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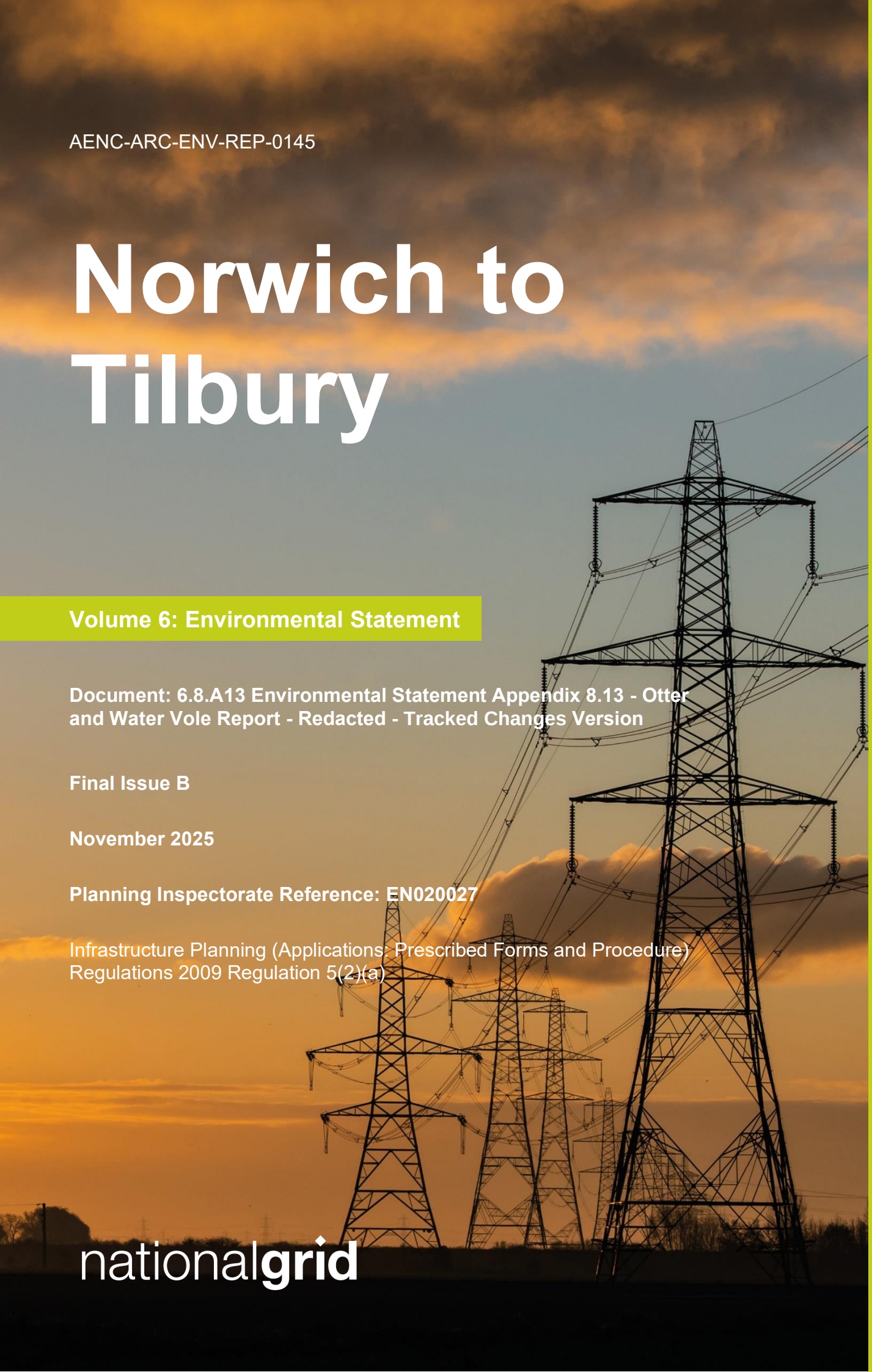

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Revision History

Version	Date	Submitted at
A	29 August 2025	DCO Application
B	17 November 2025	Providing supplementary environmental information to Responses to advice provided under section 51 of the Planning Act 2008 by the Planning Inspectorate

Contents

1. Introduction

1.1 Background

1.1.1 This report has been produced as an appendix to Chapter 8: Ecology and Biodiversity (document reference 6.8) (Rev B) of the Environment Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) for Norwich to Tilbury (the 'Project').

1.1.2 The ecological background and the scope for this report is set out in the Environmental Impact Assessment (EIA) Scoping Report (document reference 6.19) and agreed within the EIA Scoping Opinion received from the Planning Inspectorate in December 2022 (document reference 6.20).

1.1.3 The EIA Scoping Report (document reference 6.19), issued to the Planning Inspectorate in November 2022, identified the need for otter *Lutra lutra* and water vole Arvicola amphibius surveys to be conducted for the Project.

1.1.4 Watercourses and associated riparian areas, which could provide suitable habitat for otter and water vole are located within the Order Limits. The general approach to impact assessment for these species is to ensure that construction activities have minimal negative effects on their populations and habitats. This involves avoiding effects to sensitive habitats, mitigating any temporary disturbances, and implementing conservation measures.

1.1.5 The Project has also been sub-divided into eight geographical sections for reader accessibility, based largely on Local Planning Authority boundaries. As shown on Figure A8.13.1: Otter and Water Vole Desk Study Results in Annex A and comprise:

- Section A – South Norfolk Council
- Section B – Mid-Suffolk District Council
- Section C – Babergh District Council, Colchester City Council and Tendring District Council
- Section D – Colchester City Council
- Section E – Braintree District Council
- Section F – Chelmsford City Council and Brentwood District Council
- Section G – Basildon Borough Council and Brentwood Borough Council (and part of Chelmsford City Council)
- Section H – Thurrock Council.

1.2 Brief and Objectives

1.2.1 The brief for the survey work was to obtain baseline data to inform the impact assessment for the Project. This was achieved by undertaking a comprehensive suite of surveys focused on otter and water vole presence. The objectives were as follows:

- Ascertain the presence or potential absence of otter and water vole within the Order Limits
- If identified, map the distribution of otter resting sites and water vole presence within the Survey Area
- Compile and present the survey outcomes in a baseline report.

1.2.2 The results of these surveys have informed Project design and mitigation measures.

1.3 Study and Survey Area

Study Area

1.3.1 The following Study Areas were used for the otter and water vole desk study:

- Special Areas of Conservation (SACs) where otter is a qualifying feature within the Order Limits and up to 10 km from the Order Limits
- Statutory and non-statutory designated sites where otter and/or water vole is identified as present in the citation or description within the Order Limits and up to 2 km from the Order Limits
- Individual records of otter and/or water vole species within the Order Limits and up to 2 km from the Order Limits.

Survey Area

1.3.2 Watercourses which have the potential to be affected by the Project were surveyed 200 m up and downstream of the point of effect. Where the watercourse did not extend to 200 m, the full extent of the watercourse was surveyed.

1.3.3 Further details of the otter and water vole Survey Area is provided in Methodology (Section 3) below.

2. Relevant Legislation and Policy

2.1 Legal Compliance

2.1.1 Surveys have been undertaken in accordance with current legislation in the context of the Project. A summary of the relevant legislation is provided in Table A8.13.1.

Table A8.13.1 Legal compliance

Legislation	Details
Conservation of Habitats and Species Regulations 2017, as amended in 2019 ('Habitats Regulations')	The Regulations require authorities on behalf of the Secretary of State to maintain a list of sites which are important for either habitats or species (SACs and Special Protection Areas (SPAs)) and to provide protection for these sites through designation, planning and other controls. Otter is listed on Annex II of the European Habitats Directive. This listing signifies that SACs can be designated to safeguard this species. The Regulations make it an offence (subject to exceptions) to deliberately capture, kill or injure, disturb, or trade in, damage or destroy a breeding site or resting place of the animals such as otter that are listed in Schedule 2. However, these actions can be made lawful through the granting of licences by the appropriate authorities (Natural England in England). Licences may be granted for several purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on the favourable conservation status of the species concerned.
The Wildlife and Countryside Act 1981, as amended (WCA)	The Act is the main mechanism for legislative protection of wildlife in England. It gives protection to native species (particularly threatened species), their resting places and places of shelter by making it an offence to kill, injure, take, damage, destroy, sell, or possess them (with exceptions). The WCA grants full legal protection to otter. The Act prohibits intentional killing, injuring, or capturing of otter, as well as to disturb otter whilst they occupy a structure or place used for shelter or protection, or to obstruct access to a place of shelter or protection. Additionally, it is an offence to sell, possess, or transport otter or any parts of otter without a licence. Water vole is afforded protection under the WCA. The Act makes it an offence to intentionally kill, injure, or capture water vole, possess or control them alive or dead. It is an offence to intentionally or recklessly damage or destroy a structure or place used for shelter or protection, disturb them in a place used for shelter or protection, or obstruct access to a place used for shelter and protection. It is illegal to sell, possess, or transport water vole or their parts without a licence.

Legislation	Details
The Natural Environment and Rural Communities (NERC) Act 2006	The NERC Act 2006 places a duty upon public bodies to maintain section 41 (s41) lists of flora, fauna, and habitats and to consider these ecological features as a material consideration in planning. It also requires decision-makers to have regard to the conservation of biodiversity in England, when carrying out their normal functions. Otter and water vole are species of principal importance as listed in s41.

2.2 Planning Policy

2.2.1 Chapter 8: Ecology and Biodiversity (document reference 6.8) (Rev B) provides further details of relevant planning policy.

3. Methodology

3.1 Desk Study

3.1.1 A desk study was undertaken in September 2023 and subsequently updated in April 2025. The desk study identified records for otter and water vole within 2 km of the Order Limits over the past 10 years as per the national guidance (Department for Environment, Food and Rural Affairs; Defra, 2024). Records were obtained from the following Local Environmental Record Centres (LERCs):

- Norfolk Biodiversity Information Service (NBIS)
- Suffolk Biodiversity Information Service (SBIS)
- Essex Field Club (EFC).

3.1.2 The record centres also provided information on non-statutory designated sites within 2 km of the Order Limits; these were County Wildlife Sites (CWS) and Local Wildlife Sites (LWS). Non-statutory designated sites were reviewed for any mention of otter and water vole in their site description.

3.1.3 A search for SACs within 10 km of the Order Limits, where otter is a qualifying feature, was conducted using freely downloadable datasets, available from Multi Agency Geographic Information for the Countryside (MAGIC) (Natural England, 2025) and the Joint Nature Conservation Committee (JNCC) website.

3.1.4 A further search of Sites of Special Scientific Interest (SSSIs) within 2 km of the Order Limits was conducted using MAGIC, where otter and/or water vole is identified as present in the citation.

3.1.5 A search for mitigation licences for otter and water vole within 2 km of the Order Limits was also completed using MAGIC.

3.1.6 The National Water Vole Database and Mapping Project (McGuire, C. and Morse, A., 2020) was reviewed for information on trends in water vole populations at a regional and national level.

3.2 Field Survey

Targeted Species Surveys

3.2.1 Within the Order Limits, 555 potential watercourses were identified through a desk study that would be directly affected by either haul road crossings, underground cabling, and/or drainage outflow locations. These were subject to review which reduced this number down to ~~204~~ 182 watercourses that may hold water and have suitability for otter or water vole.

3.2.2 In 2023~~, and~~ 2024 and 2025, 180~~142~~ (98.9%) of the affected watercourses ~~were surveyed~~ received at least one survey for the presence of otter and water vole. Of these, 178 watercourses received a complete survey for water vole (two surveys). This accounts for 97.8% of all watercourse crossings associated with the Project, i.e.,

those impacted by underground cabling, drainage outfalls, haul road construction, or Public Right of Way (PRoW) diversions.

~~3.2.3 Given the size and scale of the Project, water vole and otter surveys will continue in 2025 for completeness. This report includes data obtained up to the end of March 2025 and covers approximately 65% of the affected watercourses. Surveys conducted beyond the end of March 2025 will be included in a further information report as reported in Chapter 8: Ecology and Biodiversity (document reference 6.8). For the purpose of this ES (Volume 6 of the DCO application) a reasonable worst case scenario for the results of these surveys for both water vole and otter has been assumed, based on records obtained from desk study, the results of the water vole and otter surveys across the rest of the Project and the type of watercourses present in and around the Order Limits.~~

~~3.2.4~~3.2.3 The otter and water vole surveys have been completed in accordance with otter and water vole good practice guidance (Chanin, 2003; Dean *et al.,* 2016; Liles, 2003; and Chanin, 2005) and Chartered Institute of Ecology and Environmental Management (CIEEM) competencies for undertaking otter surveys (CIEEM, 2013).

~~3.2.5~~3.2.4 Surveys consisted of an in-channel search for evidence indicating the presence of otter and/or water vole. For watercourses where in-channel surveys were deemed inappropriate, or the in-channel surveys judged to be unsafe, searches were undertaken from the banks of the watercourse, and binoculars used to assess inaccessible areas.

~~3.2.6~~3.2.5 Where field signs indicating the local presence of otter and water vole were found during other ecological surveys undertaken for the Project, these were recorded as incidental records and have been referenced in alphanumerical order (e.g., I1, I2, I3 etc.) and included in this report.

~~3.2.7~~3.2.6 Any evidence of American mink (*Neovison vison*) was recorded as this species has been found to be a threat to water vole.

Otter

~~3.2.8~~3.2.7 Evidence recorded for otter included spraints, footprints, feeding stations, resting sites, and natal holts. Field signs were assessed as indicating confirmed or potential presence of otter, depending on the confidence of the sign to have been left by an otter. Only otter spraints, footprints and sightings were used to confirm their presence. All other field signs, including potential natal holts and resting places, were used as an indicator of potential presence.

~~3.2.9~~3.2.8 In this report, ‘resting site / holt’ is a general term encompassing couches, lay-ups and non-natal holts. This is defined as any location, above or below ground, that could be used by an otter for resting but is not used to give birth to and rear their young. Natal holts are defined as underground or enclosed structures used by otters to give birth to and rear their young. Full definitions of otter ecology terms are provided in the Glossary at the end of this document.

~~3.2.10~~3.2.9 Resting sites / holts were recorded at suitable locations and structures where any of the following signs were present:

- Spraint or footprint within tunnel or immediate ground outside
- Scratch marks and/or body rubbing against tunnel wall
- Otter hair within tunnel or immediate ground outside.

3.2.10 Watercourses were surveyed once for otter. If the watercourse required a second visit, for instance for a water vole survey, a second search for evidence of otter was conducted.

Otter holt monitoring

3.2.11 Six of the fourteen resting sites / holts that were identified by the Project were subject to camera monitoring in 2025, to gather information on usage.

3.2.12 Motion sensor cameras were deployed 5 to 10 m outside each resting site / holt during the peak otter breeding season (May to August). Deployment was carried out during daylight hours with natural vegetation used to conceal the equipment to reduce visual impact.

3.2.13 The cameras were left in-situ for at least one month. Once collected, the footage was analysed.

~~3.2.11~~3.2.14 TableA8.13.12 in Annex D lists the resting sites / holts where monitoring was undertaken and the dates that the cameras were recording.

Water Vole

~~3.2.12~~3.2.15 Evidence recorded for water vole included:

- Latrines
- Burrows
- Runs
- Footprints
- Feeding remains and stashes
- Droppings
- Sightings.

~~3.2.13~~3.2.16 Field signs were assessed as indicating confirmed or potential presence of water vole, depending on the confidence that the sign was left by water vole. Only water vole latrines and water vole sightings were used to confirm their presence. All other field signs, including potential burrows, were used as an indicator of potential presence.

