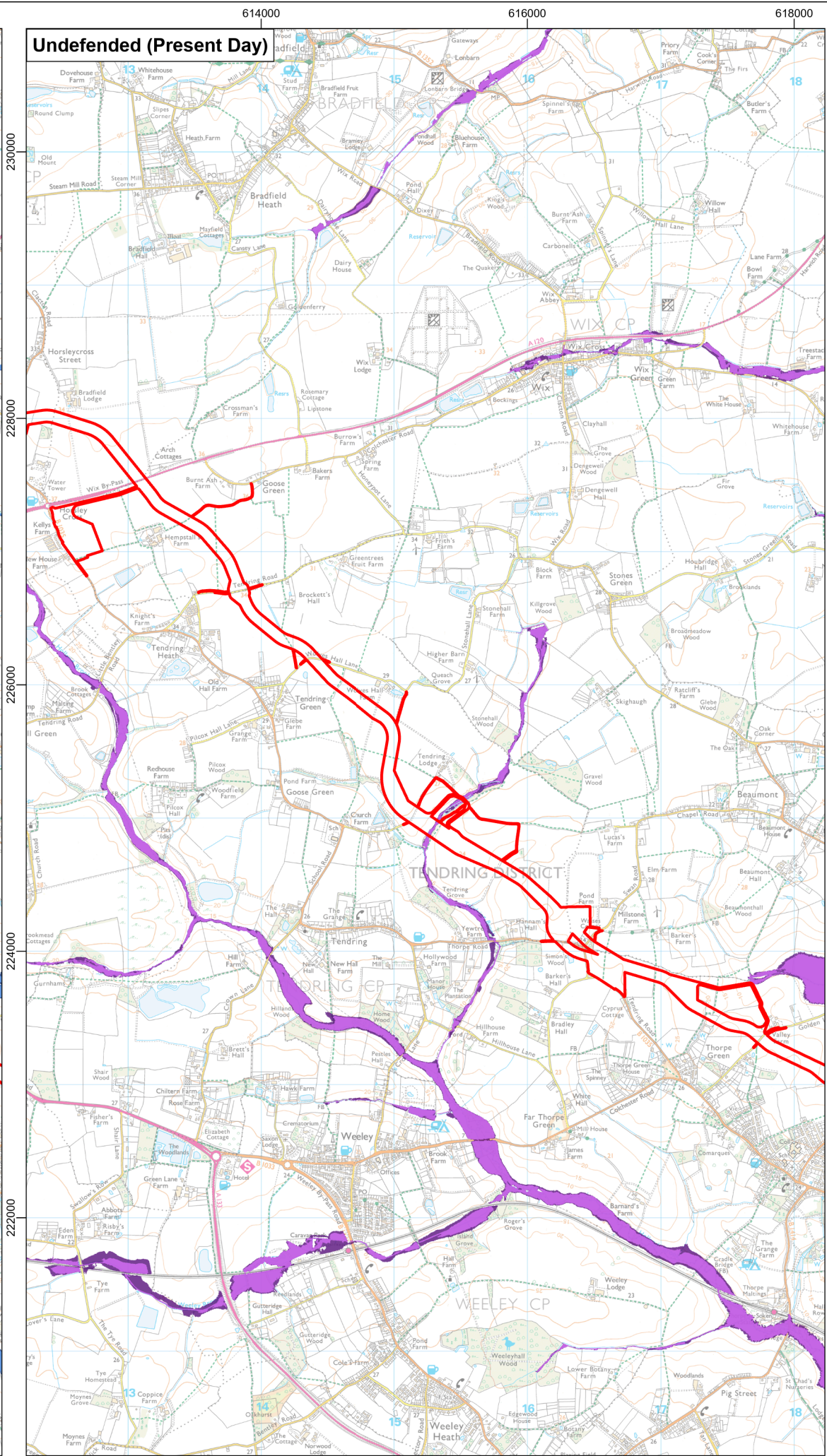
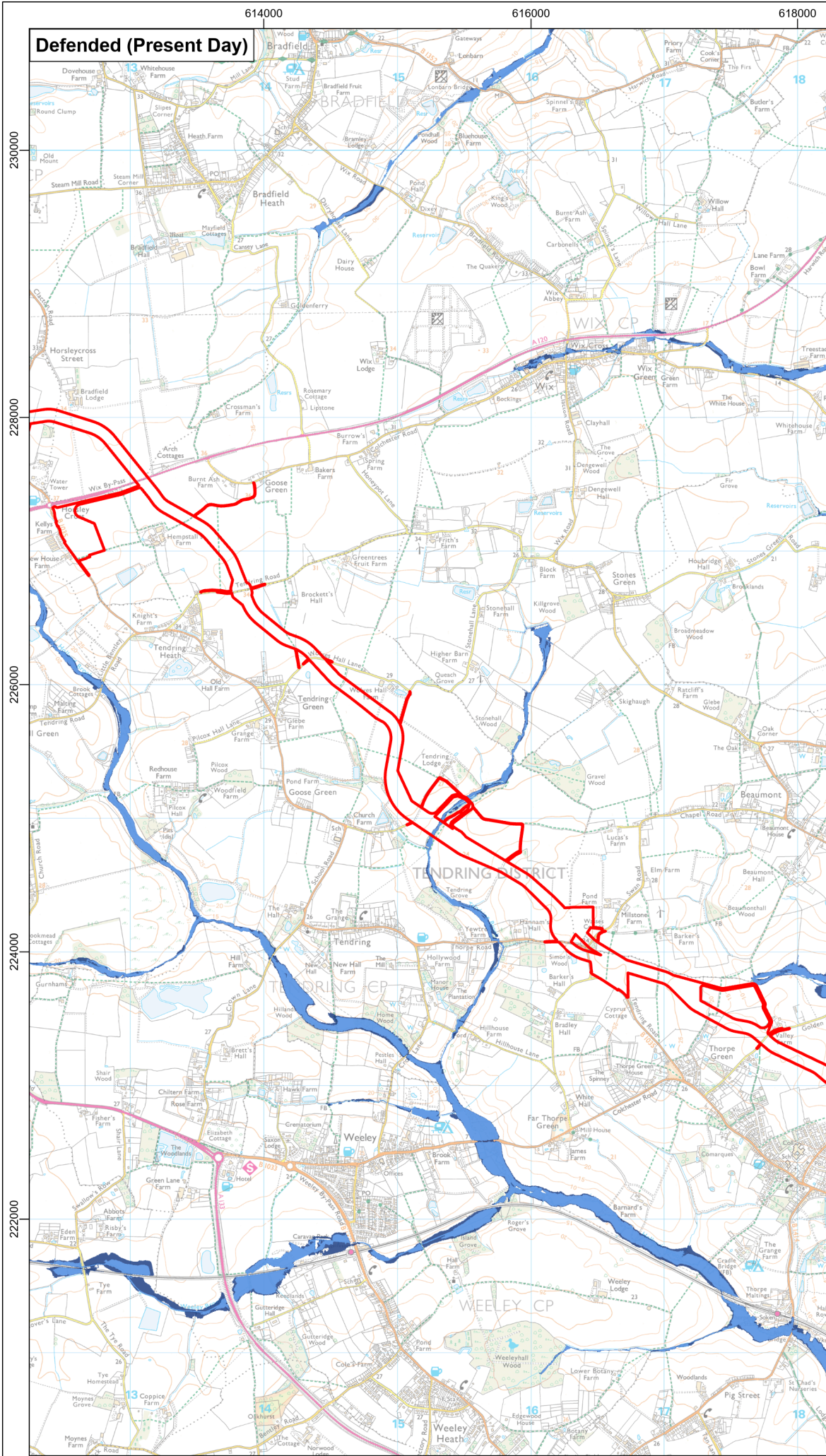
**Present Day Extents
(Defended and Undefended)**

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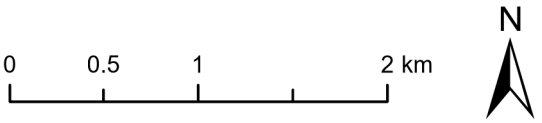
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- Legend**
- Onshore Project Area
 - Present Day Extents
 - Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
 - Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Undefended: 0.1% AEP (1 in 1,000) Rivers/Sea