~~3.2.14~~3.2.17 Watercourses assessed as suitable for water vole based on the habitat suitability assessment (see below) were subject to two surveys, one occurring between mid-April and the end of June and the second between July and October.

~~3.2.15~~3.2.18 No second survey visit was required if a confirmatory sign of presence, for instance a latrine or sighting of a water vole, was recorded in the first visit. All other evidence was recorded as potential evidence.

~~3.2.16~~3.2.19 No second survey visit was required if the watercourse was assessed as unsuitable for water vole (see Habitat Suitability Assessment below).

Habitat Suitability Assessment

~~3.2.17~~3.2.20 In relation to otter, Chanin (2003) concluded there is no evidence that the recolonisation of UK waterways by otter would be impeded by factors such as

anthropogenic disturbance and availability of resting places. As there has been conflicting results regarding habitat requirements of otter (Chanin, 2003), from research conducted on the quality of riparian habitats and those surrounding watercourses, a habitat suitability assessment for otter of watercourses was not deemed appropriate.

~~3.2.18~~3.2.21 As part of the field survey watercourses were subjected to a habitat suitability assessment to determine their suitability to support water vole based on guidance from the Water Vole Mitigation Handbook (Dean *et al*., 2016).

~~3.2.19~~3.2.22 Each watercourse that was identified as potentially suitable to support water vole was surveyed 200 m up and downstream of the point of effect, in line with guidelines in the Water Vole Mitigation Handbook (Dean *et al*., 2016).

~~3.2.20~~3.2.23 Suitability was assessed based on the following factors:

- Connectivity of the watercourse to the surrounding landscape
- Watercourse type
- Average water depth
- Water quality
- Water flow rate
- Frequency and height of water level changes
- Average channel width
- Channel and bankside substrate (if visible)
- Current or recent management and disturbance
- Surrounding land use
- Presence of suitable habitats for resting
- Presence of anthropogenic mortality risk
- In-channel herbaceous vegetation width, density and type
- Bankside herbaceous vegetation density, type and species
- Bank profile, height and substrate
- Suitability of bankside for burrowing
- Presence of dry areas above the water level for nesting (either in burrows or above-ground nests)
- Percentage of channel and bank shaded by trees and shrubs
- Evidence of high rainfall or high-water levels.

~~3.2.21~~3.2.24 Habitat suitability referred only to the watercourse surveyed and does not reflect the suitability of the wider area.

3.3 Dates of Survey and Personnel

3.3.1 In 2023, field surveys were undertaken between August and September. In 2024, field surveys were undertaken between April and October. In 2025, field surveys were undertaken between April and September.

3.3.2 Otter surveys are not seasonally constrained, but they were undertaken at the same time as the water vole surveys to avoid unnecessary travel. The lead surveyors were experienced ecologists, competent at undertaking otter and water vole surveys.

3.4 Notes and Limitations

3.4.1 In some instances, access and visibility to the full survey lengths was at least partially limited by dense vegetation cover or other debris, as identified below in Table A8.13.2. In all cases, this only presented a minor constraint as there were sufficient access points/viewing points to complete the survey.

3.4.2 In 2023 and 2024, high rainfall immediately prior to surveys affected surveys at 16 watercourses, as identified below in Table A8.13.2. It is possible that field signs may have been washed away prior to the survey visit. Fifteen of these watercourses were resurveyed to overcome this limitation in 2024 or 2025.

3.4.3 Watercourses 92 (Section G) and ~~152 (Section G)~~ 588 (Section C) have not been surveyed due to land access restrictions. Desk study data and data collected as part of the Project has been used to infer likely presence or absence.

~~3.4.3~~3.4.4 Watercourses 545 and 447 (Section H) were inaccessible for one of the two survey visits for water vole. Otter and water vole presence is assumed on a precautionary basis where presence / absence survey information is limited by difficulties in access.

~~3.4.4~~3.4.5 This report is based on desk study and field survey information that was available up to and including the end of ~~March~~ September 2025. See Table 8.13.12 in Annex D for limitations regarding the otter holt camera monitoring, these limitations are not considered a significant constraint.

Table A8.13.2 Watercourses with limitations

Project Section(s)	Limitation Type		
	Dense Vegetation or Other Debris	High Recent Rainfall	Inaccessible
A	1, 2, 8, 17, 178, 179, 182	1, 2, 3, 19, 124[1], 126 (a)[2], 126 (b)	Not applicable (N/A)

[1] Watercourse 124 is no longer impacted by the Project

[2] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126(a) and 126(b).

Project Section(s)	Limitation Type		
	Dense Vegetation or Other Debris	High Recent Rainfall	Inaccessible
B	26[3], 27, 28, 36, 127[4], 132, 249, 251, 455, 558	25, 31, 37, 128[5] ~~(a)~~	N/A
C	39, 41(a), 42, 45, 46, 146, 150, 151[6], 322, 565	39[7], 145	588 (both surveys)
D	50, 51, 52, 53[8], 54, 55, 58, 59, 155, 498, 357	N/A	N/A
E	61, 62, 67, 68, 156[9], 158	N/A	N/A
E and F	72	N/A	N/A
F	73, 75, 78, 85, 86, 87, 88, 89, 90, 91[10], 160, 161	N/A	N/A
G	93, 97, 99, 100, 102, 104	94, 95, 97, 98	92 (both surveys)
H	105[11], 106, 107, 108, 545	N/A	447 and 545 (inaccessible for one survey)

[3] Watercourse 26 is no longer impacted by the Project.

[4] Watercourse 127 is no longer impacted by the Project.

[5] This watercourse label was changed to 128 as it is presented on Figure A8.13.3, watercourse 128(b) is no longer impacted by the Project with results presented in Annex C.

[6] Watercourse 151 is no longer impacted by the Project.

[7] Watercourse 39 is no longer impacted by the Project.

[8] Watercourse 53 is no longer impacted by the Project.

[9] Watercourse 156 is no longer impacted by the Project

[10] Watercourse 91 is no longer impacted by the Project

[11] Watercourse 105 is no longer impacted by the Project

4. Results

4.1 Desk Study

4.1.1 Desk study results are detailed within the following section and shown on Figure A8.13.1: Otter and Water Vole Desk Study Results in Annex A.

Statutory Designated Sites

4.1.2 Seven SACs are situated within 10 km of the Order Limits. Only one of these, the Broads SAC (Section A), identified otter as a qualifying feature, but not a primary reason for site selection. The Broads SAC consists of naturally nutrient-rich lakes that support fenland flora and contain a rich assemblage of rare and local aquatic species. This site is located 8.93 km north-east of the Order Limits.

4.1.3 Nineteen biological SSSIs were situated within 2 km of the Order Limits, and none included otter or water vole within their citation, see Appendix 8.16: Designated Sites (document reference 6.8.A16) for more detail. It should be noted that desk study records identified the presence of otter and water vole within or close to most of these sites.

Non-Statutory Designated Sites

4.1.4 The descriptions for five non-statutory designated sites received from the desk study mention either otter or water vole, two CWS and three LWS. Details of these sites are provided in Table A8.13.3 with locations shown on Figure A8.13.1: Otter and Water Vole Desk Study Results, Annex A.

Table A8.13.3 Non-statutory designated sites with otter or water vole

Project Section	Site Name	Distance from Order Limits (km)	Site Description	Otter/water vole comment/records
B	Bramford Meadows CWS	0.58 km east	This site on the east bank of the River Gipping has grassland and scrub, and it is crossed by wet ditches and the former course of the river.	This is also key habitat for priority mammals including otter and water vole.
C	Sproughton Park CWS	Within Order Limits	The site consists of grassland, wet woodland (predominantly alder *Alnus* sp.), scrub and hedgerow habitats. The site is adjacent to the Belstead Brook.	Otter has been seen on the Belstead Brook and the woodland provides ideal lying up habitat for this species. The ditches and ponds are important for water vole.

Project Section	Site Name	Distance from Order Limits (km)	Site Description	Otter/water vole comment/records
C	Langham Water Works LWS	0.61 km west	Site supports wet woodland, eutrophic standing water, traditional orchards and old orchards, a range of flora including nationally scarce species.	Water vole has been recorded from some of the ditches.
E	Coggeshall Hall Farm LWS	Within Order Limits	A river valley site with a mosaic habitat of cricket-bat willow *Salix* sp. plantations, flower-rich grassland, and associated hedgerows.	The fauna of the site included otter within the river corridor.
F	Chelmer Valley riverside LWS	1.79 km east	A mosaic of riverside habitats including grassland, scrub, and wooded plantations, which form a corridor into Chelmsford City Centre.	Water vole has been recorded along this stretch of the river and otter may use it to pass along the Chelmer to the quieter headwaters to the north.

Species Records

4.1.5 Desk study results are shown on Figure A8.13.1: Otter and Water Vole Desk Study Results in Annex A.

4.1.6 The desk study showed a total of 46 otter and 71 water vole records within 2 km of the Order Limits from 2012 to 2022, distributed across the Project. No records of either species were returned in Section G and H, with 93.2% of all otter and water vole records returned within Section A to C. Desk study records in relation to each Project Section are presented in Table A8.13.4.

Table A8.13.4 Desk study records for otter and water vole

Project Section	Number of Records	
	Otter	Water Vole
A	11	17
B	4	26
C	24	27
D	4	1
E	2	0
F	1	0

Project Section	Number of Records	
	Otter	Water Vole
G	0	0
H	0	0
Total	**46**	**71**

4.1.7 A review of these records identified the presence of otter in Norfolk on the River Tas (Section A) and River Waveney (Section A and B), and in Suffolk on the Gipping (Section B), The Channel (Section B), Spring Brook (Section C), Belstead Brook (Section C), River Brett (Section C) and Stour (Section C) and in Essex on the River Colne (Section D) and River Blackwater (Section D).

4.1.8 Records revealed the presence of water vole in Norfolk on the River Tas (Section A) and River Waveney (Section A and B), in Suffolk River Gipping (Section B), The Channel (Section B), Belstead Brook (Section C) River Brett (Section C) and River Stour (Section C) and in Essex on the River Colne (Section D).

4.1.9 A search of MAGIC (Natural England, 2025) revealed no mitigation licences for otter or water vole within 2 km of the Order Limits.

4.1.10 The National Water Vole Database and Mapping project (McGuire, C. and Morse, A., 2020) revealed that water vole has been recorded in all three counties affected by the Project. The resolution of these records was not sufficient to make any other firm conclusions.

4.1.11 One record of American mink was returned within 2 km of the Order Limits in the western suburbs of Chelmsford (Section F) approximately 1 km north of the River Can (Section C) and 1.44 km east of the Order Limits.

4.2 Field Survey

Otter

Otter Holts/Resting Places and Field Signs

4.2.1 Otter is a common and widespread species that use both wet and dry watercourses for foraging and when travelling across their range. It is therefore assumed that otter could utilise all watercourses within the Order Limits. The focus of the survey was to establish where potential holts were located by searching for field signs.

4.2.2 Of the ~~142~~ 180 watercourses surveyed for evidence of otter, ~~27~~ 30 had confirmed otter presence due to sightings or the presence of confirmed otter holts, spraints or footprints. 24 of these watercourses would be affected by the Project.

4.2.3 Four watercourses were assigned potential otter presence due to indicative signs such as potential otter feeding remains, footprints, slides, couches and nearby sightings.

4.2.4 These records are shown in Table A8.13.5 below and shown on Figure A8.13.2: Otter Field Survey Results (Rev B) in Annex A. Full details of these results can be found in Table A8.13.9 in Annex B.

4.2.5 In 2024, ~~a~~A live sighting of a family of otter with kits (young otter) was recorded going into and out of a tree in a small woodland copse surrounding a small pond to the north of Fuller Street (Section E). The nearest major watercourse is the River Ter approximately 1.3 km to the south. The only identified flowing watercourse providing potential connectivity between the River Ter and the potential holt's location is watercourse 72 that crosses the boundary between Section E and F. This feature could be a potential resting site or a potential natal holt, but this cannot be determined at this stage. This feature is shown as 'O9' on Figure A8.13.2: Otter Field Survey Results in Annex A.

4.2.6 A confirmed resting site / holt (O11) with multiple confirmed spraints inside its entrance cavity and additional tunnels leading deeper was recorded on the banks of [redacted] A second confirmed otter resting site / holt (O10), [redacted] recorded within the cavity. [redacted]

~~4.2.6~~4.2.7 A potential holt (labelled O13) was identified underneath alder *Alnus glutinosa* tree roots, this hole appeared to be linked to an entrance hole on [redacted] Feeding remains and possible otter spraint were identified on the edge of the reservoir, but the signs were old and partially decayed. O13 is approximately [redacted]

~~4.2.7~~4.2.8 A further ~~eight~~ 10 features with suitability to be used as a resting site by otter have been identified. Not enough evidence of usage has been recorded to confirm their status in 2023/2024. These features were recorded at watercourse 16 (Section A); 32, 251 (Section B); 139, 140, 145, 331 (Section C); 183 (Section D); 62 (Section E) and 78, 398 (Section F). These potential resting places are included in Table A8.13.5 below, the locations of the features labelled 'O1' to 'O1~~4~~1' in Table A8.13.6 and shown on Figure A8.13.2: Otter Field Survey Results (Rev B) in Annex A. [Note O6 on watercourse 331 is not listed as it is no longer affected by the Project.]

~~4.2.8~~4.2.9 Full details of the 1~~4~~1 holts / resting sites are presented in Table A8.13.10 in Annex B.

~~4.2.9~~4.2.10 It should be noted that the use of natal holts and resting places is subject to change across the seasons and the years and so camera trapping would be conducted to confirm the status of any potential natal holts or resting sites before works take place close to these features. Each feature that is camera trapped with be assigned as either a natal holt, a non-natal holt, a lay-up site, a couch or scoped out if no use is evidenced.

Table A8.13.5 Otter field signs

Project Section(s)	Watercourse ID	Name of Watercourse (if applicable)	Otter Field Signs
A	[redacted]	Tributary of River Tas 2	No signs but landowner had a recent photograph of an otter in the stream.
A		N/A	Footprints
A		River Tas	Spraint

Project Section(s)	Watercourse ID	Name of Watercourse (if applicable)	Otter Field Signs
A	[redacted]	Frenze Beck	Spraint, potential resting site (O1)
A		Tributary of River Waveney 1	Spraint
A		River Waveney	Spraint
A		N/A	Spraint
A and B		River Waveney	Otter signs confirmed at nearby connected watercourse 124 and 126.
B		Belstead Brook	Spraint, potential holt (O12)
B		Wattisham Watercourse	Spraint, potential resting site (O2)
C		Belstead Brook	Spraint, potential resting site (O3)
C		Spring Brook	Footprint, potential resting site (O4)
C		Tributary of River Brett	Potential resting site (O5)
C		River Stour	Spraint
C		River Stour	No signs at this location but this is a continuation of the River Stour, just downstream from 41(a) which has confirmed otter presence.
C		Black Brook	Spraints
C		N/A	Spraint, feeding remains
C		Ardleigh Reservoir	Potential feeding remains, spraint, potential holt (O13)
D		N/A	Spraint
D		N/A	Spraint, potential otter path
D		Tributary of River Colne	Spraint
D		River Colne	Spraint, footprints, potential resting site (O7)
D		Roman River	Spraint

[12] Watercourse no longer impacted by the Project.

[13] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126(a) and 126(b).

[14] Watercourse no longer impacted by the Project and O3 is also no longer impacted by the Project.

[15] Watercourse no longer impacted by the Project

[16] Watercourse no longer impacted by the Project. Potential holt O7 is also no longer impacted by the Project.

Project Section(s)	Watercourse ID	Name of Watercourse (if applicable)	Otter Field Signs
E	[redacted]	River Blackwater	Spraint, slide, grooming area, potential resting site (O8)
E		Tributary of River Blackwater	Potential otter feeding remains
E		River Brain	Potential slide
E		River Brain	Spraint
E		N/A	Nearest watercourse to potential natal holt or resting site with kits (O9)
F		River Chelmer	Spraint and temporary resting place (O14)
F		River Can	Spraint, ~~confirmed~~ holt / resting site (O10)
F		Roxwell Brook	Spraint, footprint
F		Tributary of Roxwell Brook	Spraints
G		Stock Brook	Sighting, spraint, footprint
G		Off Roxwell Brook	Spraint
G		Havering's Grove Brook	Spraints, ~~confirmed~~ resting site / holt (O11)

~~4.2.10~~4.2.11 Full details of these results can be found in Annex B and are shown on Figure A8.13.2: Otter Field Survey Results (Rev B) in Annex A.

~~4.2.11 Further otter surveys are to be undertaken in 2025 and it is reasonable to assume a similar number of confirmed or potential otter field signs will be identified across the remaining watercourses, given the type and location of the watercourses present. On this basis a precautionary reasonable worst case scenario has been applied for the purpose of the ES (Volume 6 of the DCO application), with the same percentage of positive otter records applied to the remaining watercourses, as was found within the surveys undertaken across the rest of the Project (22%). Therefore, it is considered reasonable to assume that 14 additional watercourses will have confirmed or potential evidence of otter identified during the 2025 surveys. This is assumed within the baseline for the assessment within Chapter 8: Ecology and Biodiversity (document reference 6.8). However there would be no change to the overall value of medium value/County importance assigned to otter.~~

[17] Watercourse no longer impacted by the Project.

[18] Watercourse no longer impacted by the Project. Potential temporary resting place O14 is also no longer impacted by the Project.

~~4.2.12 The results of the otter surveys undertaken post March 2025, will be included in a further environmental information report, as detailed in Chapter 8: Ecology and Biodiversity (document reference 6.8).~~

Otter Holt Monitoring

4.2.12 The results of the camera surveys are provided in Table A8.13.13 in Annex D, with resting site / holt locations shown on Figure A8.13.2: Otter Field Survey Results (Rev B) in Annex A.

4.2.13 None of the reviewed camera footage provided evidence that the holts or resting places were occupied by otter in 2025.

4.2.14 An otter was observed investigating the camera at O1 [redacted] and O10 [redacted] and then could be heard entering the water. These individuals were not recorded using the potential resting site / holts.

4.2.15 A mink was observed entering and leaving O11 [redacted] on three separate occasions.

4.2.16 In 2024, location O9 was identified as a potential natal holt following a sighting of an otter family, including young otter, entering and exiting a tree within a small copse surrounding a pond. No evidence of otter activity was recorded during the 2025 camera monitoring.

4.2.17 Otter is a highly mobile species, and the usage of features may vary by season or year. The data obtained through this monitoring was undertaken to further the Project's understanding on usage of the identified features and inform future licensing requirements.

Water Vole

Habitat Suitability Assessment

~~4.2.13~~4.2.18 Table A8.13.6 summarises the results of the habitat suitability assessment with more detail provided in Table A8.13.9 in Annex B.

~~4.2.14~~4.2.19 Of the ~~142~~ 182 watercourses scheduled for survey~~ed~~, ~~89~~ 115 were assessed to be suitable for water vole (assessed as poor, sub-optimal and optimal), ~~53~~ 65 were assessed to be unsuitable. Two could not be surveyed (watercourse 588, Section C and watercourse 92, Section G) and it is assumed that the habitat is suitable on a precautionary basis. Water vole was considered absent from the watercourses that were assessed to be unsuitable, and no further surveys for water vole were undertaken on these watercourses.

Table A8.13.6 Habitat suitability assessment for water vole

Project Section(s)	Habitat Suitability					
	Optimal	Sub-optimal	Poor	Unsuitable	Unknown (Watercourse Inaccessible)	Total
A	42	11~~12~~	8~~5~~	10~~12~~	0	33~~31~~

Project Section(s)	Habitat Suitability					
	Optimal	Sub-optimal	Poor	Unsuitable	Unknown (Watercourse Inaccessible)	Total
A and B	1~~1~~	0~~0~~	0~~0~~	0~~0~~	0	1~~1~~
B	~~8~~6	10~~5~~	~~9~~8	7~~4~~	0	34~~23~~
C	5~~4~~	~~6~~6	8~~4~~	~~9~~6	1	29~~20~~
D	3~~4~~	~~5~~3	10~~4~~	~~8~~7	0	26~~18~~
E	1~~2~~	~~3~~3	1~~0~~	~~9~~6	0	14~~11~~
E and F	0~~0~~	1~~1~~	0~~0~~	0~~0~~	0	1~~1~~
F	~~4~~4	~~3~~3	~~4~~4	13~~10~~	1	25~~21~~
G	1~~1~~	~~4~~4	1~~1~~	5~~4~~	0	11~~10~~
G and H	0~~0~~	1~~1~~	0~~0~~	0~~0~~	0	1~~1~~
H	2~~0~~	0~~1~~	1~~0~~	~~4~~4	0	~~7~~5
Total	**~~24~~29**	**~~39~~44**	**~~26~~42**	65~~53~~	**2**	**18~~42~~**

Water Vole Burrows and Field Signs

4.2.20 The results of the water vole surveys are summarised in Table A8.13.7. As identified in Section 3.4 Notes and Limitations, one survey visit was possible on watercourse 545 and 447 (Section F) and no surveys were undertaken on watercourses 588 (Section C) and 92 (Section G). Water vole presence has been assumed on these four watercourses on a precautionary basis.

~~4.2.15~~ Of the ~~89~~ 115 watercourses assessed to be suitable for water vole, 2~~6~~1 had confirmed water vole presence due to sightings or the presence of confirmed water vole latrines.

~~4.2.16~~4.2.21 ~~Fifteen~~ Eighteen watercourses were assigned potential water vole presence due to indicative signs such as potential water vole feeding stations, burrows and footprints.

~~4.2.17~~4.2.22 These records are shown in Table A8.13.7 below and shown on Figure A8.13.3: Water Vole Field Survey Results (Rev B) in Annex A.

~~4.2.18~~4.2.23 A full breakdown of the survey results and other incidental records contributing to the results can be found in Table A8.13.9 in Annex B.

Table A8.13.7 Water vole field signs and presence

Project Section	Watercourse ID	Name of Watercourse (if applicable)	Water Vole Field Signs	Water Vole Presence
A	182	Tributary of River Tas 2	Latrine	Confirmed presence
A	201 (a)[19]	N/A	Latrines, burrows, feeding station	Confirmed presence
A	201 (b)	N/A	Latrines, burrows, feeding station	Confirmed presence
A	1	N/A	Latrines, burrows, footprints	Confirmed presence
A	9	N/A	Latrine, burrows	Confirmed presence
A	10	N/A	Latrine, burrow, feeding station	Confirmed presence
A	16	Frenze Beck	Potential burrow	Potential presence
A	17	N/A	Latrine and feeding station	Confirmed presence
A	124[20]	Tributary of River Waveney 1	Latrine	Confirmed presence
A	126 (a)[21]	River Waveney	Latrine, potential feeding stations	Confirmed presence
A	126 (b)	River Waveney	Latrine, potential feeding stations	Confirmed presence
A and B	125	River Waveney	Potential burrow	Potential presence
B	128	Tributary of River Waveney 2	Latrine	Confirmed presence
B	25	Tributary of River Dove	Latrine	Confirmed presence
B	30	River Gipping	Latrine, burrow, feeding station	Confirmed presence

[19] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 201(a) and 201(b).

[20] Watercourse no longer impacted by the Project.

[21] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126(a) and 126(b).

Project Section	Watercourse ID	Name of Watercourse (if applicable)	Water Vole Field Signs	Water Vole Presence
B	133	N/A	Latrine, burrows, feeding station	Confirmed presence
B	31	N/A	Latrine, burrow, feeding station	Confirmed presence
B	134	Tributary of River Gipping 1	Latrine, burrows, feeding station	Confirmed presence
B	135	N/A	Latrine, burrows, feeding station	Confirmed presence
B	32	Wattisham Watercourse	Latrines, burrows, feeding station	Confirmed presence
B	37	N/A	Latrine	Confirmed presence
B	458	N/A	Potential run / pathway	Potential presence
C	41_(a)	River Stour	Sighting, latrine, feeding station	Confirmed presence
C	41_(b)	N/A	Potential feeding stations	Potential presence
C	42	River Stour	Latrine, feeding station	Confirmed presence
C	43	N/A	Feeding station, potential burrow	Potential presence
C	139[22]	Belstead Brook	Latrines, burrows	Confirmed presence
C	140	Spring Brook	Latrine, feeding station	Confirmed presence
C	326	N/A	Latrine, burrows, feeding station, pathways	Confirmed presence
C	150	N/A	Potential feeding station	Potential presence
C	152	N/A	Potential pathway	Potential presence
D	52	N/A	Potential burrow, footprints	Potential presence
D	54	N/A	Potential burrows	Potential presence
D	183[23]	River Colne	Latrine, burrow	Confirmed presence
D	60	Roman River	Potential footprints	Potential presence

[22] Watercourse no longer impacted by the Project.

[23] Watercourse no longer impacted by the Project.

Project Section	Watercourse ID	Name of Watercourse (if applicable)	Water Vole Field Signs	Water Vole Presence
E	62	River Blackwater	Potential burrows	Potential presence
E	71	Tributary of River Ter	Potential feeding stations	Potential presence
E and F	72	N/A	Potential burrows	Potential presence
F	73	River Ter	Potential footprints, feeding stations	Potential presence
F	79	Roxwell Brook	Latrine, feeding station	Confirmed presence
F	81	Tributary of Roxwell Brook	Potential footprints	Potential presence
G	95	River Wid	Potential feeding station	Potential presence
G	100	Havering's Grove Brook	Potential feeding stations	Potential presence
H	105[24]	N/A	Potential footprints	Potential presence

~~4.2.19 Further water vole surveys are to be undertaken in 2025. For the purpose of the ES (Volume 6 of the DCO application) a precautionary reasonable worst case scenario has been applied to the likely survey findings. It has been assumed that all 72 watercourses subject to survey in 2025 would have confirmed water vole field signs identified during the 2025 surveys. However, there would be no change to the overall value of medium value/County importance assigned to water vole within the ES (Volume 6 of the DCO application).~~

~~4.2.20 The results of the water vole surveys undertaken post March 2025, will be included in a further environmental information report, as detailed in Chapter 8: Ecology and Biodiversity (document reference 6.8).~~

American Mink

~~4.2.21~~4.2.24 Sightings, scat, footprints or burrows of American mink were recorded in Section A (watercourse 120), Section B (watercourse 137 and 556), Section C (watercourse 331), Section F (watercourse 398, 79 and 181), and Section G (watercourse 97, 98, and 104~~ and 181~~). Note, although watercourses 137, 331 and 104 ~~Tributary of Salary Brook 1 in Section C~~ are~~is~~ no longer affected by the Project the record has been retained to provide context as this species could spread into linked watercourses within the Order Limits.

[24] Watercourse no longer impacted by the Project.

5. Conclusion

5.1.1 Of the 182 watercourses scheduled for survey in 2023, 2024 and 2025, 180 (98.9%) watercourses crossed by the Project have had at least one survey undertaken (which is a complete survey effort for otter) and 178 (97.8%) watercourses had two surveys undertaken (which is a complete survey effort for water vole).

~~5.1.1~~5.1.2 Desk study records indicated water vole and otter presence in Norfolk, Suffolk and Essex, all records with precise locations were concentrated in Section A, B, C and D, with Section C having the highest concentration of both water vole and otter records.

~~5.1.2~~5.1.3 Otter is a common and widespread species present throughout East Anglia, and it is assumed that they would use both wet and dry watercourses when travelling across their range. Otter presence was confirmed in ~~27~~ 30 watercourses due to sightings or the presence of confirmed otter holts, spraints or footprints. Four watercourses were assigned potential otter presence due to indicative signs such as potential otter feeding remains, footprints, slides, couches and nearby sightings. It is assumed that otter could use all watercourses within the Order Limits, including the two watercourses (watercourse 588, Section C and watercourses 92, Section G) where no survey was possible due to constraints in access.

5.1.4 [redacted]

~~5.1.3~~5.1.5 Six of these features (O1, O2, O9, O10, O11, O12) which had the potential to be directly affected by the Project were subject to camera monitoring in 2025. None of the reviewed camera footage provided evidence that the holts or resting places were occupied by otter in 2025. The use of holts and resting sites by otter can vary seasonally and across years and so although each holt / resting place was not used during the monitoring period, they could be used in future years.

~~5.1.4~~5.1.6 A summary of these results by Section is provided below in Table A8.13.8 Watercourses with confirmed otter presence were more evenly distributed through all Sections than the spread of desk study records. All Sections except for H had at least one watercourse with confirmed otter presence.

5.1.7 Water vole presence was confirmed in ~~21~~ 26 watercourses due to sightings or the presence of confirmed water vole latrines. ~~15~~ 18 watercourses were assigned potential water vole presence due to indicative signs such as potential water vole feeding stations, burrows and footprints. A summary of these results by Section is provided below in Table A8.13.8. As with the desk study, most of the watercourses with confirmed water vole presence were in Section A, B, C and D, with Section B

having the highest total number. Watercourses with potential water vole presence were evenly spread across all Sections.

~~5.1.5~~5.1.8 Watercourses 588 (Section C) and 92 (Section G) have not been surveyed due to land access restrictions, and watercourses 545 and 447 (Section H) were inaccessible for one of the two survey visits for water vole. Water vole presence is therefore assumed on these four watercourses on a precautionary basis.

~~5.1.6~~5.1.9 The desk study revealed American mink in Section C with field surveys confirming their presence in Section A, B, C, F and G. Mink travel widely and have the potential to be present in all Project Sections. Mink eradication programmes have resulted in water vole recolonising areas and so it is possible that where such programmes are in place water vole could colonise suitable watercourses in future years where presence was not confirmed in 2023, ~~and~~ 2024, and 2025.

~~5.1.7~~5.1.10 Otter and water vole are highly mobile species. The usage of otter holts / resting sites varies across the seasons and across the years and so pre-construction surveys to include the use of cameras for monitoring would be required to confirm the status and location of any holts / resting sites. Water vole populations also vary across the seasons with significant population fluctuations particularly in response to the presence or absence of American mink. Pre-construction surveys would therefore be required to confirm the presence/absence of water vole and identify the locations of water vole burrows.

Table A8.13.8 Summary of watercourses with otter and water vole presence by Project Section

Project Section (s)	Watercourse ID					
	Otter Confirmed Presence	Potential Otter Field Signs	Incidental Findings (Otter)	Water Vole Confirmed Presence	Water Vole Potential Presence	Water Vole Assumed Presence
A	16, 118, 120, 124[25], 126 (a)[26], 126 (b), 182	N/A	N/A	1, 9, 10, 17, 124[27], 126 (a)[28], 126 (b), 182, 201 (a)[29], 201 (b)	16	N/A
A and B	125	N/A	N/A	N/A	125	N/A

[25] Watercourse no longer impacted by the Project.

[26] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126 (a) and 126 (b).

[27] Watercourse no longer impacted by the Project.

[28] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126 (a) and 126 (b).

[29] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 201 (a) and 201 (b).