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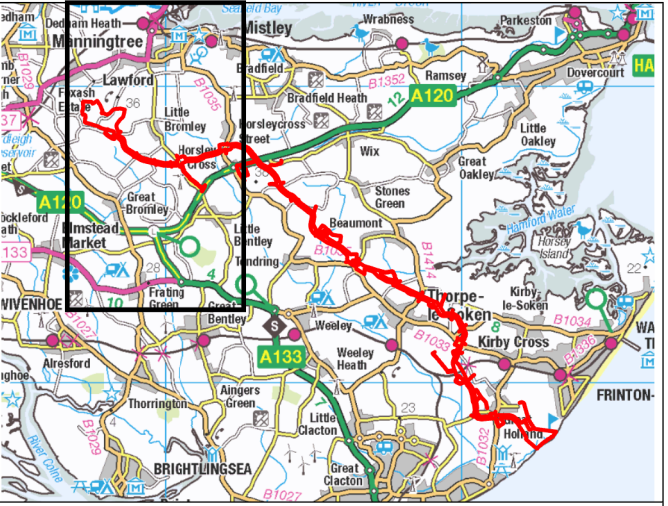
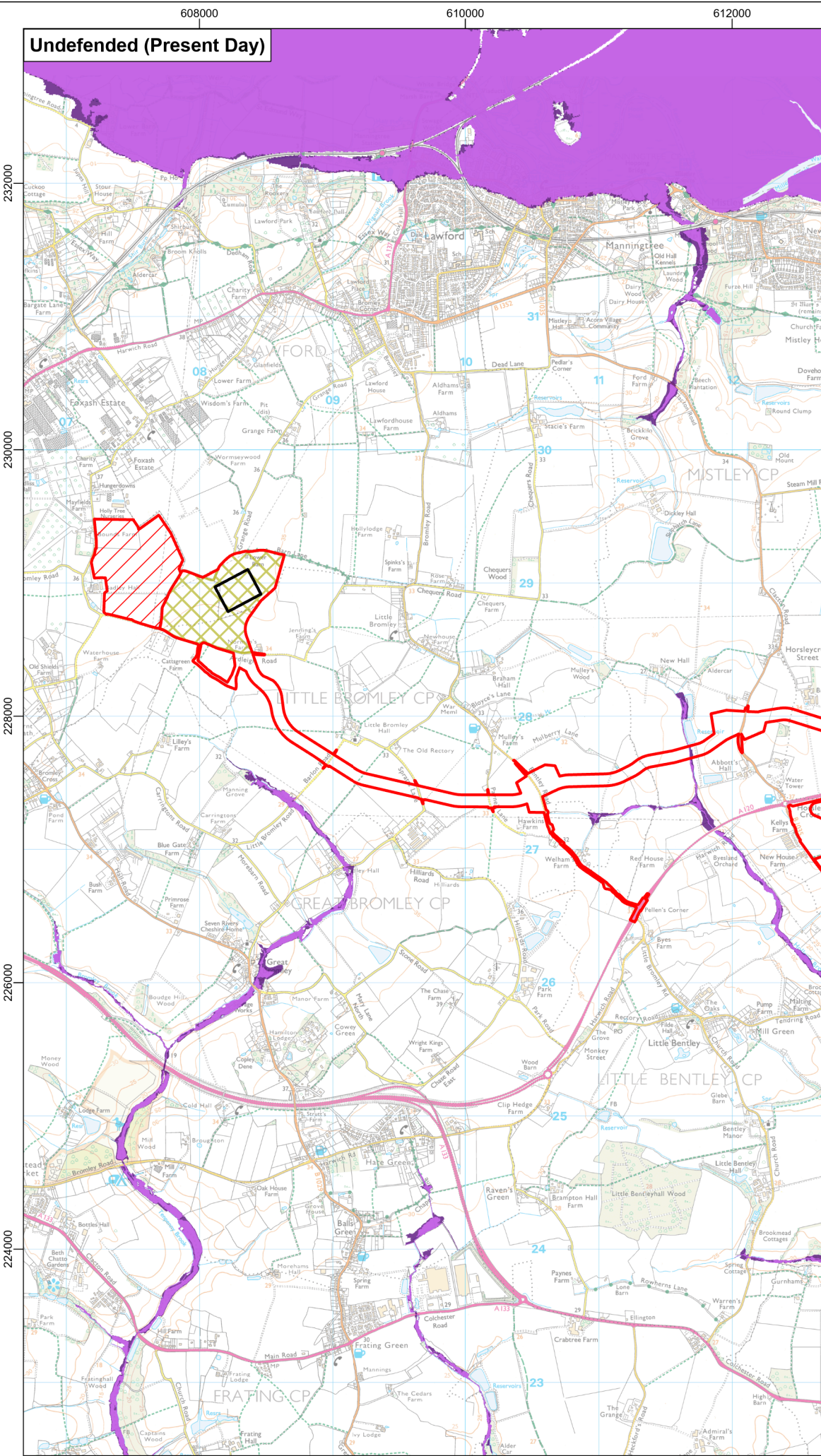
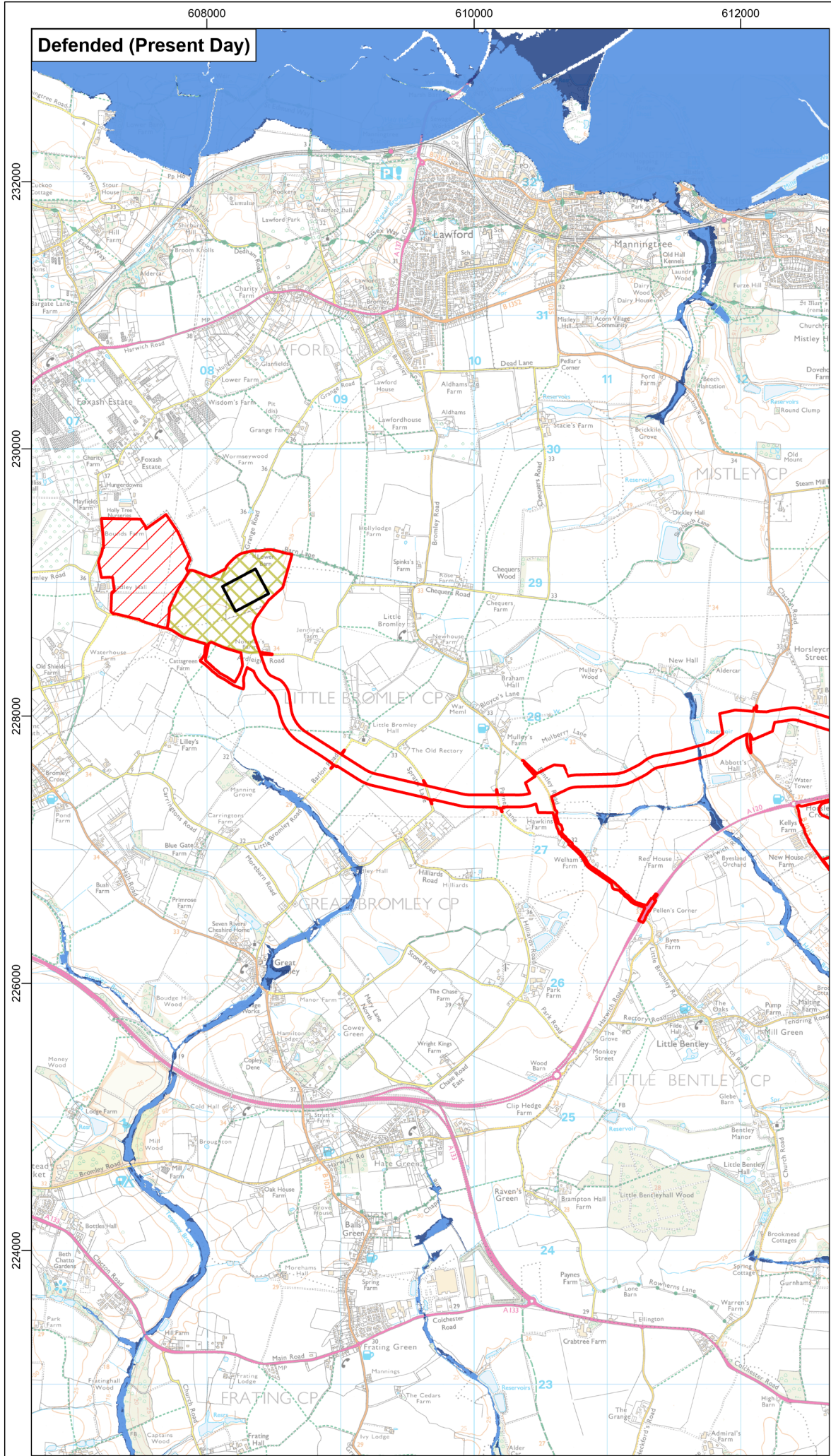
**Present Day Extents
(Defended and Undefended)**

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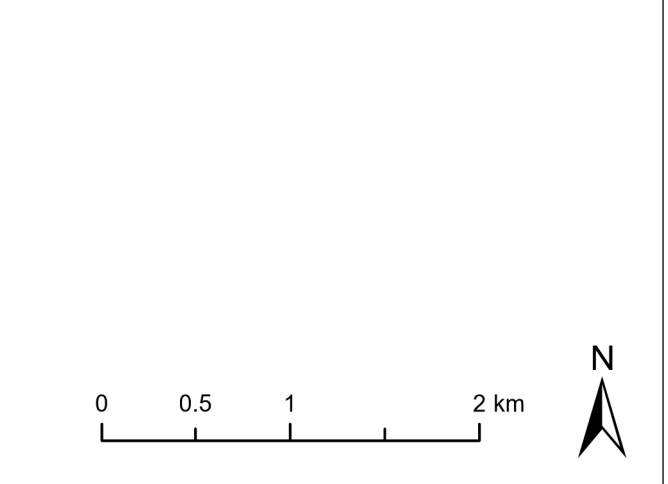


Legend

- Onshore Project Area
- Onshore Substation
- East Anglia Connection Node (EACN)
- Substation Works Area

Present Day Extents

- Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
- Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Undefended: 0.1% AEP (1 in 1,000) Rivers/ Sea



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**Present Day Extents
(Defended and Undefended)**

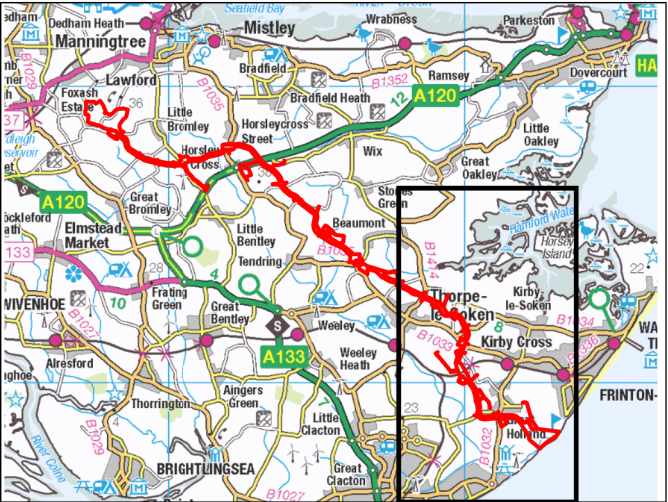
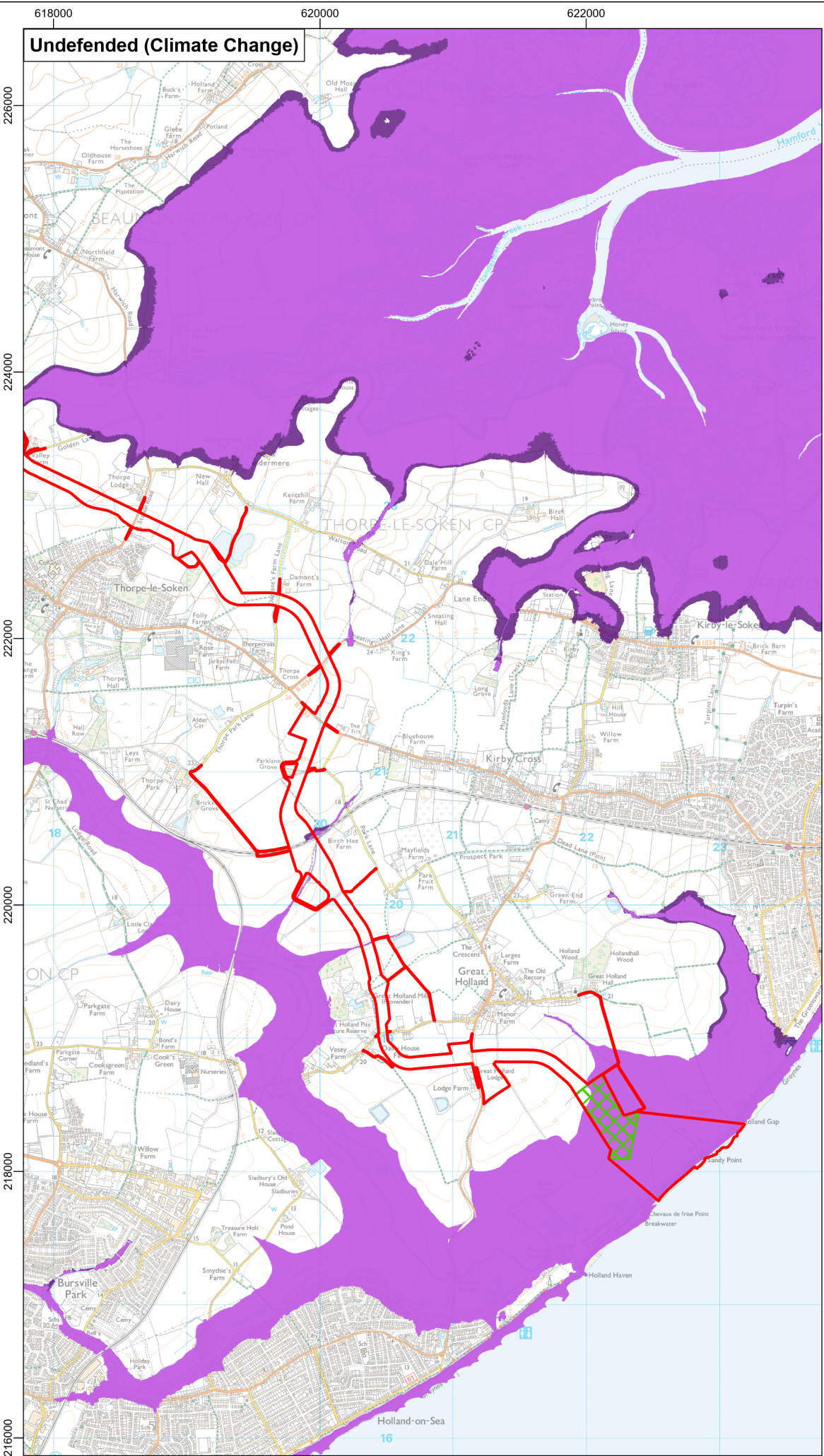
Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0656	3-3c

Scale	Plot Size	Datum	Projection
1:40,000	A3	OSGB36	BNG



Figure 3.4: Climate Change Extents (Defended and undefended)

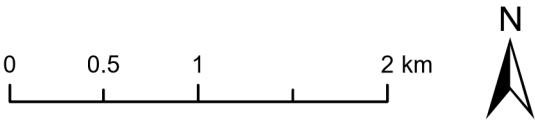


Legend

- Onshore Project Area
- Landfall Compound

Climate Change Extents

- Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
- Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Undefended: 0.1% AEP (1 in 1,000) Rivers/ Sea



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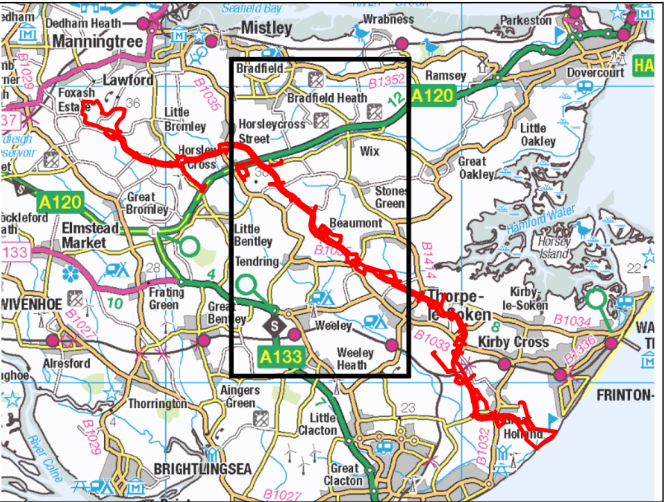
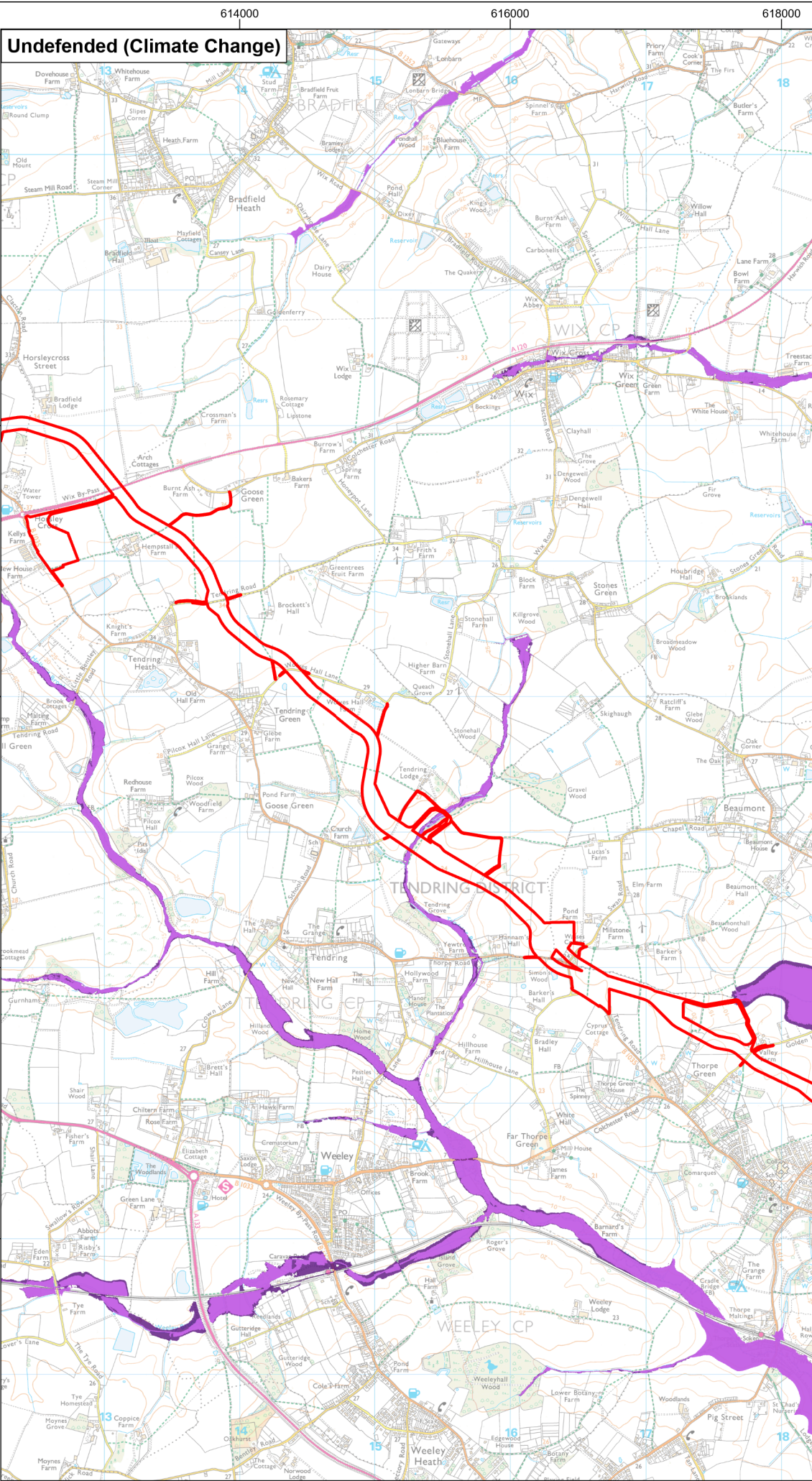
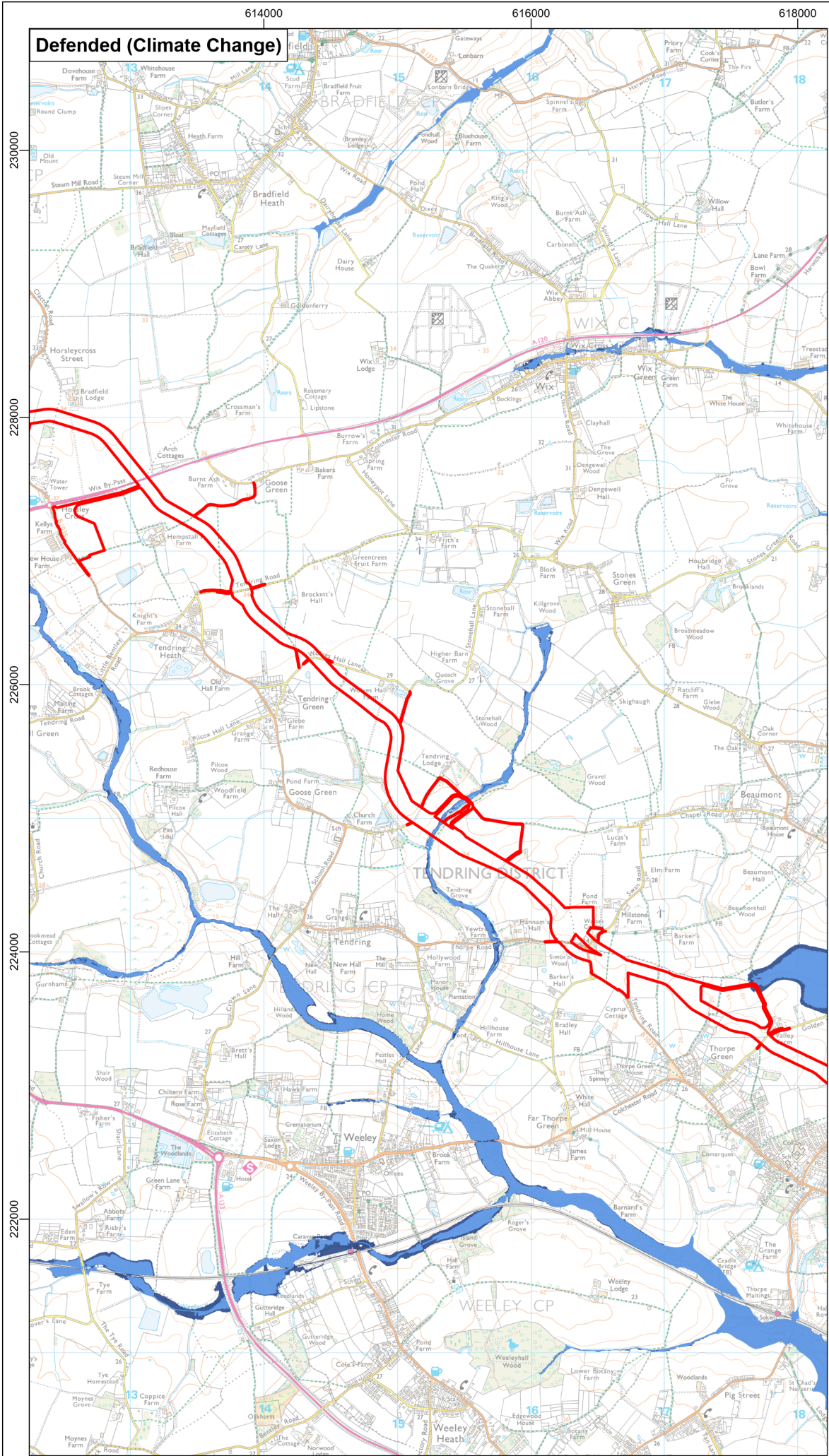
**Climate Change Extents
(Defended and Undefended)**

Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

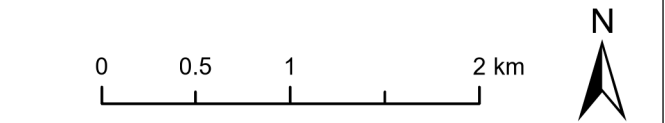
Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0657	3-4a

Scale	Plot Size	Datum	Projection
1:40,000	A3	OSGB36	BNG





- Legend**
- Onshore Project Area
- Climate Change Extents**
- Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
 - Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
 - Undefended: 0.1% AEP (1 in 1,000) Rivers/ Sea