Project Section (s)	Watercourse ID					
	Otter Confirmed Presence	Potential Otter Field Signs	Incidental Findings (Otter)	Water Vole Confirmed Presence	Water Vole Potential Presence	Water Vole Assumed Presence
B	32, 251	N/A	N/A	25, 30, 31, 32, 37, 128, 133, 134, 135	~~N/A~~458	N/A
C	41(a), 42, 45, 139[30], 140, 151[31]	145	Ardleigh Reservoir	41(a), 42, 139[32], 140[33], 326	41(b), 43, ~~-~~150, 152	588
D	54, 55, 60, 155, 183[34]	N/A	N/A	183[35]	52, 54, 60	N/A
E	62, 157[36]	67, 68, 385	N/A	N/A	62, 71	N/A
E and F	N/A	N/A	N/A	N/A	72	N/A
F	78, 79, 81	N/A	N/A	79	73, 81	N/A
G	94, 97, 98	N/A	N/A	N/A	95, 100	92
H	N/A	N/A	N/A	N/A	105[37]	447, 545
Total	**~~27~~30**	**4**	**1**	**2~~6~~1**	**1~~8~~5**	**4**

[30] Watercourse no longer impacted by the Project.

[31] Watercourse no longer impacted by the Project.

[32] Watercourse no longer impacted by the Project.

[33] 2025 surveys identified a latrine on this watercourse and therefore it has been re-classified from potential to confirmed presence.

[34] Watercourse no longer impacted by the Project.

[35] Watercourse no longer impacted by the Project.

[36] Watercourse no longer impacted by the Project.

[37] Watercourse no longer impacted by the Project.

Abbreviations

Abbreviation	Full Reference
CIEEM	Chartered Institute of Ecology and Environmental Management
CWS	County Wildlife Site
DCO	Development Consent Order
DEFRA	Department for the Environment, Food and Rural Affairs
EFC	Essex Field Club
EIA	Environmental Impact Assessment
ES	Environmental Statement
JNCC	Joint Nature Conservation committee
LWS	Local Wildlife Site
MAGIC	Multi Agency Geographic Information for the Countryside
N/A	Not Applicable
NBIS	Norfolk Biodiversity Information Service
NERC	Natural Environmental and Rural Communities
SAC	Special Area of Conservation
SBIS	Suffolk Biodiversity Information Service
SPA	Special Protection Areas
SSSI	Sites of Special Scientific Interest
S41	Section 41
WCA	Wildlife and Countryside Act 1981

Glossary

Term	Description
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
County Wildlife Site	Non-statutory designated areas of land important for their wildlife and nature conservation value (Norfolk and Suffolk).
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
Haul Road	Another term used for the temporary access route, which is a temporary route built to carry construction vehicles within the Order Limits.
Local Wildlife Site	Non-statutory designated areas of land important for their wildlife and nature conservation value (Essex).
Non-statutory Designated Site	Areas which are recognised for their ecological importance but do not have the same level of legal protection as statutory designated sites. These are typically identified at a local or regional level through non-legally binding agreements, policies, or planning frameworks.
Order Limits	The maximum extent of land within which the authorised development may take place.
Otter Couch	Couches are above-ground daytime resting places for otters. Typically, they take the form of an uncovered nest-like structure. Sometimes they are less conspicuous as this and may simply be an area of flattened vegetation which does not appear to offer any protection from disturbance.
Otter Holt	An underground or enclosed den or burrow used by otters for shelter, resting or sleeping, usually overnight. These can be burrows or cavities in rocks, trees or man-made structures.
Otter Natal Holt	An underground or enclosed den or burrow used by otters for giving birth to and raising their young.
Otter Lay-up	Lay-ups are regular resting places where otters have short rest periods during the daytime. They may be within vegetation patches, under rock ledges or other sheltered areas. They tend to be inconspicuous and may only be marked by the presence of spraints or feeding remains.
Otter Resting Site	Any location where otters pause to rest, groom themselves, or take shelter during the day or night. This includes non-natal holts, couches and lay-ups.
Otter Spraint	The term used to describe the droppings or faeces of an otter, they are distinctive and often used by otters to mark their territory.

Term	Description
Priority species	Species identified as of principal importance in England, in accordance with requirements of the Natural Environment and Rural Communities Act 2006. These are based on the UK Biodiversity Action Plan Priority Species.
Sites of Special Scientific Interest	SSSIs are protected by law under the Wildlife and Countryside Act 1981. They are important because they support rare or endangered fauna and flora, and they represent the United Kingdom's best wildlife and geological sites.
Special Areas of Conservation	Protected areas designated under the European Union's Habitats Directive (Council Directive 92/43/EEC) to conserve and protect rare, vulnerable, or endangered habitats and species of plants and animals that are considered of European importance.
Species	A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.
Statutory Designated Site	An area that has been legally designated and protected for its importance to biodiversity.
Underground Cable	An insulated conductor carrying electric current designed for underground installation. Underground cables link together two cable sealing end compounds.
Water vole feeding station	Locations where water voles eat their food, often containing feeding remains.
Water vole latrines	The term used to describe the droppings or faeces of a water vole.
Water vole runs	Well-worn paths created by water voles as they move through their habitat.
Water vole stashes	Collections of food that water voles gather and store, typically for later consumption.

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Annex A. Figures

Figure A8.13.1 Otter and Water Vole Desk Study Results

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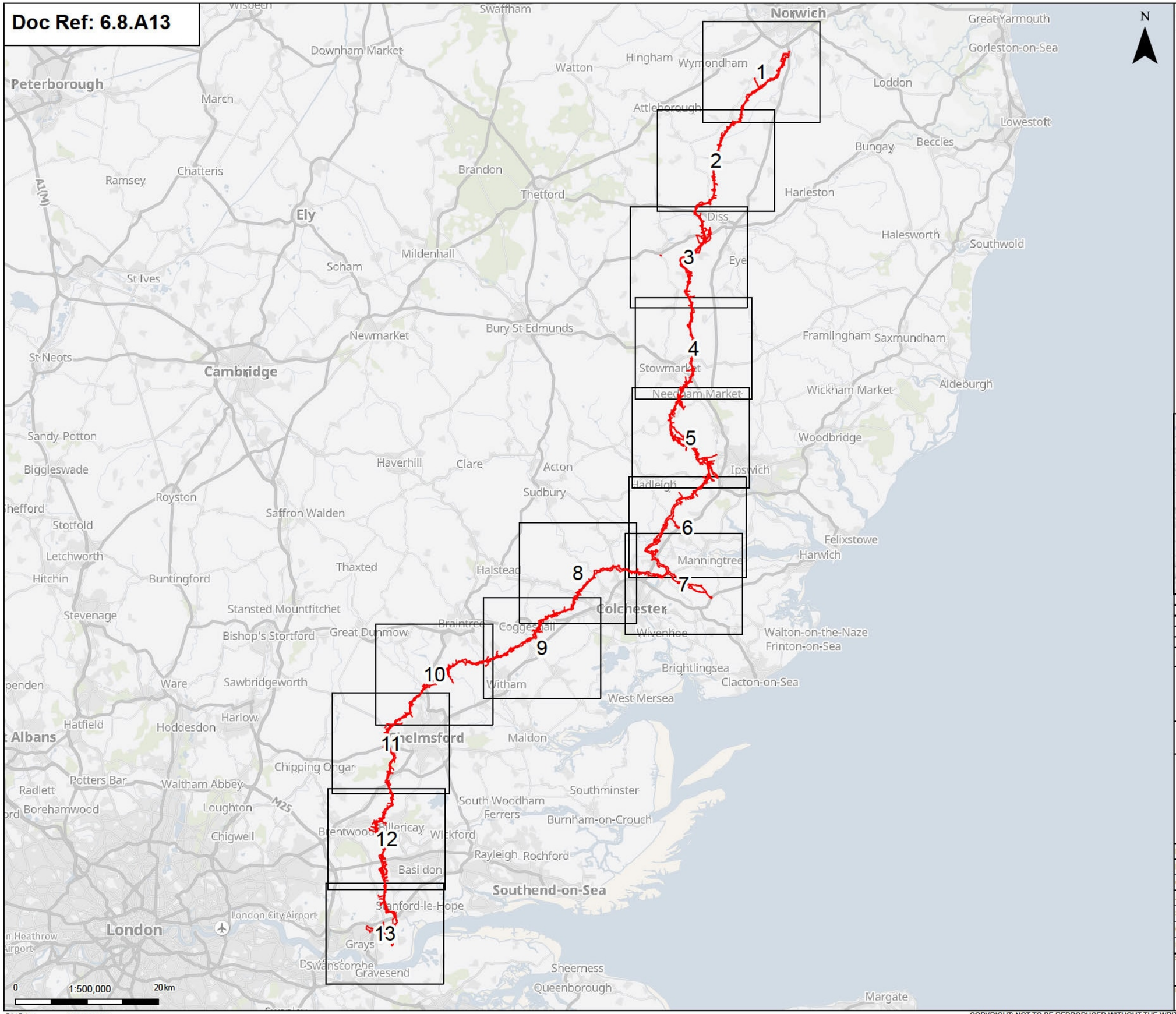

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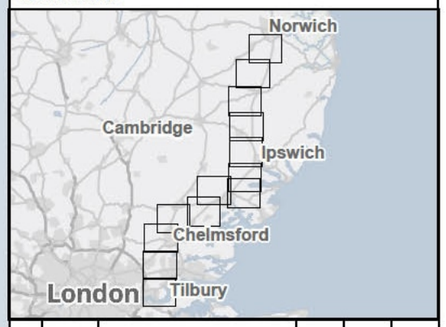

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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results Overview

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
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Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Print Date: 30-10-25 10:16:26

Doc Ref: 6.8.A13

Norwich Main Substation Extension (Future Baseline)

Norwich Main Substation

RG1

RG5

RG10

RG15

RG20

RG25

RG30

RG35

RG40

FOR CONTINUATION SEE PAGE 2

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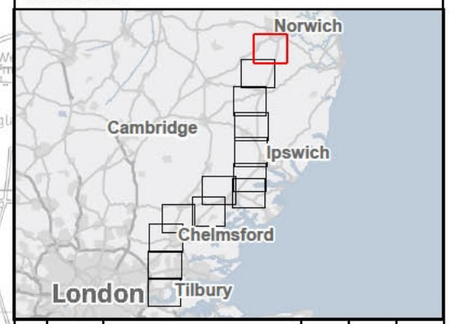
Proposed project design details
Proposed overhead line alignment
Proposed full line tension gantry
Proposed standard lattice pylon location
Norwich Main Substation
Norwich Main Substation Extension (future baseline)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
Water vole desk study results
Otter desk study results
2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results Page 1 of 13

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Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
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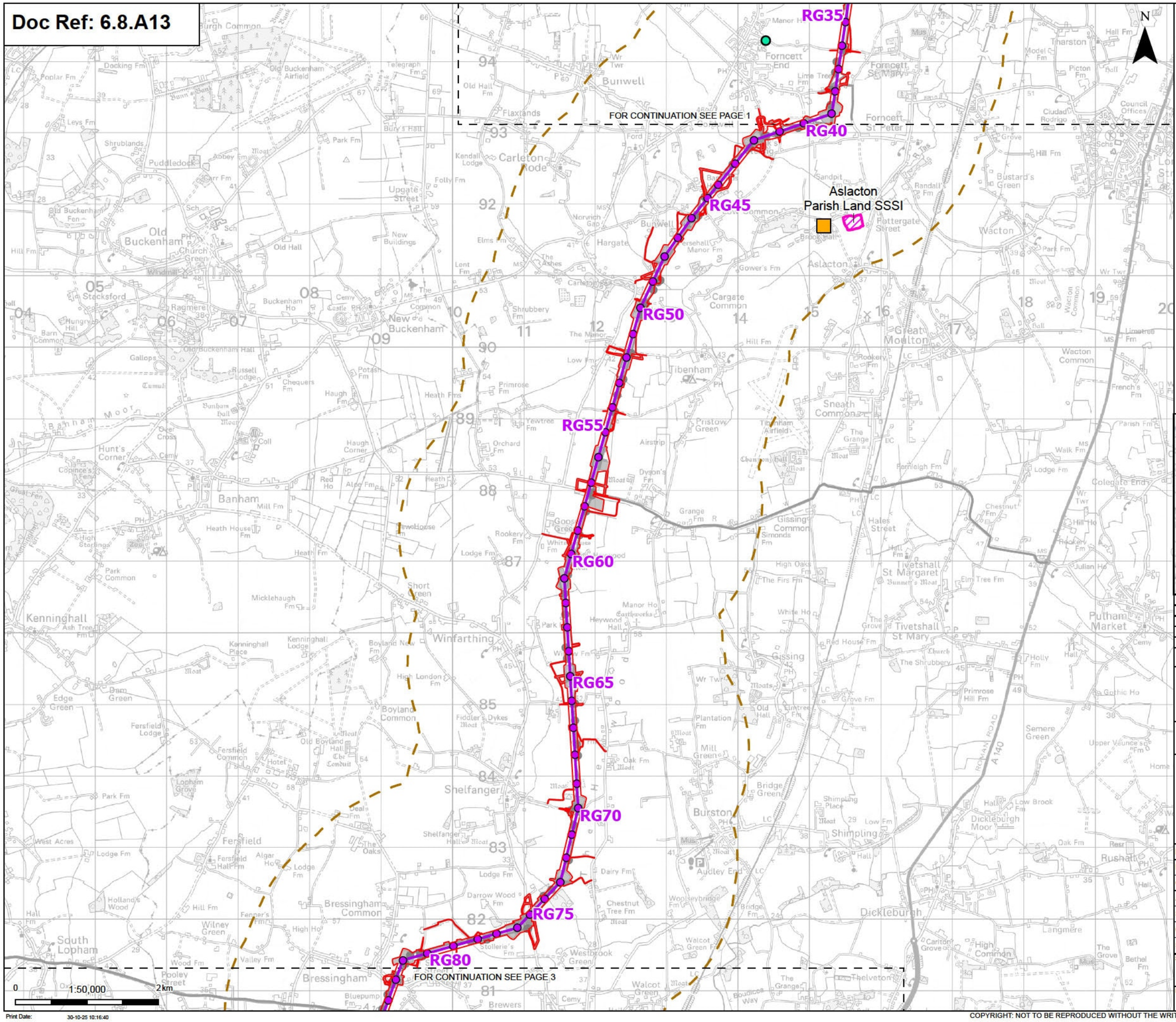
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Doc Ref: 6.8.A13



Order limits

Sheet index cutline

Proposed project design details

Proposed overhead line alignment

Proposed standard lattice pylon location

Other temporary and permanent construction and operational works

Discipline specific constraints

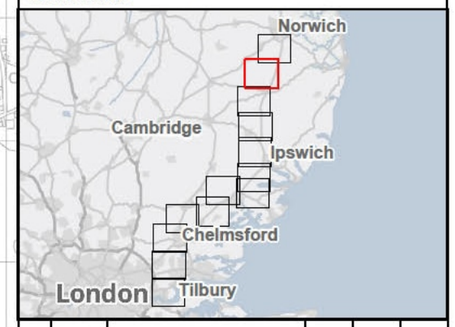
Water vole desk study results

Otter desk study results

2 km Study Area

Sites of special scientific interest

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
Page 2 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

Revision: A

Print Date: 30-10-25 10:16:40

Doc Ref: 6.8.A13

FOR CONTINUATION SEE PAGE 2

RG85
RG90
RG95
RG100
RG105
RG110
RG115
RG120
RG125
RG130

Section A
Section B

FOR CONTINUATION SEE PAGE 4

0 1:50,000 2km

N

- Order limits
- Sheet index cutline
- Project section line

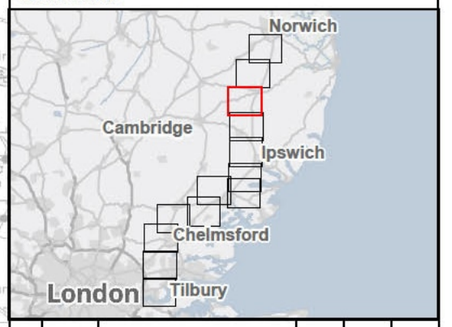
Proposed project design details

- Proposed overhead line alignment
- Proposed standard lattice pylon location
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Water vole desk study results
- Otter desk study results
- 2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
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Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

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Doc Ref: 6.8.A13

RG130

FOR CONTINUATION SEE PAGE 3

RG135

RG140

RG145

RG150

RG155

RG160

RG165

RG170

FOR CONTINUATION SEE PAGE 5

0 1:50,000 2km

Print Date: 30-10-25 10:16:55

N

- Order limits
- Sheet index cutline

Proposed project design details

- Proposed overhead line alignment
- Proposed standard lattice pylon location
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Water vole desk study results
- Otter desk study results
- 2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results Page 4 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

Revision: A

Doc Ref: 6.8.A13

RG170
RG175
RG180
RG185
RG190
RG195
RG200
RG205
JC1
JC5
JC10
JC15
JC20

Barking Woods SSSI

Bramford Substation

Bramford Meadows

Proposed substation extension

Section B

Section C

Sproughton Park

FOR CONTINUATION SEE PAGE 4

FOR CONTINUATION SEE PAGE 6

0 1:50,000 2km

Print Date: 30-10-25 10:17:03

N

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed overhead line alignment
Proposed full line tension gantry
Proposed low duty gantry
Proposed standard lattice pylon location
Bramford Substation
Bramford Substation Extension
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
Water vole desk study results
Otter desk study results
2 km Study Area
Sites of special scientific interest
County wildlife sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
Page 5 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
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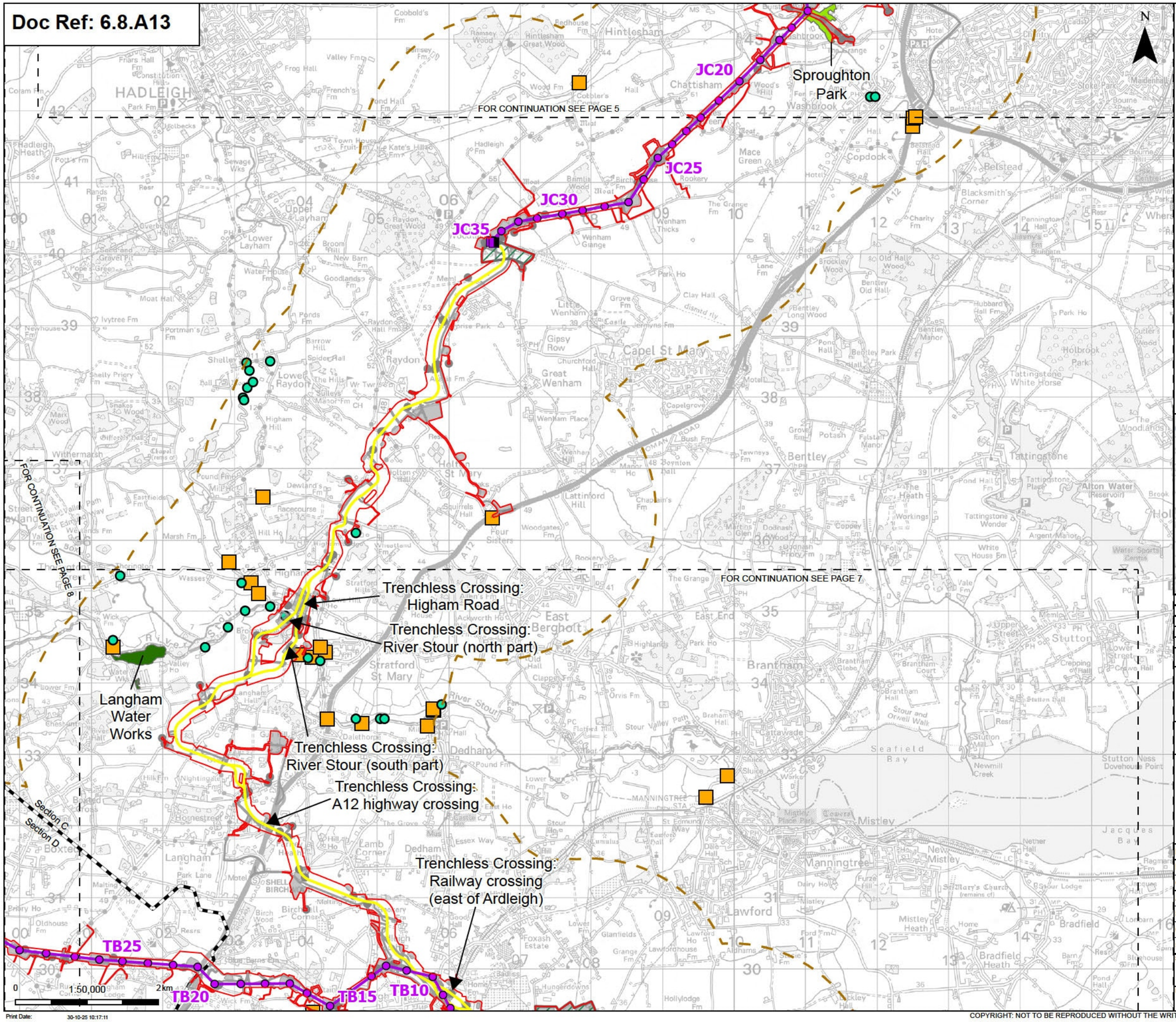
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Doc Ref: 6.8.A13



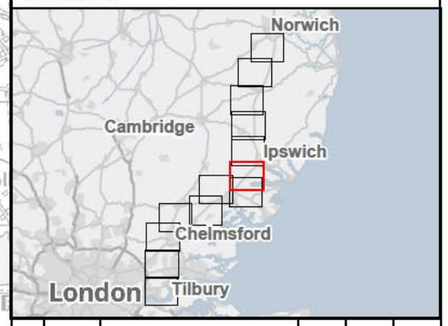
Proposed project design details

- Order limits
- Sheet index cutline
- Project section line
- Proposed overhead line alignment
- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Water vole desk study results
- Otter desk study results
- 2 km Study Area
- County wildlife sites
- Local Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
Page 6 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Print Date: 30-10-25 10:17:11

Doc Ref: 6.8.A13

Trenchless Crossing: Higham Road

Trenchless Crossing: River Stour (north part)

Trenchless Crossing: River Stour (south part)

Trenchless Crossing: A12 highway crossing

Trenchless Crossing: Railway crossing (east of Ardleigh)

Langham Water Works

Bullock Wood SSSI

Proposed EACN Substation

TB30 TB25 TB20 TB15 TB10 TB5 TB1

Section C

Section D

FOR CONTINUATION SEE PAGE 6

FOR CONTINUATION SEE PAGE 8

N

0 1:50,000 2km

Print Date: 30-10-25 10:17:19

- Order limits
- Sheet index cutline
- Project section line

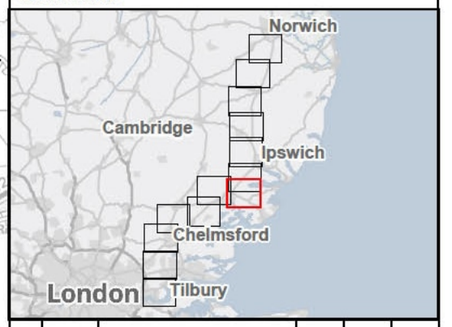
Proposed project design details

- Proposed overhead line alignment
- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed underground cable alignment
- Proposed DNO Substation
- Proposed East Anglia Connection Node Substation (EACN)
- Environmental area
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Water vole desk study results
- Otter desk study results
- 2 km Study Area
- Sites of special scientific interest
- Local Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
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Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

Revision: A

Doc Ref: 6.8.A13

TB30
TB35
TB40
TB45
TB50
TB55
TB60
TB65
TB70

FOR CONTINUATION SEE PAGE 6
FOR CONTINUATION SEE PAGE 7
FOR CONTINUATION SEE PAGE 9

Section C
Section D
Section D
Section E

0 1:50,000 2km

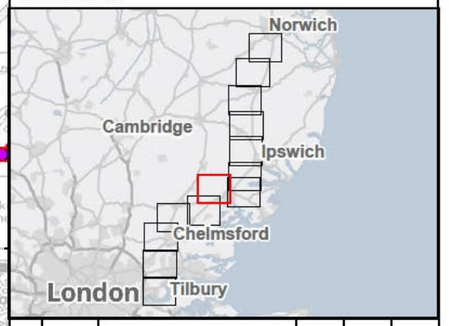
Print Date: 30-10-25 10:17:27

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed overhead line alignment
Proposed full line tension gantry
Proposed standard lattice pylon location
Proposed underground cable alignment
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
Water vole desk study results
Otter desk study results
2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
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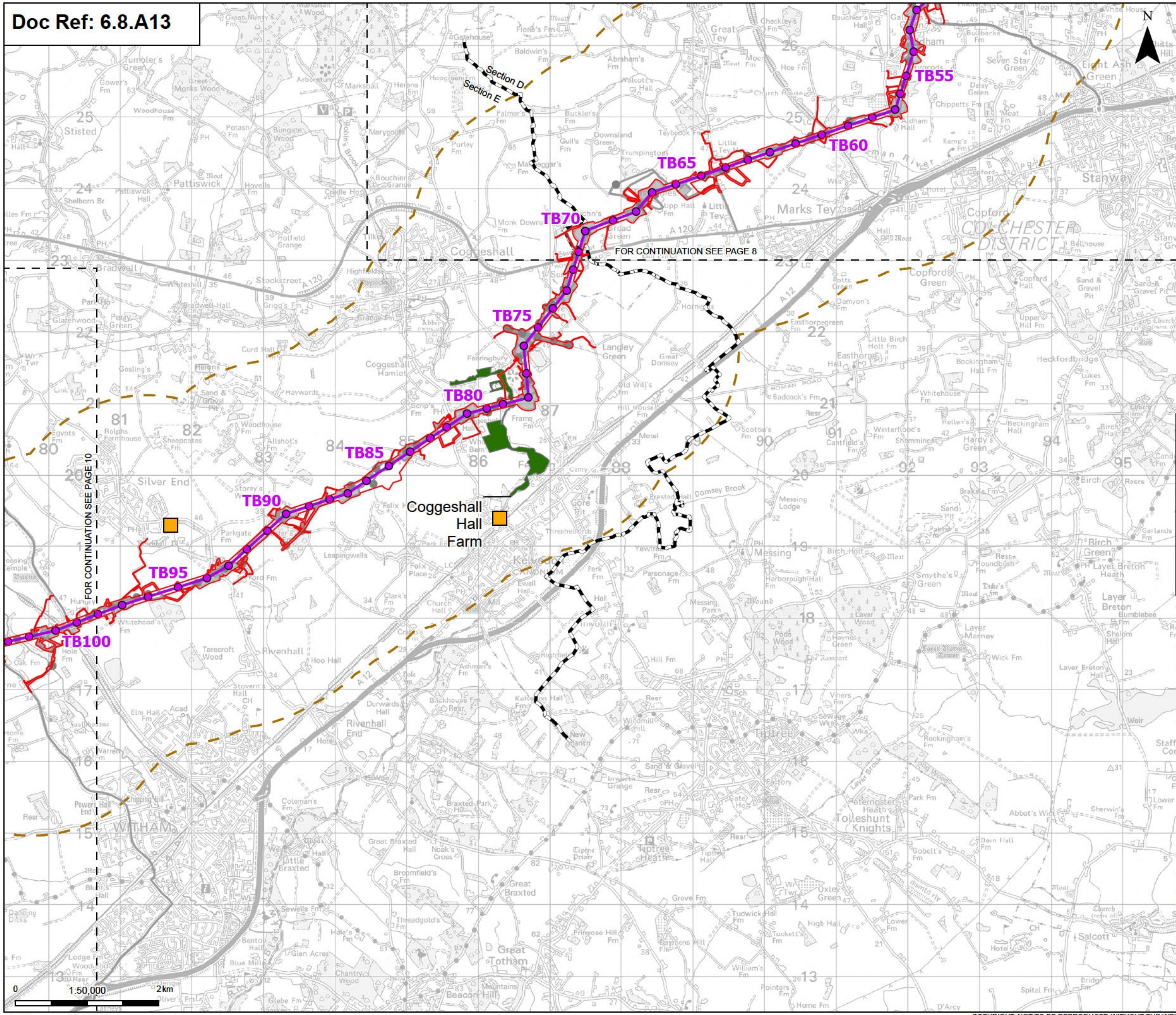
Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Doc Ref: 6.8.A13



- Order limits
- Sheet index cutline
- Project section line

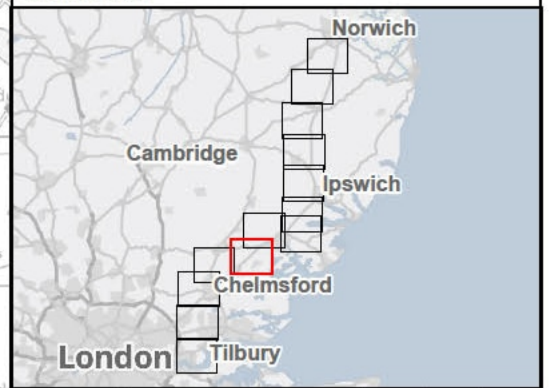
Proposed project design details

- Proposed overhead line alignment
- Proposed standard lattice pylon location
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Otter desk study results
- 2 km Study Area
- Local Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
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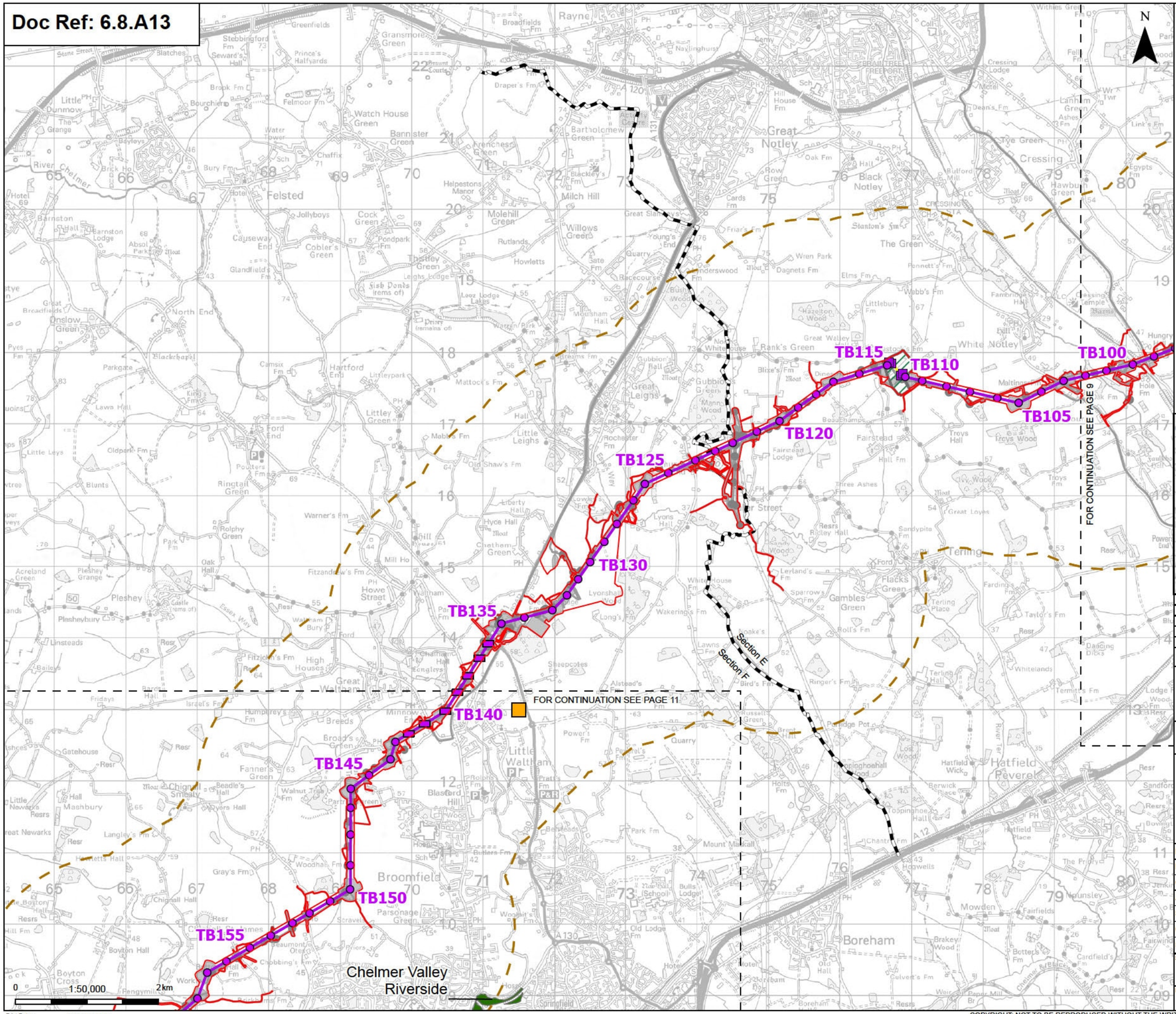
Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270 | Revision: A