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Drawing Title

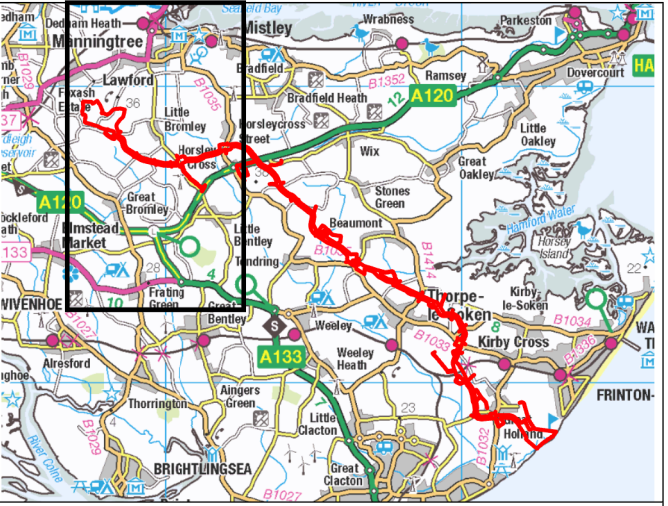
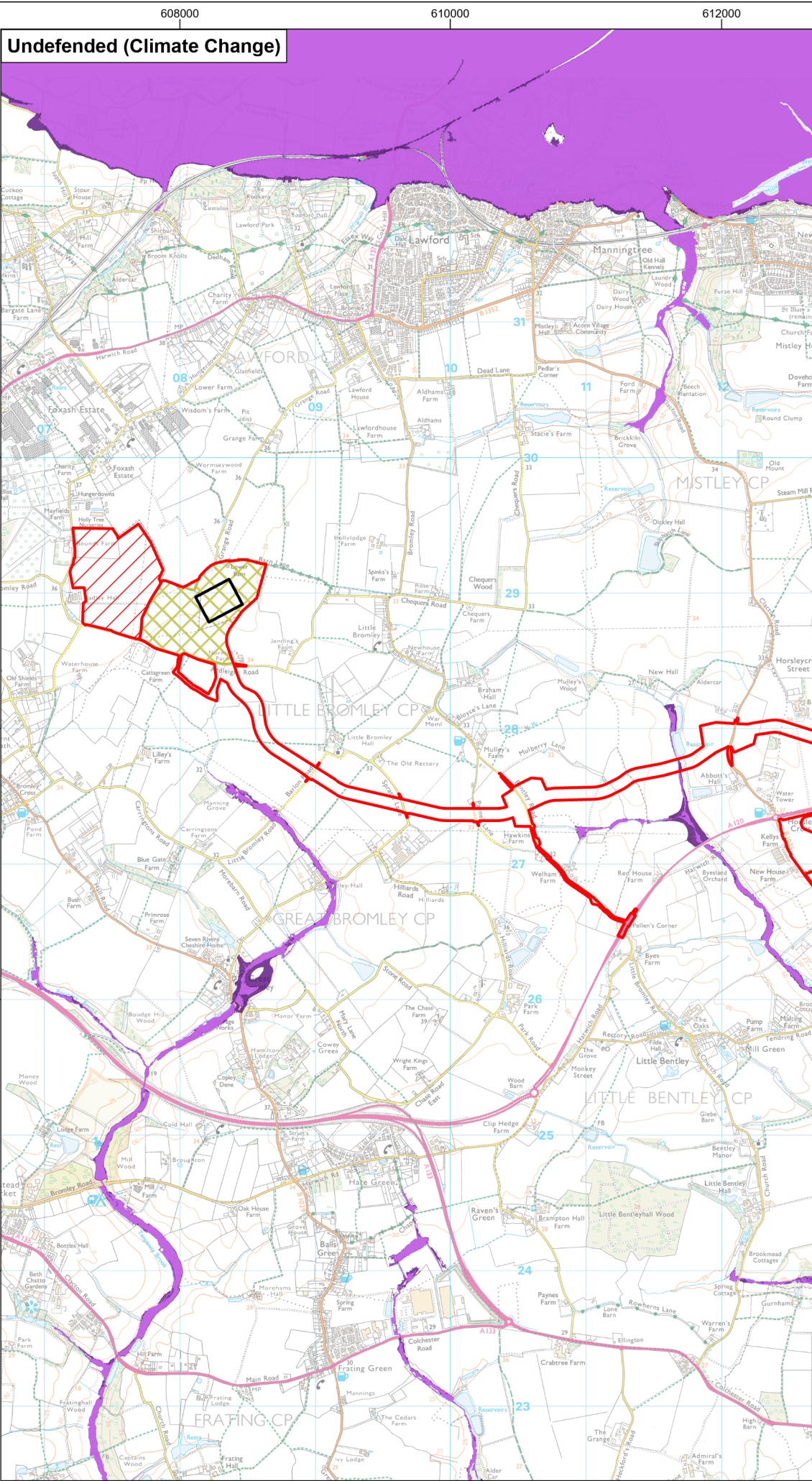
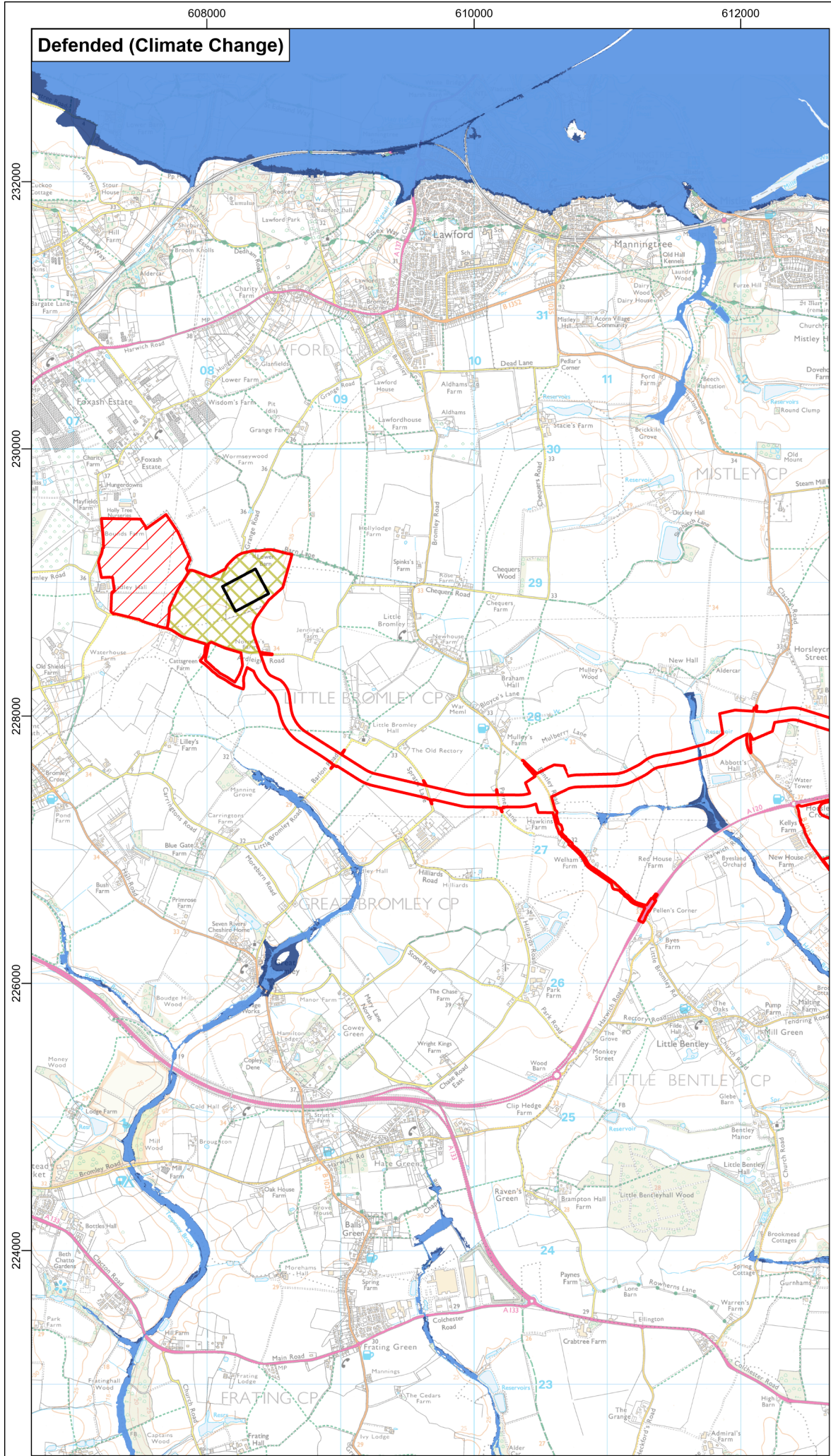
**Climate Change Extents
(Defended and Undefended)**

Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

Drawing Number	Figure Number
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Scale	Plot Size	Datum	Projection
1:40,000	A3	OSGB36	BNG



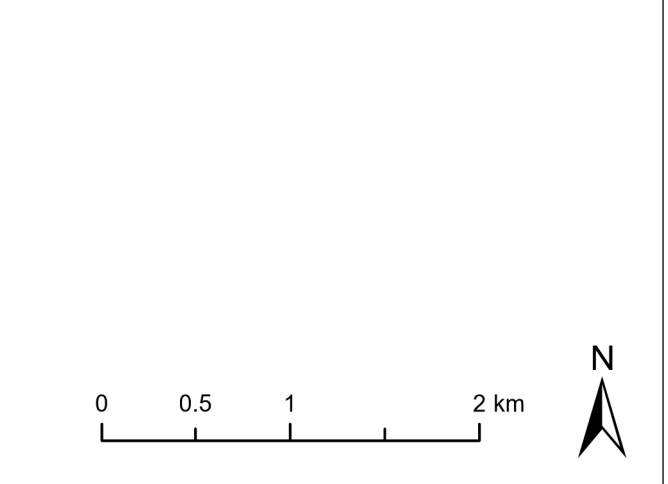


Legend

- Onshore Project Area
- Onshore Substation
- East Anglia Connection Node (EACN)
- Substation Works Area

Climate Change Extents

- Defended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Defended: 0.1% AEP (1 in 1,000) Rivers/Sea
- Undefended: 1% AEP (1 in 100) Rivers/ 0.5% (1 in 200) Sea
- Undefended: 0.1% AEP (1 in 1,000) Rivers/ Sea



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**Climate Change Extents
(Defended and Undefended)**

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01	09/04/2025	First issue	FC	SI

Drawing Number PB9244-RHD-ZZ-ON-DR-GS-0657		Figure Number 3-4c	
Scale 1:40,000	Plot Size A3	Datum OSGB36	Projection BNG



3.3 Fluvial / Tidal Flood Risk Summary

20. Following a review of the updated Flood Zone extents against previous Flood Zone data used in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** (see **Figure 3.1** and **Section 3.1**), it is considered that there are no significant changes in the Flood Zone extents across the entire onshore project area. This includes the landfall, onshore cable route and onshore substation works area.
21. Furthermore, once operational the only significant above ground infrastructure, the onshore substation, continues to be located in Flood Zone 1, at low risk of flooding from rivers or the sea.
22. The new datasets for defended and undefended flood risk during the present day and climate change events are similar to the Flood Zone extents that apply to the onshore project area.
23. Additionally, a review of the climate change scenarios at the onshore substation works area for both the defended and undefended scenarios has confirmed that it would not be at risk of flooding during any future scenarios i.e. up to and including the 0.1% AEP (1 in 1,000 year flood event).
24. Overall, the fluvial and tidal flood risk to the landfall, onshore cable route and onshore substation works area remains similar to that presented in ES Appendix 21.3 Flood Risk Assessment **[APP-121]**.
25. On this basis, it is concluded there is no material change in the fluvial or tidal flood risk to the Project as a result of the new and updated mapping.

4 Surface Water Flood Risk

26. As discussed above, the Environment Agency's surface water flood risk maps have also been updated on 28 January 2025.
27. To understand whether this has changed the risk of surface water flooding to the Project, the previous surface water flood risk data used in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** has been compared with the updated Environment Agency data.
28. The updated mapping has been included as a number of supplementary figures to this Technical Note as follows:
 - **Figure 4.1:** Environment Agency Risk of Flooding Surface Water (present day).
 - **Figure 4.2:** Environment Agency Risk of Flooding Surface Water (Climate Change).
29. A comparison of the surface water flood risk mapping in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** and the updated dataset / mapping (28 January 2025) is summarised below:
 - In ES Appendix 21.3 Flood Risk Assessment **[APP-121]**, in a number of areas the surface water flood risk comprises numerous surface water flow routes; however, it is noticeable that the updated dataset does not now show all of these surface water flow routes and instead it comprises isolated areas of surface water flood risk.

- There is huge variability in surface water flood risk both within the onshore project area and the wider area. Both the mapping in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** and the updated mapping in this technical note indicates that the surface water flood risk is variable ranging from low to high chance.
- As noted previously, the updated dataset includes both the present day (**Figure 4.1**) and climate change scenarios (**Figure 4.2**). The surface water dataset considered in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** did not include climate change scenarios, as these were not previously available online.

4.1 Present Day

30. The updated dataset for the present day surface water events has been compared with the previous mapping to assess the risk of flooding to the landfall, onshore cable route and onshore substation works area, as shown on the mapping presented in **Figure 4.1**.

4.1.1 Impact on the landfall

31. At the landfall, the previous mapping indicated that there were areas of increased surface water flooding, associated with existing drains and ditches in the area.
32. A review of the updated mapping indicates that the surface water flood risk at the landfall has reduced significantly, characterised by smaller areas of isolated flooding. It should be noted that there are still areas of varied flood risk in the updated mapping, ranging from low to high chance.

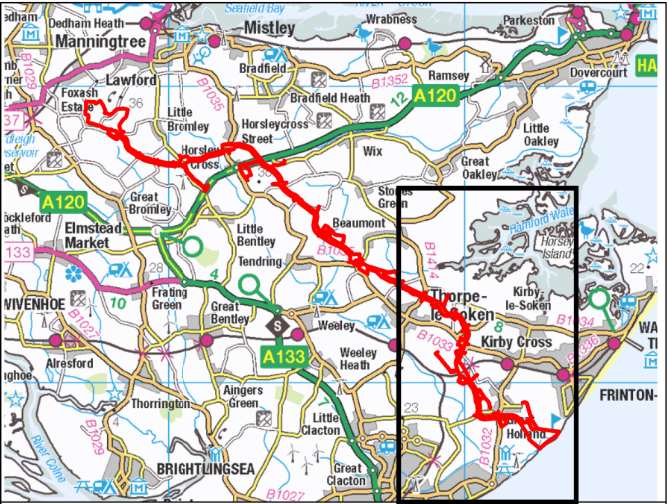
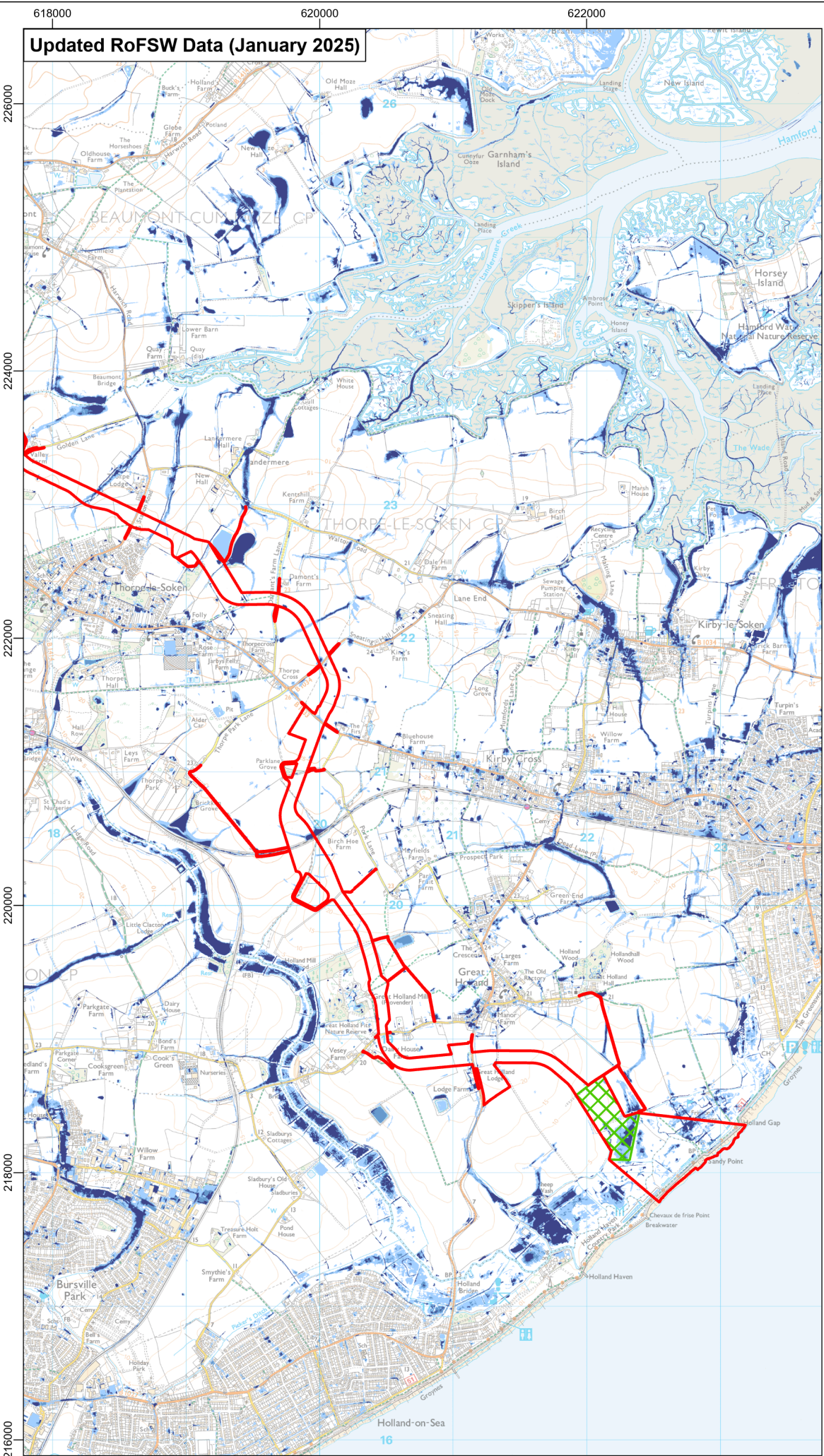
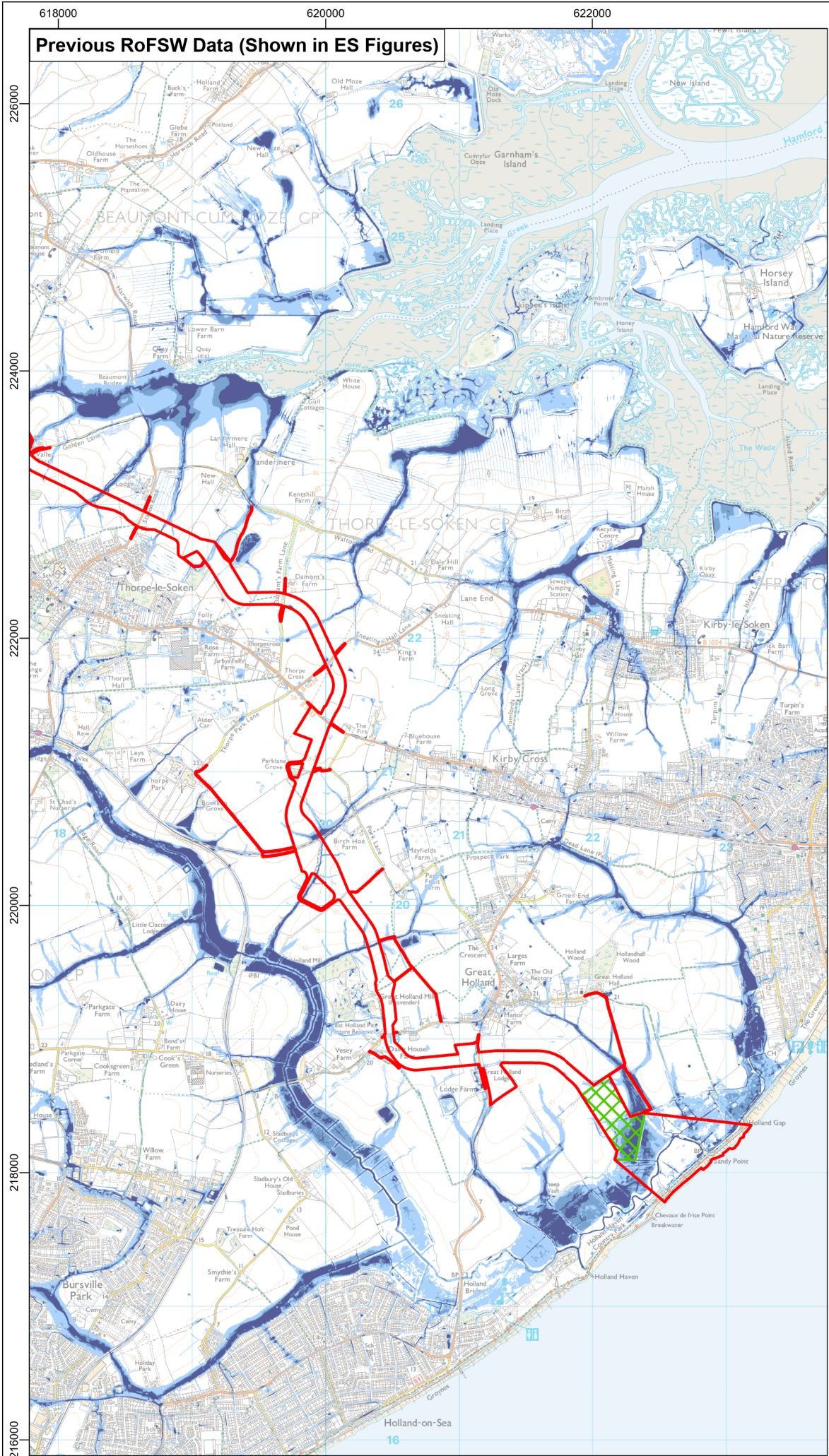
4.1.2 Impact on the onshore cable route

33. The previous mapping indicates that there are numerous overland flow routes crossing the onshore cable route.
34. It is noticeable that the updated dataset no longer shows all of these surface water flow routes. In some areas, it is noted that the surface water flow routes have remained, whilst in other areas these are now shown as isolated areas of surface water flood risk.

4.1.3 Impact on the onshore substation works area

35. From reviewing the updated mapping and previous mapping, it is understood that the flood risk to the onshore substation works area remains largely the same in the updated dataset. This is characterised by small areas of isolated, localised flooding.

Figure 4.1: Environment Agency Risk of Flooding Surface Water (present day)



Legend

Onshore Project Area

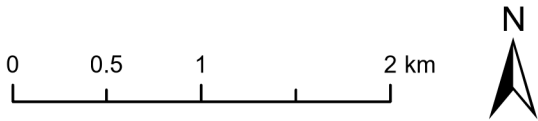
Landfall Compound

Flood Likelihood Category

High Chance (More than 3.3% Chance Each Year)

Medium Chance (Between 1% and 3.3% Chance Each Year)

Low Chance (Between 0.1% and 1% Chance Each Year)