Print Date: 30-10-25 10:17:35

Doc Ref: 6.8.A13



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- Order limits
- Sheet index cutline
- Project section line

Proposed project design details

- Proposed overhead line alignment
- Proposed low duty gantry
- Proposed low height pylon location
- Proposed standard lattice pylon location
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Otter desk study results
- 2 km Study Area
- Local Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
Page 10 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

Revision: A

Print Date: 30-10-25 10:17:43

Doc Ref: 6.8.A13

TB140
TB145
TB150
TB155
TB160
TB165
TB170
TB175
TB180
TB185
TB190

FOR CONTINUATION SEE PAGE 10

FOR CONTINUATION SEE PAGE 12

Chelmer Valley Riverside

Section F
Section G

0 1:50,000 2km

Print Date: 30-10-25 10:17:50

N

- Order limits
- Sheet index cutline
- Project section line

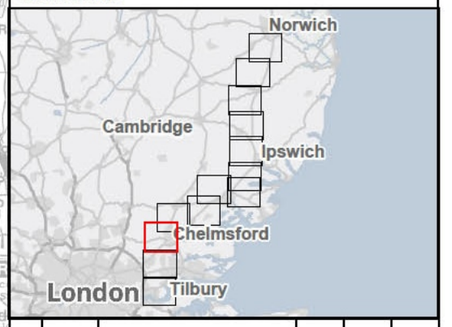
Proposed project design details

- Proposed overhead line alignment
- Proposed low height pylon location
- Proposed standard lattice pylon location
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- Otter desk study results
- 2 km Study Area
- Local Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results
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Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270

Revision: A

Doc Ref: 6.8.A13

FOR CONTINUATION SEE PAGE 11

FOR CONTINUATION SEE PAGE 13

TB190 TB195 TB200 TB205 TB210 TB215 TB220 TB225 TB230 TB235

Section F Section G Section G Section H

0 1:50,000 2km

Print Date: 30-10-25 10:17:58

N

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed overhead line alignment
Proposed low height pylon location
Proposed standard lattice pylon location
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity- Otter and Water Vole Desk Study Results Page 12 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
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Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Doc Ref: 6.8.A13

FOR CONTINUATION SEE PAGE 12

TB240
TB245
TB250
TB255
TB260
Proposed Tilbury North Substation
YYJ115
ZB20
YYJ120
ZB15RA
ZB15RB
ZB15RC
YYJ125R
ZB10
YYJ130

N

0 1:50,000 2km

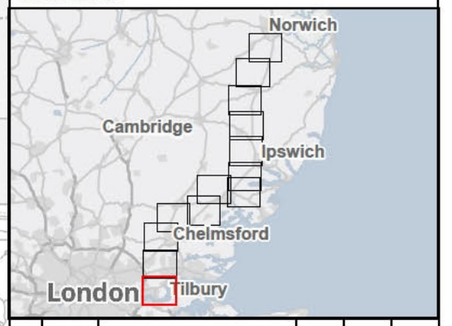
Print Date: 30-10-25 10:18:05

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed overhead line alignment
Proposed full line tension gantry
Proposed low duty gantry
Proposed low height pylon location
Existing pylon (modify)
Proposed standard lattice pylon location
Proposed underground cable alignment
Proposed Tilbury North Substation
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

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PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.1 - Ecology and Biodiversity-Otter and Water Vole Desk Study Results
Page 13 of 13

Designed	D. Macaulay	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
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Approved	K. Burrows	Date	21 Aug 25
Scale:	1:50,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

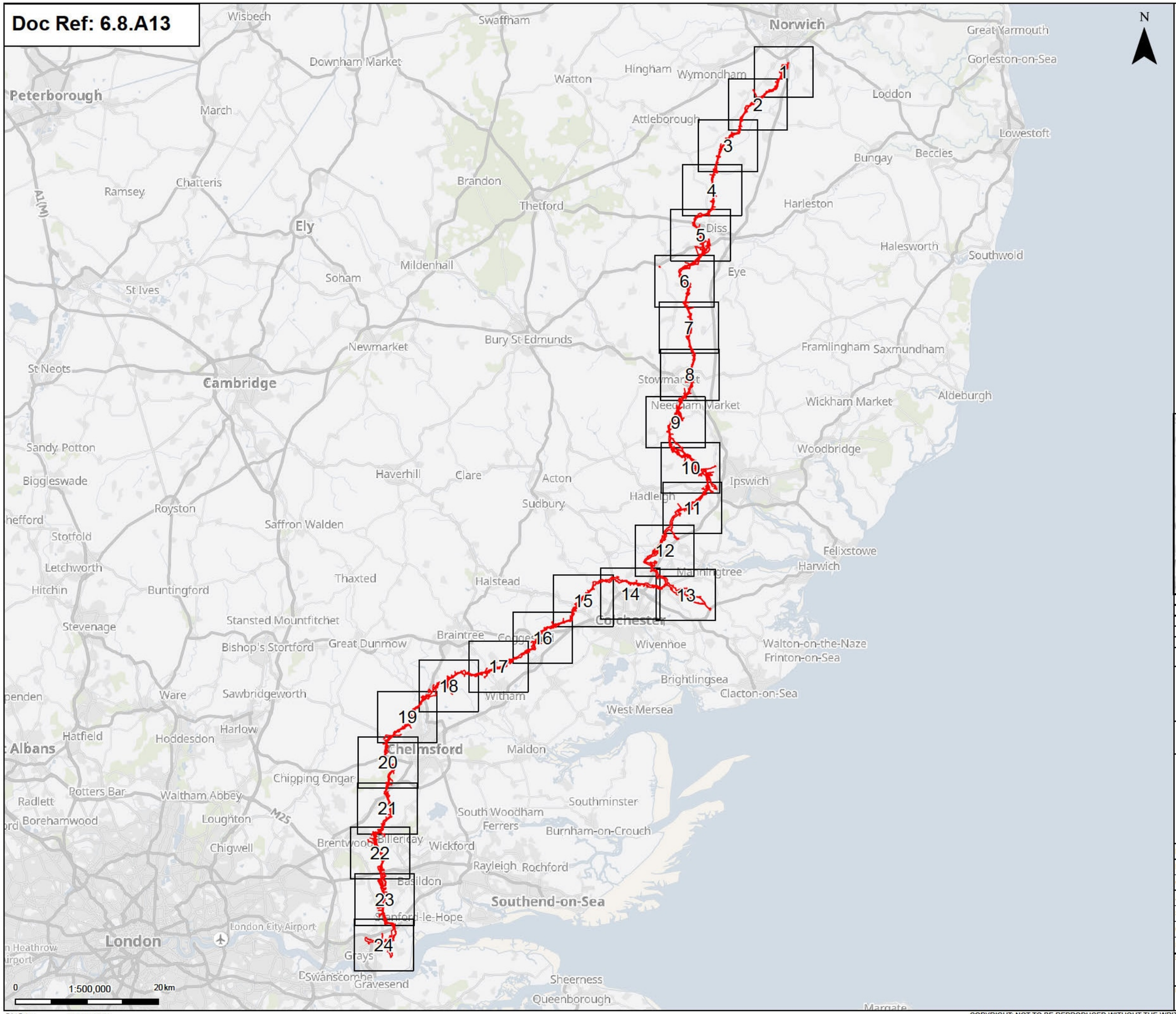
Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00270
Revision: A

Figure A8.13.2 Otter Field Survey Results (Rev B)

FIGURE REMOVED AS IS CONFIDENTIAL

Figure A8.13.3 Water Vole Field Survey Results (Rev B)

Doc Ref: 6.8.A13



Order limits
Pages

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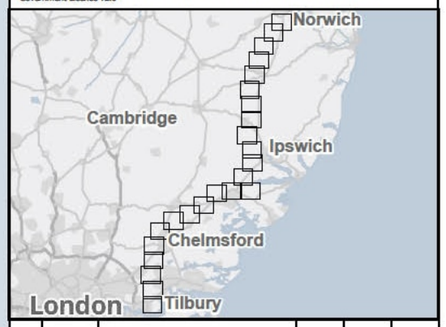

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results Overview

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:500,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

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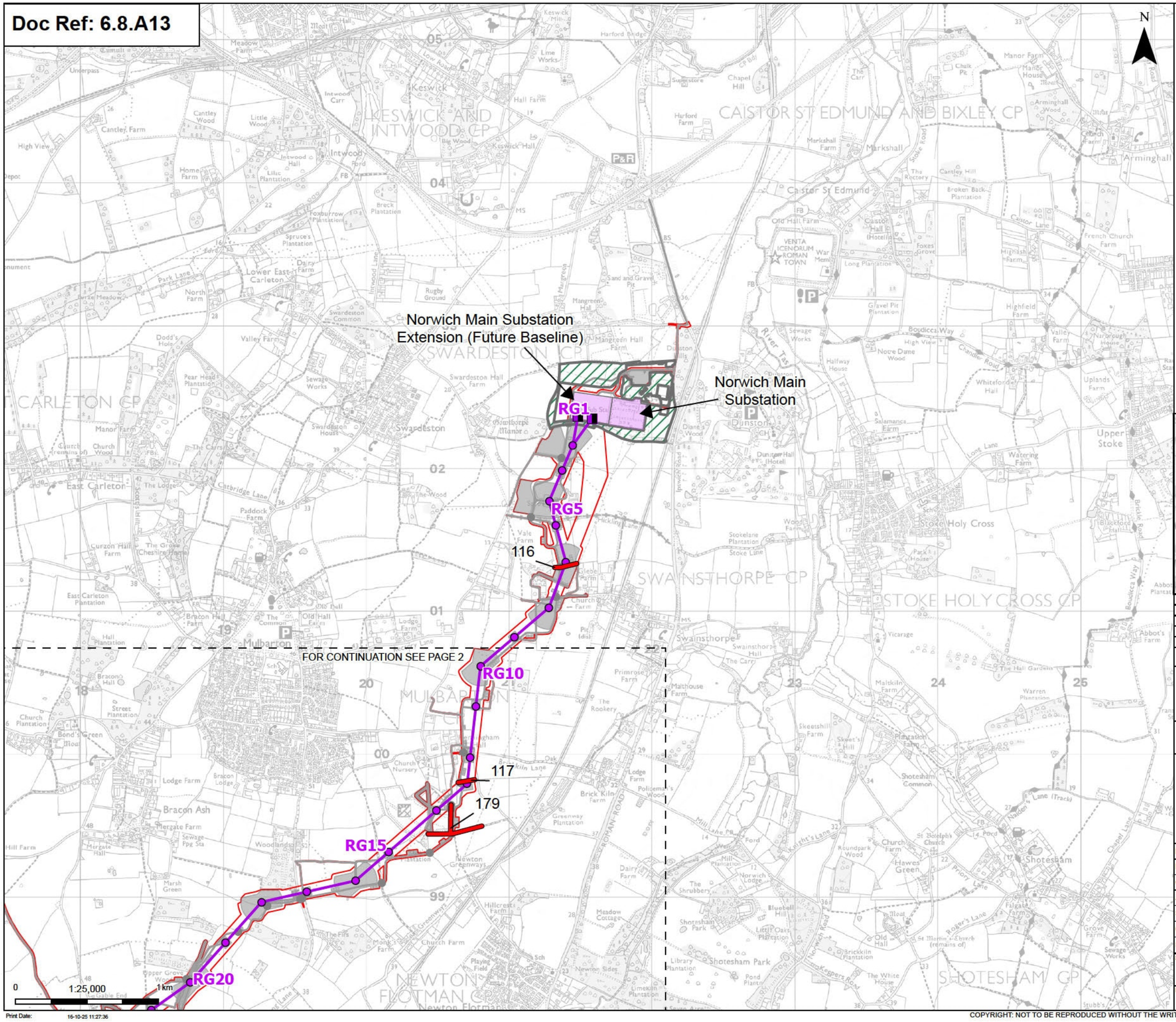
Doc Ref: 6.8.A13



Order limits

Sheet index cutline

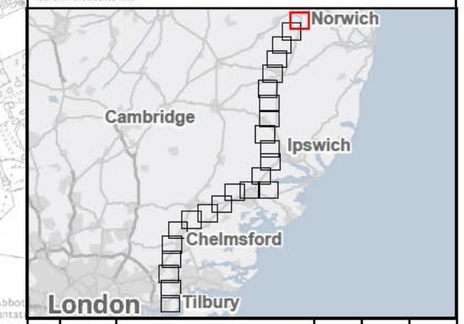
Proposed project design details

- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Norwich Main Substation
- Norwich Main Substation Extension (future baseline)
- Environmental area
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - unsuitable habitat confirmed through field survey

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 1 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
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Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:27:36

Doc Ref: 6.8.A13

RG10
117
179
RG15
RG20
RG25
182(Tributary of River Tas)
201(b)
201(a)
178
RG30
001
RG35
002

FOR CONTINUATION SEE PAGE 1

FOR CONTINUATION SEE PAGE 3

0 1:25,000 1 km

Print Date: 16-10-25 11:27:41

- Order limits
- Sheet index cutline

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 2 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

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RG35
002
212
RG40
003(Tributary of River Tas 1)
224
RG45
120(River Tas)
118
119
RG50
004
005
006
007
008
RG55
009
010