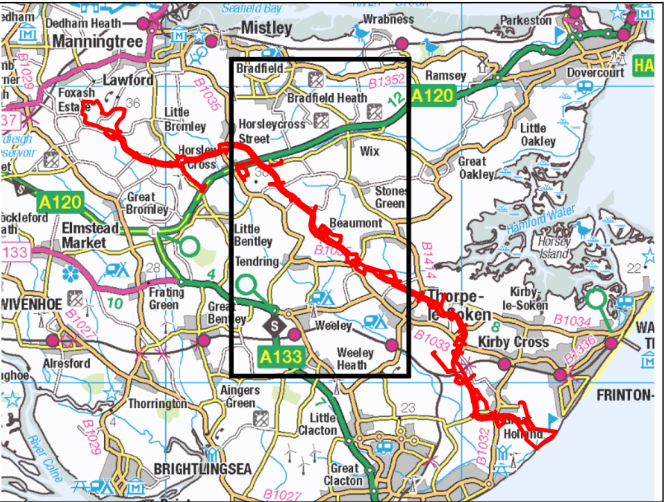
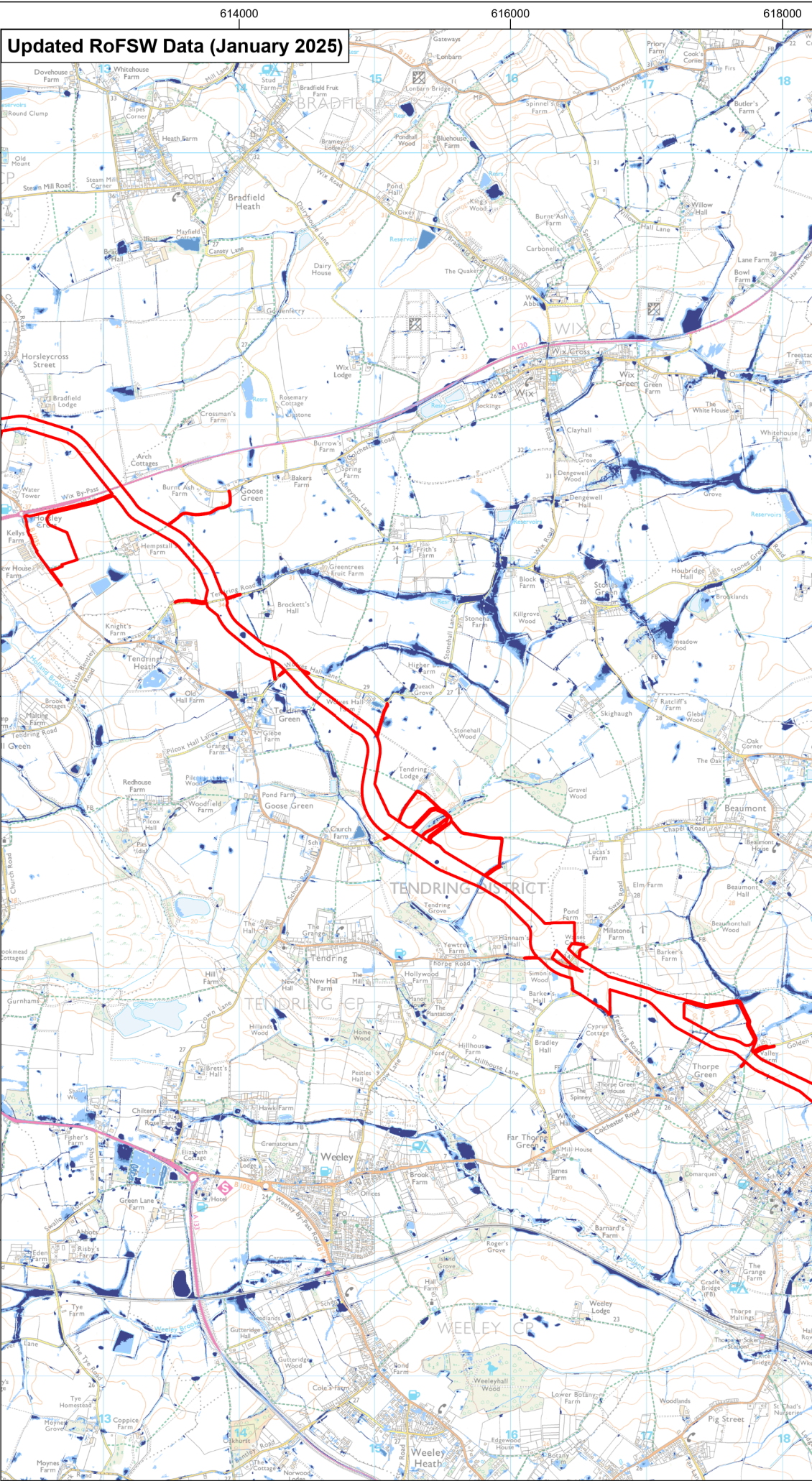
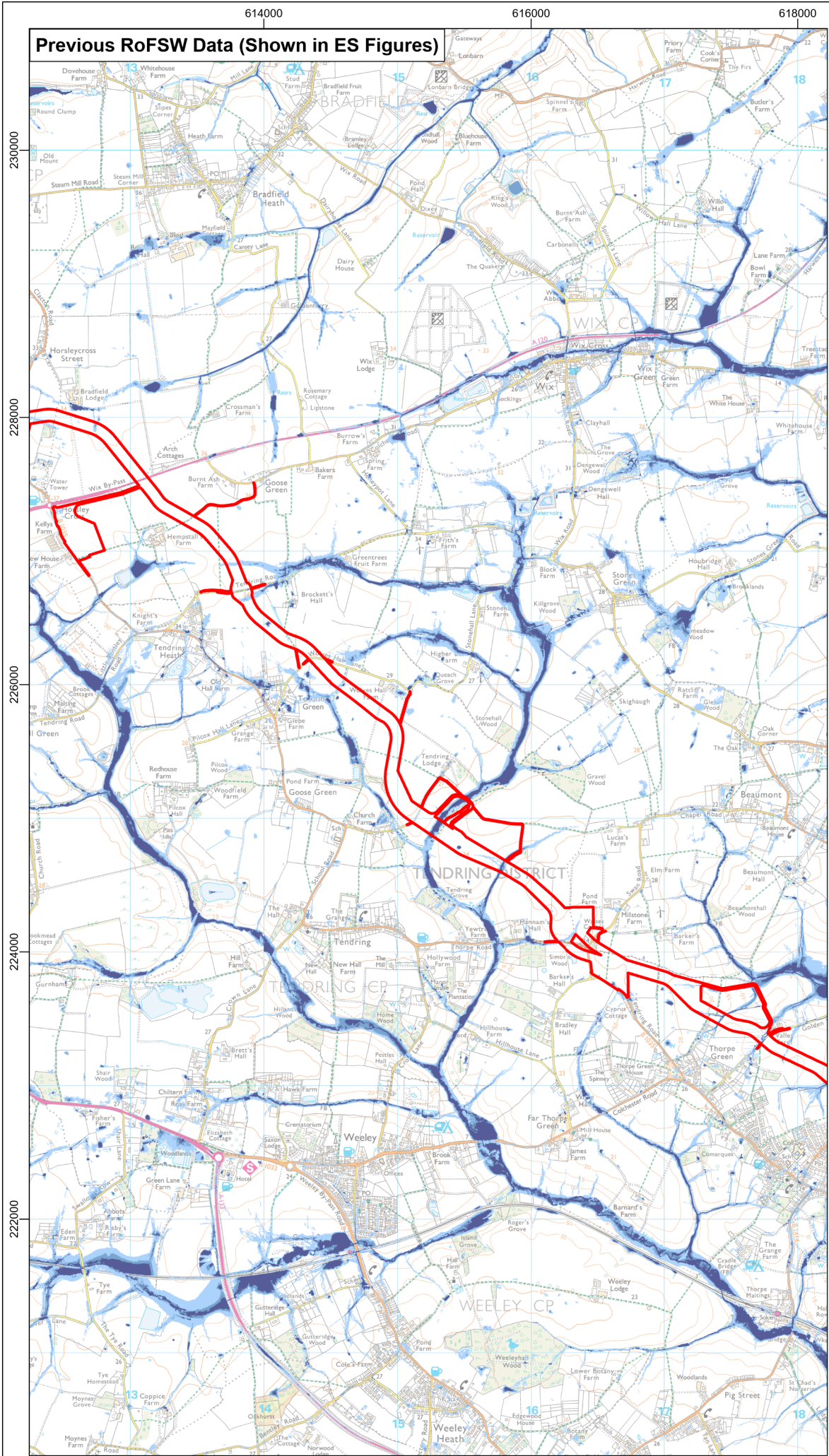
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**Environment Agency Risk of
Flooding Surface Water (Present Day)**

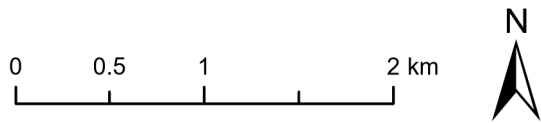
Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

Drawing Number PB9244-RHD-ZZ-ON-DR-GS-0658		Figure Number 4-1a	
Scale 1:40,000	Plot Size A3	Datum OSGB36	Projection BNG





- Legend**
- Onshore Project Area
- Flood Likelihood Category**
- High Chance (More than 3.3% Chance Each Year)
 - Medium Chance (Between 1% and 3.3% Chance Each Year)
 - Low Chance (Between 0.1% and 1% Chance Each Year)



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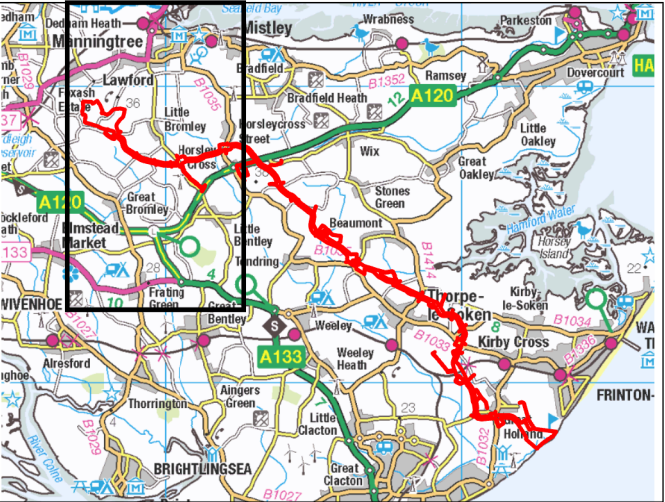
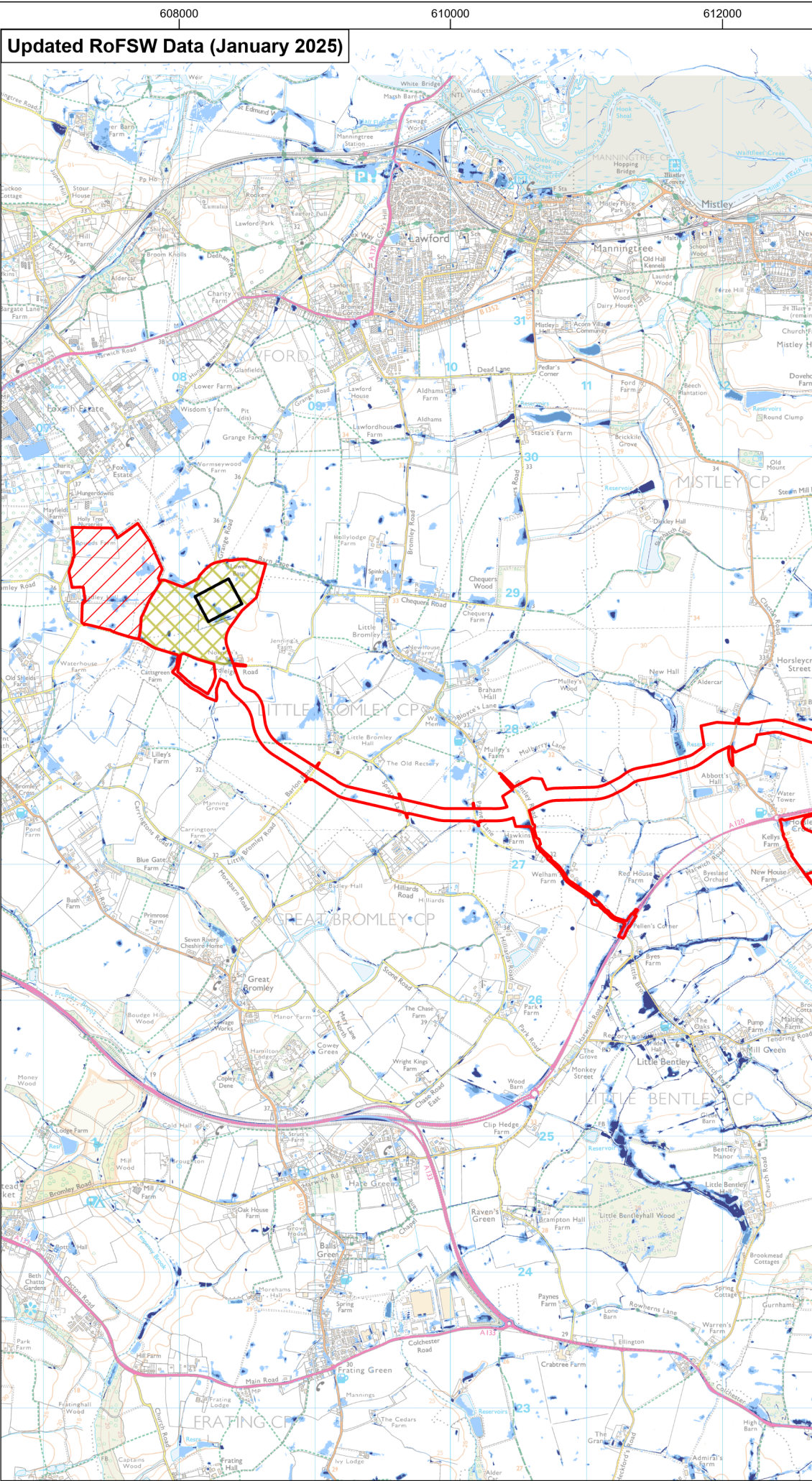
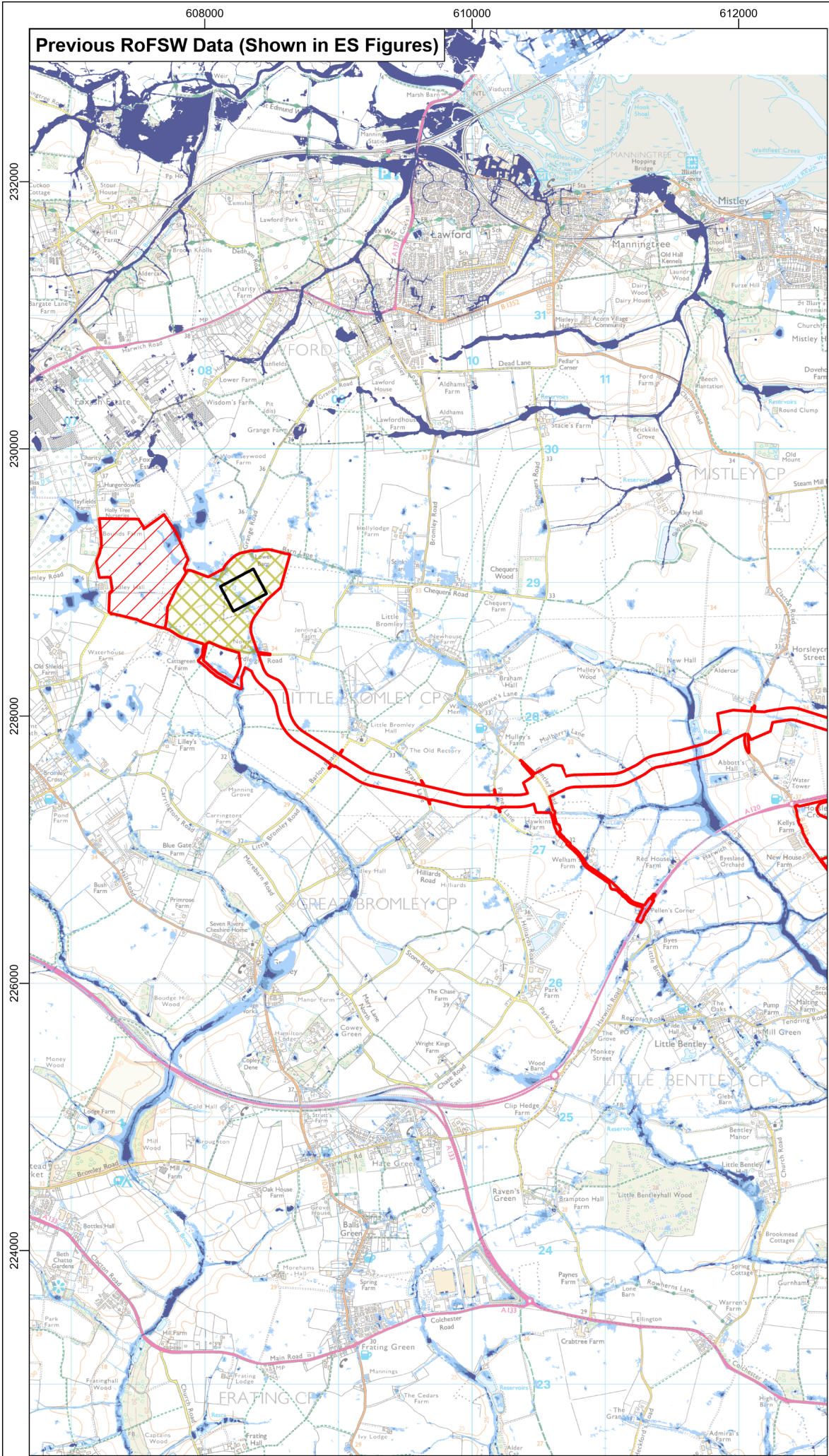
**Environment Agency Risk of
Flooding Surface Water (Present Day)**

Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

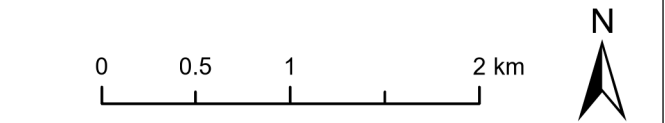
Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0658	4-1b

Scale	Plot Size	Datum	Projection
1:40,000	A3	OSGB36	BNG





- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)
 - Substation Works Area
- Flood Likelihood Category**
- High Chance (More than 3.3% Chance Each Year)
 - Medium Chance (Between 1% and 3.3% Chance Each Year)
 - Low Chance (Between 0.1% and 1% Chance Each Year)



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Drawing Title

**Environment Agency Risk of
Flooding Surface Water (Present Day)**

Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

Drawing Number
PB9244-RHD-ZZ-ON-DR-GS-0658

Figure Number
4-1c

Scale
1:40,000

Plot Size
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Datum
OSGB36

Projection
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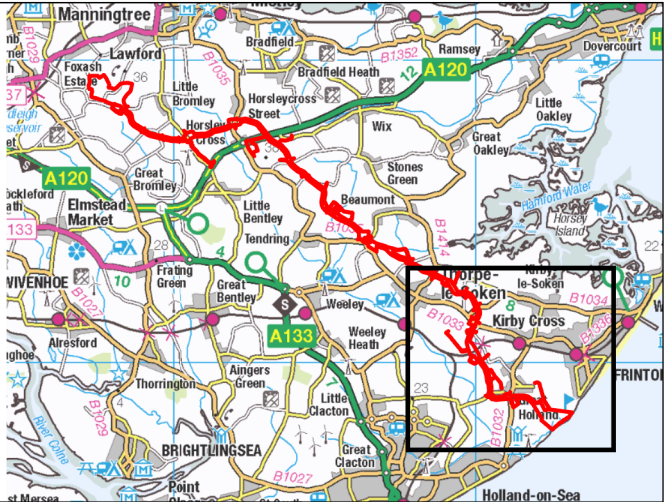
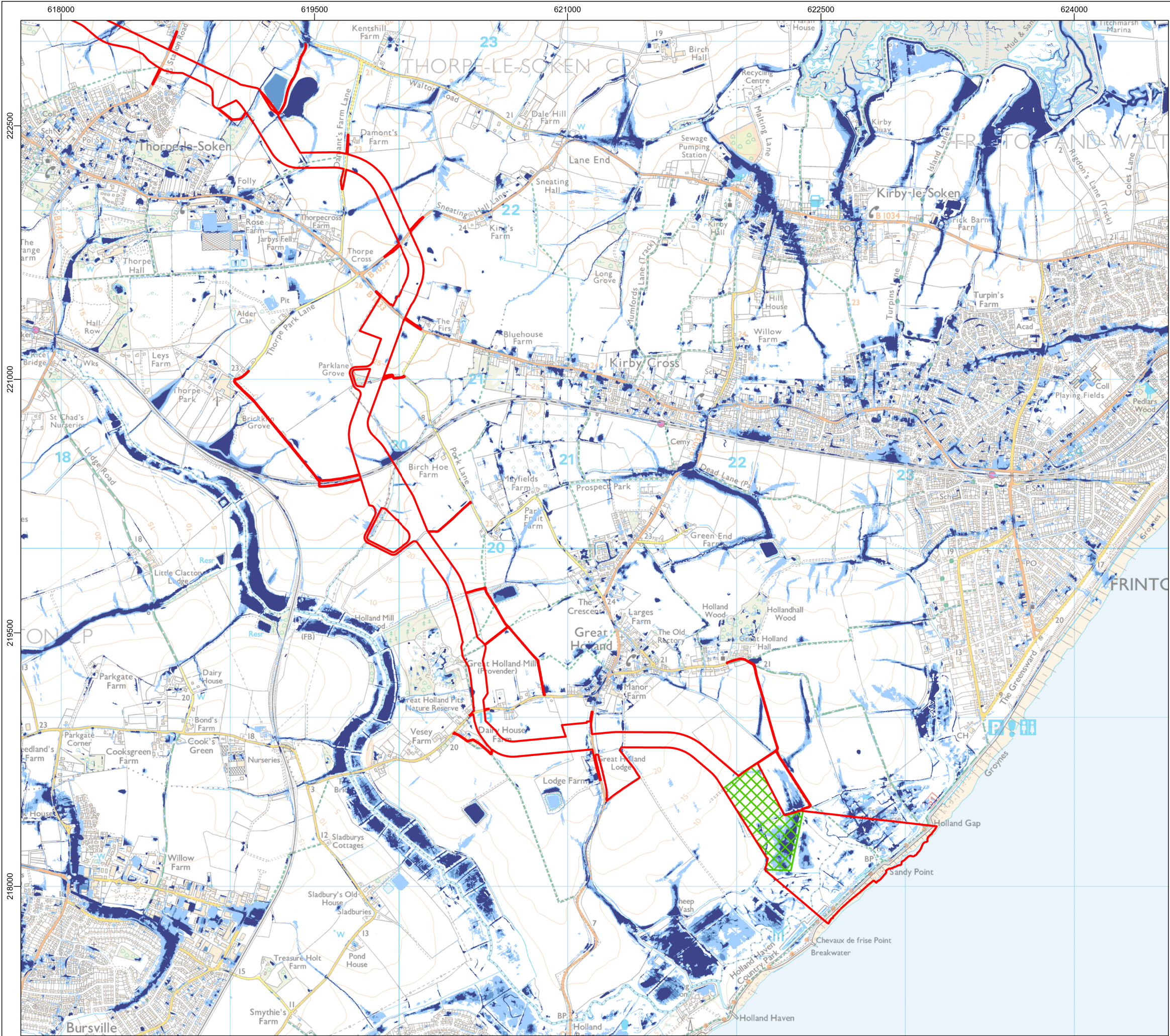
4.2 Climate Change

36. As noted above, the surface water dataset considered in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** did not include climate change scenarios, as these were not available online at the time of the assessment.
37. Given that the landfall and onshore cable route are only likely to be at risk of flooding during the present day scenario, as the permanent infrastructure will be predominantly below ground once operational, they have not been considered in the context of the climate change scenarios.
38. As such, the newly published surface water flood risk dataset for the climate change scenario has been used to assess flood risk to the onshore substation within the onshore substation works area, as shown on the mapping included in **Figure 4.2**.

4.2.1 Impact on the onshore substation works area

39. As noted above, in **Section 4.1.3**, the previous present day surface water flood risk mapping, shows the onshore substation would be located in an area where there are several isolated areas of flood risk. It was also noted that the updated present day surface water mapping remains largely the same.
40. A review of the newly published climate change scenario surface water flood risk mapping has been compared with the updated present day scenario maps to understand if there are likely to be any significant changes in surface water flood risk in this location. The review notes that the areas shown as being at risk in the climate change surface water flood risk scenario are very similar to those shown as being at risk in the updated present day surface water flood risk maps.
41. As such, the future (i.e. with climate change) surface water flood risk to the onshore substation works area appears to remain largely the same as that presented in ES Appendix 21.3 Flood Risk Assessment **[APP-121]** for the previous present day scenario, and also the present day scenario based on the updated 28 January 2025 data.