FOR CONTINUATION SEE PAGE 2

FOR CONTINUATION SEE PAGE 4

N

0 1:25,000 1 km

Print Date: 16-10-25 11:27:46

Order limits
Sheet index cutline

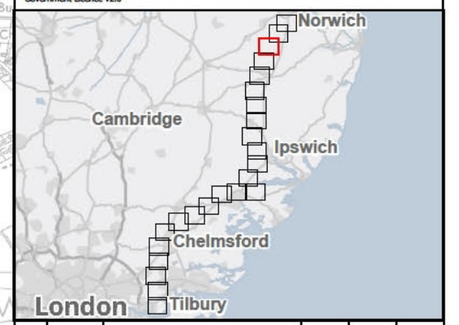
Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - confirmed presence (water vole sighting or latrine identified)
Surveyed - unsuitable habitat confirmed through field survey
Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
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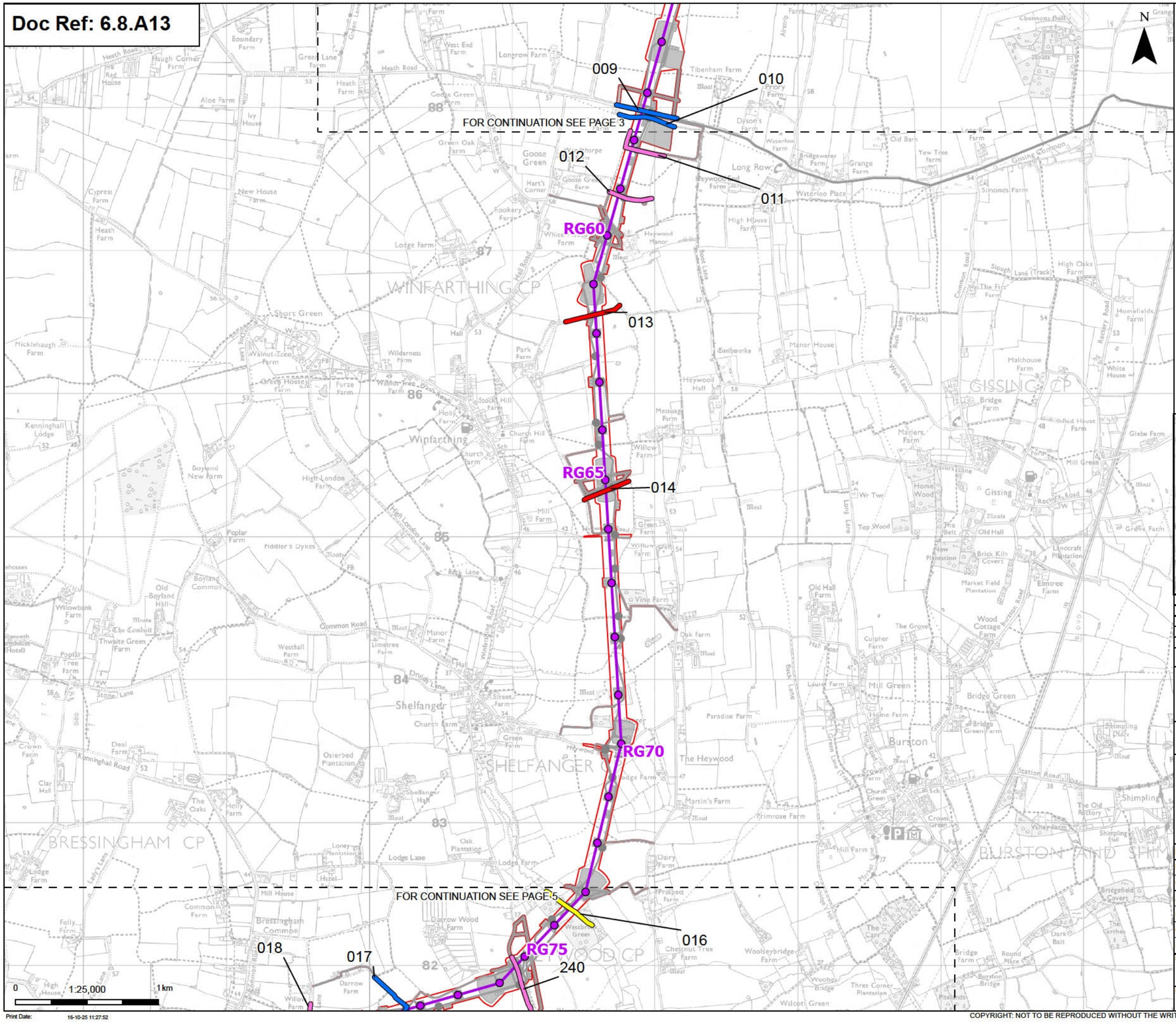
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

Doc Ref: 6.8.A13



Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - confirmed presence (water vole sighting or latrine identified)

Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)

Surveyed - unsuitable habitat confirmed through field survey

Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

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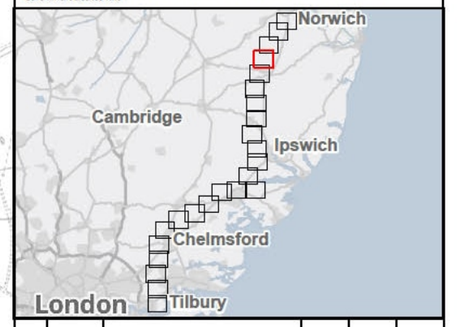

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B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 4 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
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Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:27:52

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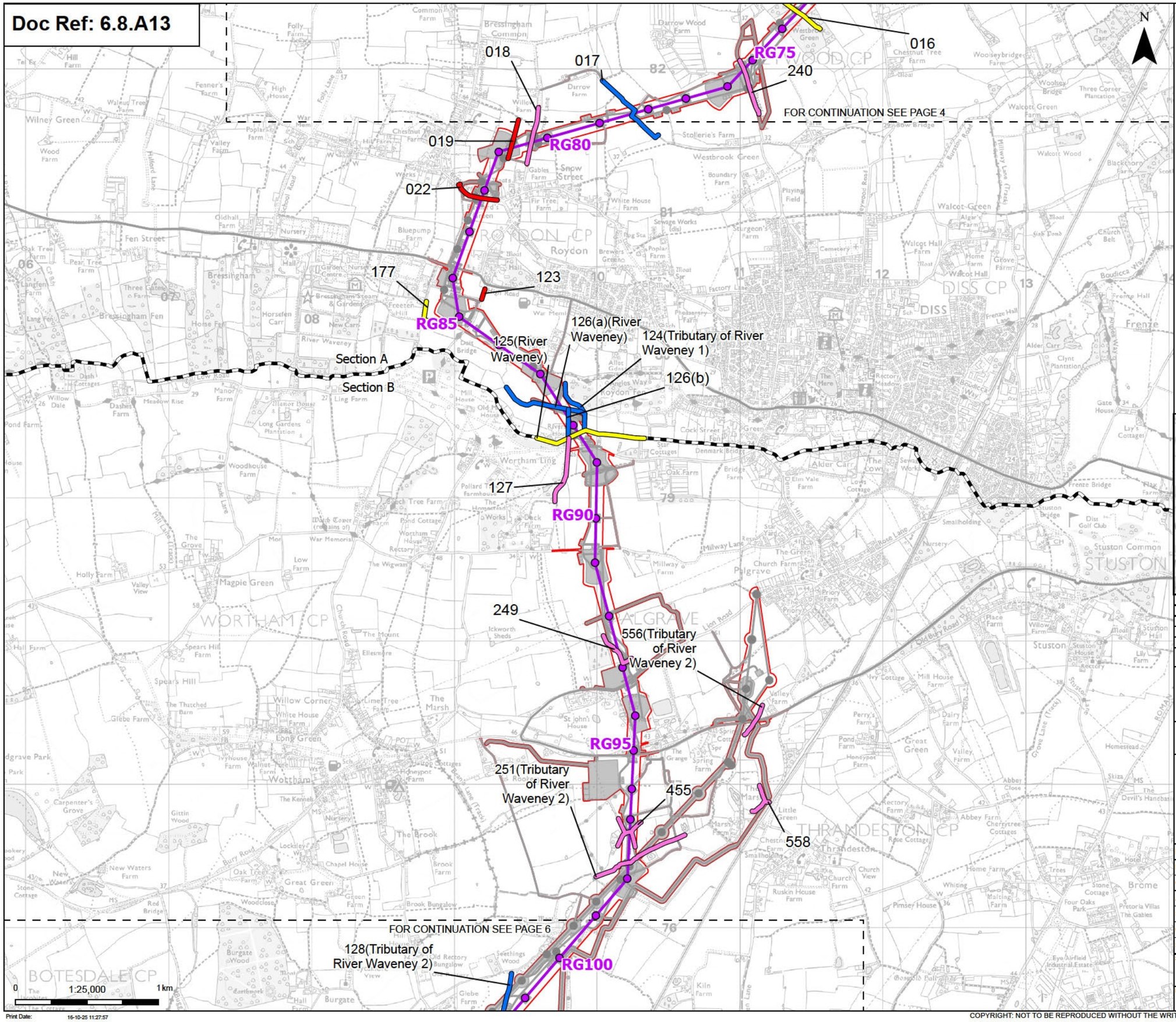

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - confirmed presence (water vole sighting or latrine identified)
Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
Surveyed - unsuitable habitat confirmed through field survey
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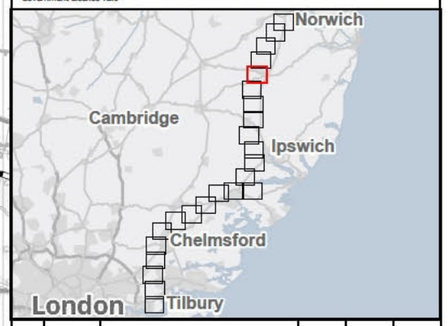

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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 5 of 24

Designed	D. Macaulay	Date	October 25
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Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
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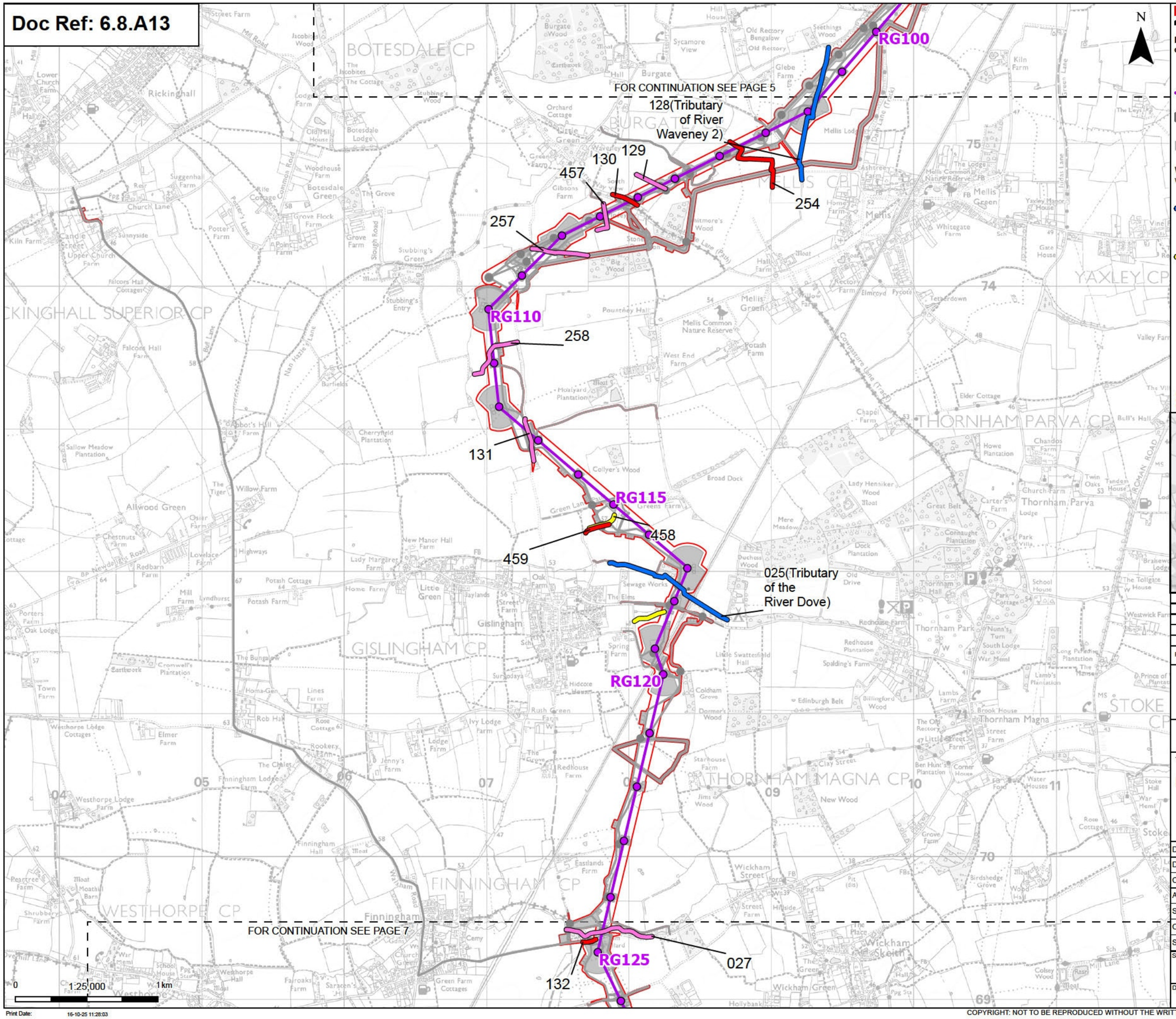

- Order limits
- Sheet index cutline

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
- Surveyed - unsuitable habitat confirmed through field survey
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
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nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 6 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:28:03

Doc Ref: 6.8.A13

RG125

027

132

FOR CONTINUATION SEE PAGE 6

RG130

RG135

028

RG140

030(River Gipping)

FOR CONTINUATION SEE PAGE 8

RG145

133

031

0 1:25,000 1km

Print Date: 16-10-25 11:28:09

N

- Order limits
- Sheet index cutline

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 7 of 24

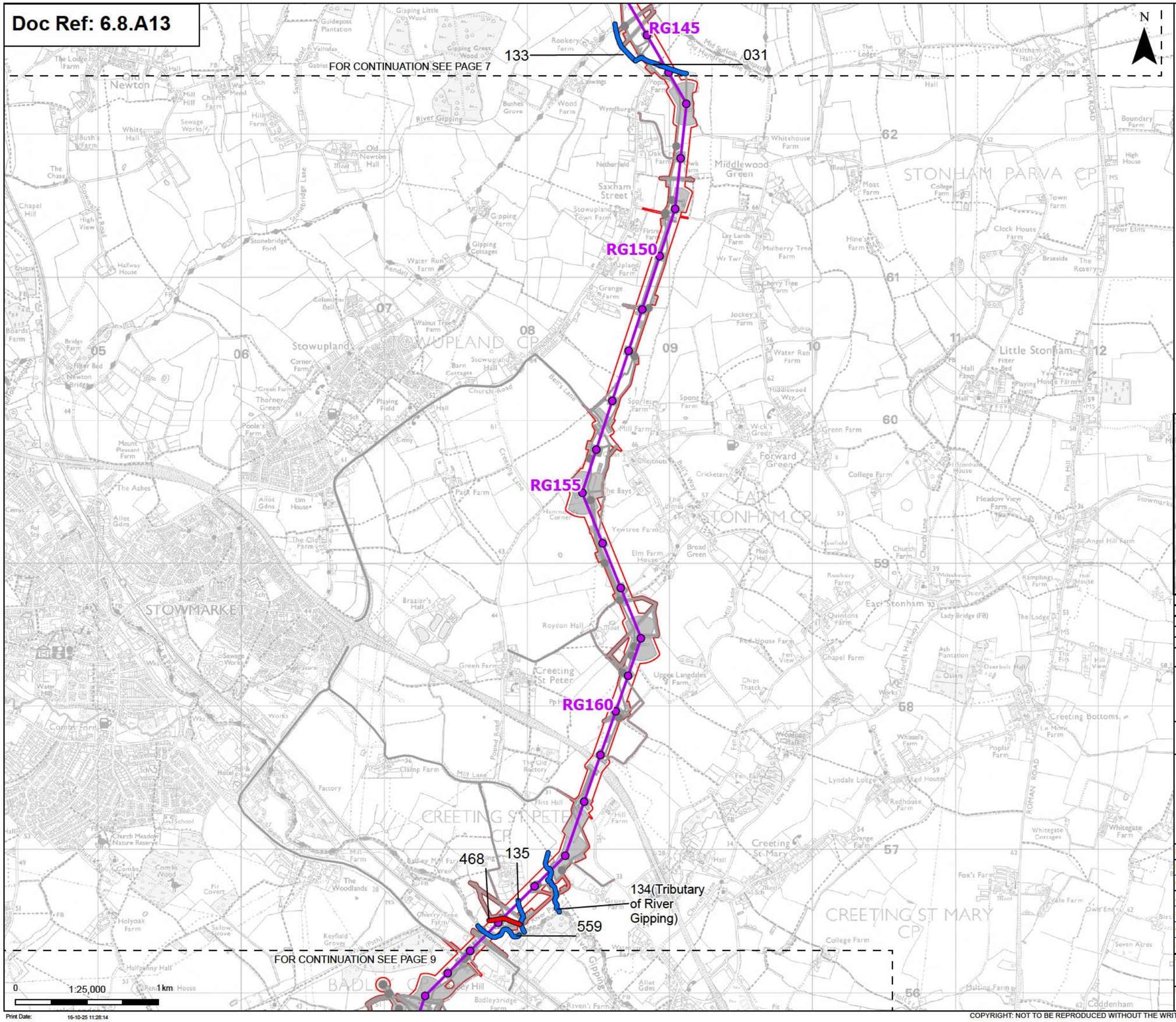
Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Doc Ref: 6.8.A13