Figure 4.2: Environment Agency Risk of Flooding Surface Water (Climate Change)



Legend

- Onshore Project Area
- Landfall Compound

Flood Likelihood Category

- High Chance (More than 3.3% Chance Each Year)
- Medium Chance (Between 1% and 3.3% Chance Each Year)
- Low Chance (Between 0.1% and 1% Chance Each Year)

0 0.25 0.5 1 km



N

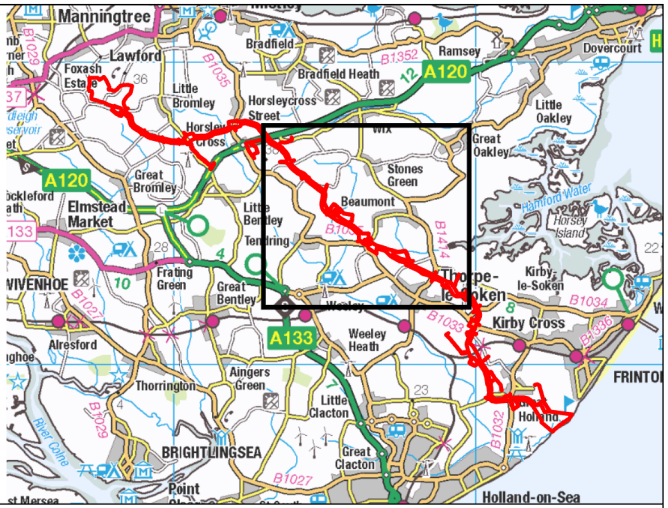
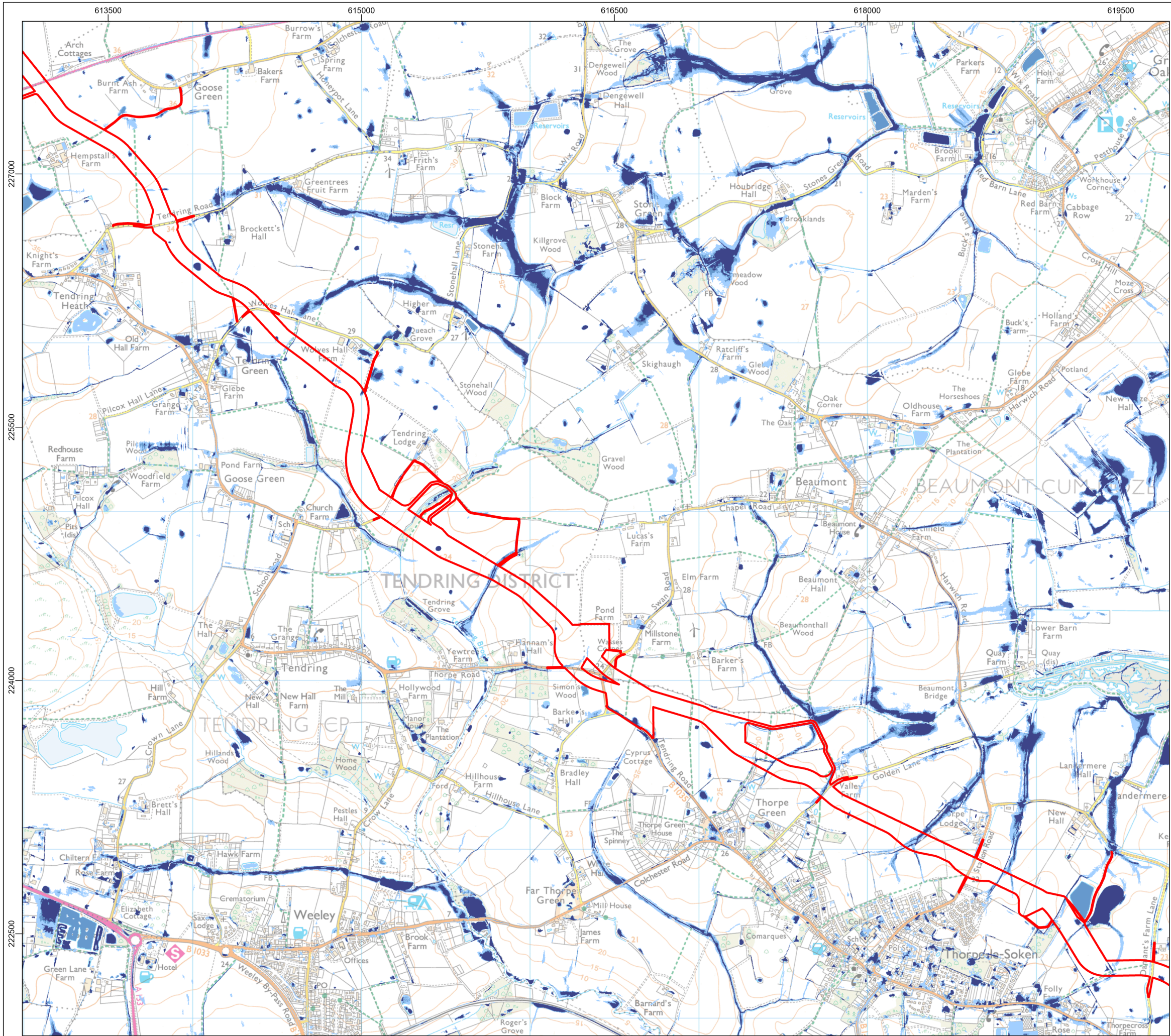
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**Environment Agency Risk of Flooding
Surface Water (Climate Change)**

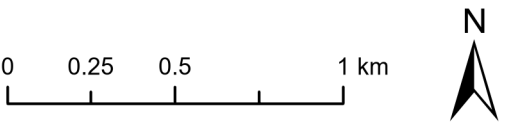
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Drawing Number PB9244-RHD-ZZ-ON-DR-GS-0659		Figure Number 4-2a	
Scale 1:22,500	Plot Size A3	Datum OSGB36	Projection BNG





- Legend**
- Onshore Project Area
- Flood Likelihood Category**
- High Chance (More than 3.3% Chance Each Year)
 - Medium Chance (Between 1% and 3.3% Chance Each Year)
 - Low Chance (Between 0.1% and 1% Chance Each Year)



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Drawing Title

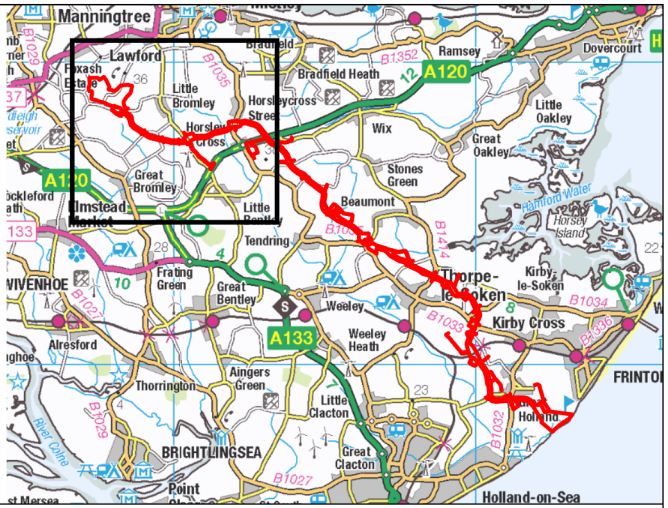
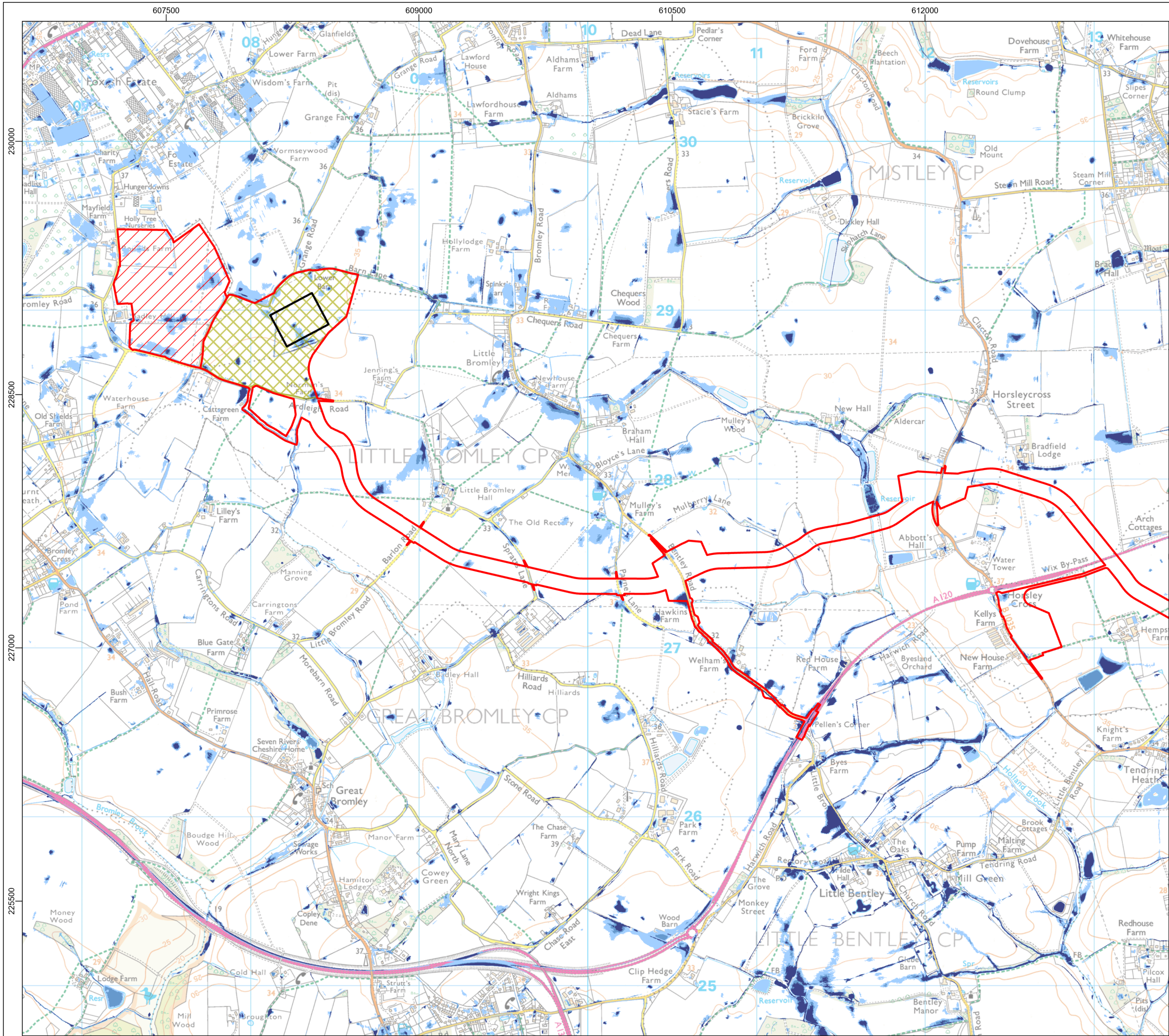
Environment Agency Risk of Flooding Surface Water (Climate Change)

Rev	Date	Remarks	Drwn	Chkd
01	09/04/2025	First issue	FC	SI

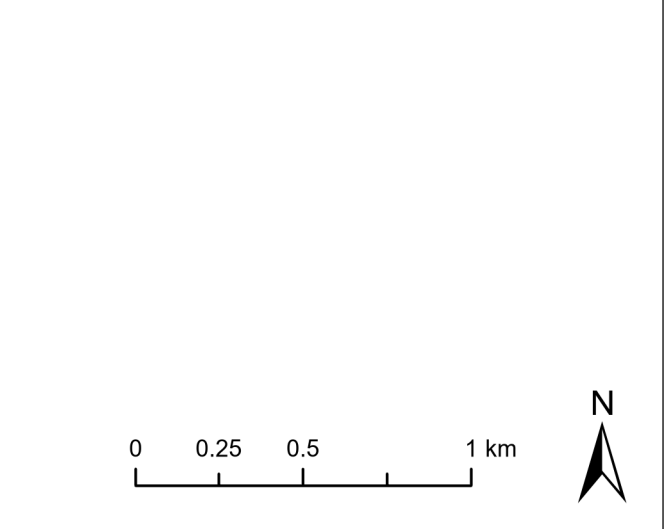
Drawing Number	Figure Number
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Scale	Plot Size	Datum	Projection
1:22,500	A3	OSGB36	BNG





- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)
 - Substation Works Area
- Flood Likelihood Category**
- High Chance (More than 3.3% Chance Each Year)
 - Medium Chance (Between 1% and 3.3% Chance Each Year)
 - Low Chance (Between 0.1% and 1% Chance Each Year)



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Drawing Number PB9244-RHD-ZZ-ON-DR-GS-0659		Figure Number 4-2c	
Scale 1:22,500	Plot Size A3	Datum OSGB36	Projection BNG



4.3 Surface Water Flood Risk Summary

42. Overall, the Environment Agency's updates to the surface water flood risk dataset appear to have resulted in minor changes to the surface water flood risk to the landfall, onshore cable route and onshore substation works area.
43. The main changes resulting from this update to the surface water flood risk mapping are that overland flow routes appear, in a number of locations, to have been replaced with isolated areas of surface water flood risk.
44. Overall, the surface water flood risk to the landfall, onshore cable route and onshore substation works area remains similar to that presented in ES Appendix 21.3 Flood Risk Assessment [**APP-121**].
45. On this basis, it is concluded there are no material change in the surface water flood risk to the Project as a result of the new and updated surface water mapping.



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