- Order limits
- Sheet index cutline

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

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Doc Ref: 6.8.A13

FOR CONTINUATION SEE PAGE 8

032

032(Wattisham Watercourse)

RG170

RG175

033

RG180

297

RG185

034(The Channel)

136(The Channel)

FOR CONTINUATION SEE PAGE 10

137(The Channel)

RG190

N

0 1:25,000 1 km

Print Date: 16-10-25 11:28:20

- Order limits
- Sheet index cutline
- Project section line

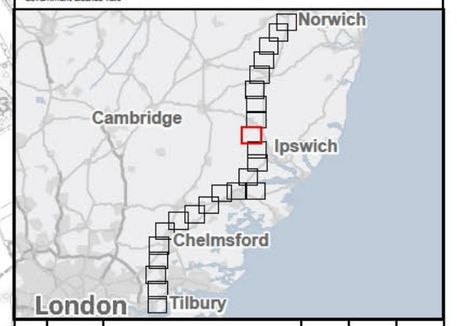
Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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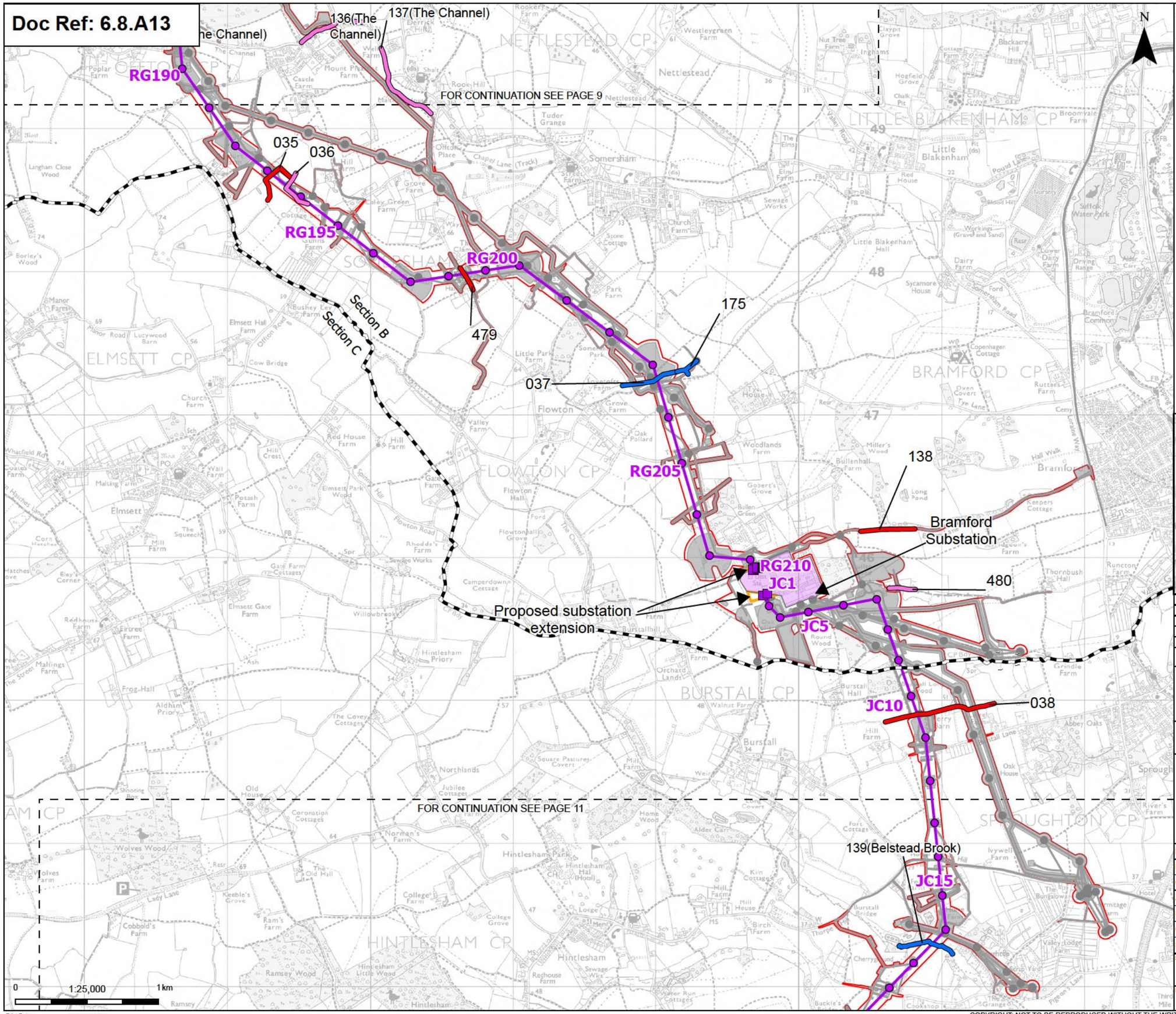
Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Doc Ref: 6.8.A13



Order limits
Sheet index cutline
Project section line

Proposed project design details

- Proposed full line tension gantry
- Proposed low duty gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Bramford Substation
- Bramford Substation Extension
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
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nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
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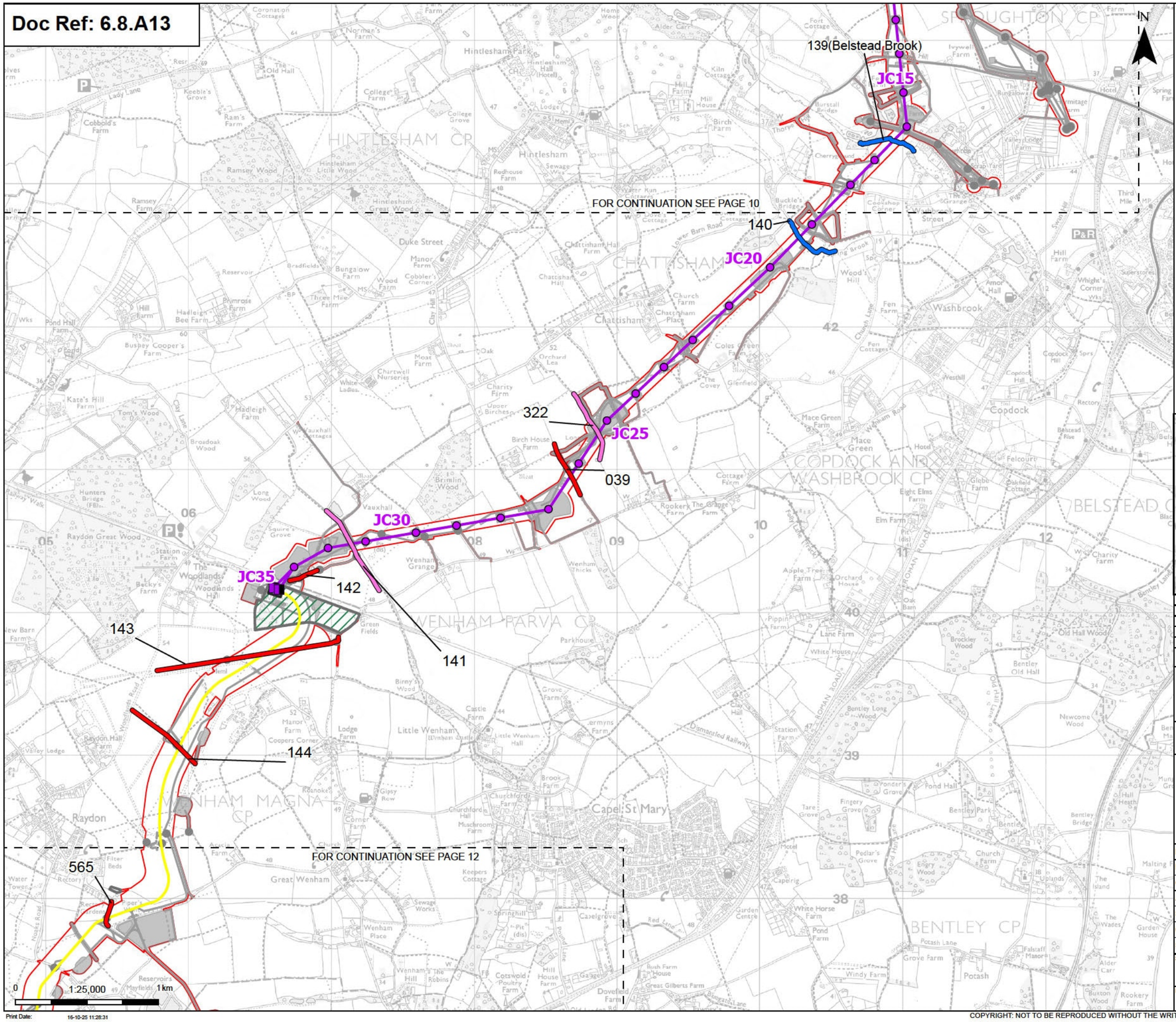
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Doc Ref: 6.8.A13



Order limits

Sheet index cutline

Proposed project design details

- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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nationalgrid

PROJECT: Norwich to Tilbury

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Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
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Suitability Code:	A2	Project Number:	10059280

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Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

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Doc Ref: 6.8.A13

565

145(Tributary of River Brett)

146(Tributary of River Stour)

483

567

588

180

Trenchless Crossing: Higham Road

Trenchless Crossing: River Stour (south part)

Trenchless Crossing: River Stour (north part)

147

041(b)

484

041(a)(River Stour)

043

042(River Stour)

148

569

149

486

045(Black Brook)

150

151

046

Trenchless Crossing: A12 highway crossing

FOR CONTINUATION SEE PAGE 11

FOR CONTINUATION SEE PAGE 14

FOR CONTINUATION SEE PAGE 13

Section C
Section D

0 1:25,000 1km

Print Date: 16-10-25 11:28:37

N

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed underground cable alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - confirmed presence (water vole sighting or latrine identified)
Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
Surveyed - unsuitable habitat confirmed through field survey
Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence
Not surveyed - presence assumed

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
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nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
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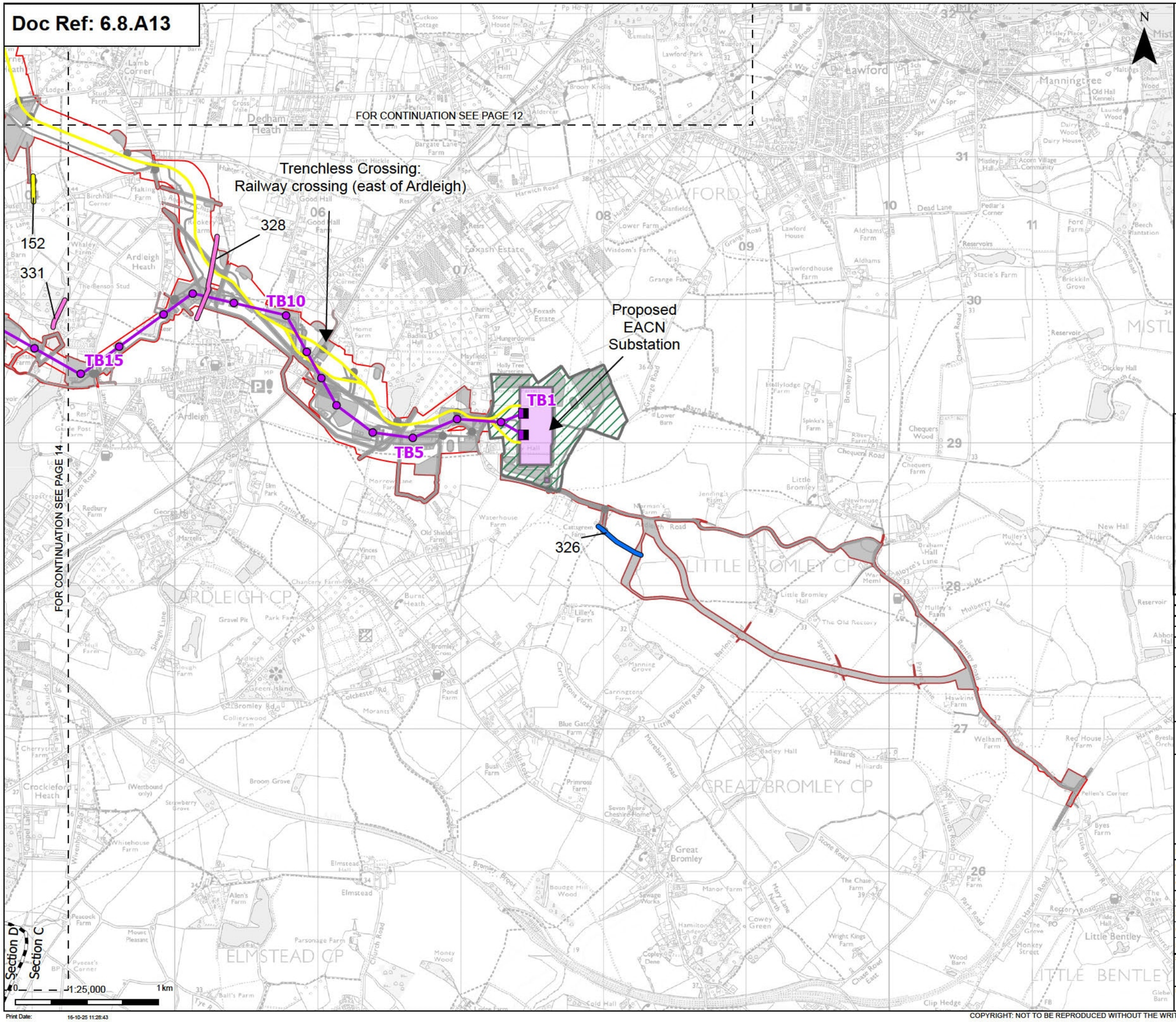
Revision: B

Doc Ref: 6.8.A13



- Order limits
- Sheet index cutline
- Project section line

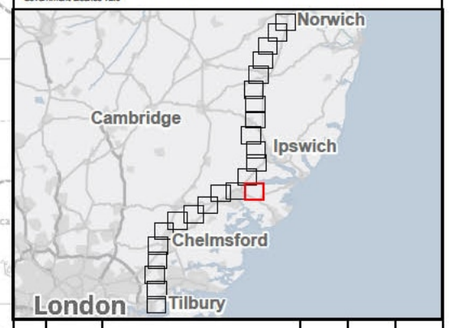
Proposed project design details

- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed DNO Substation
- Proposed East Anglia Connection Node Substation (EACN)
- Environmental area
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 13 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

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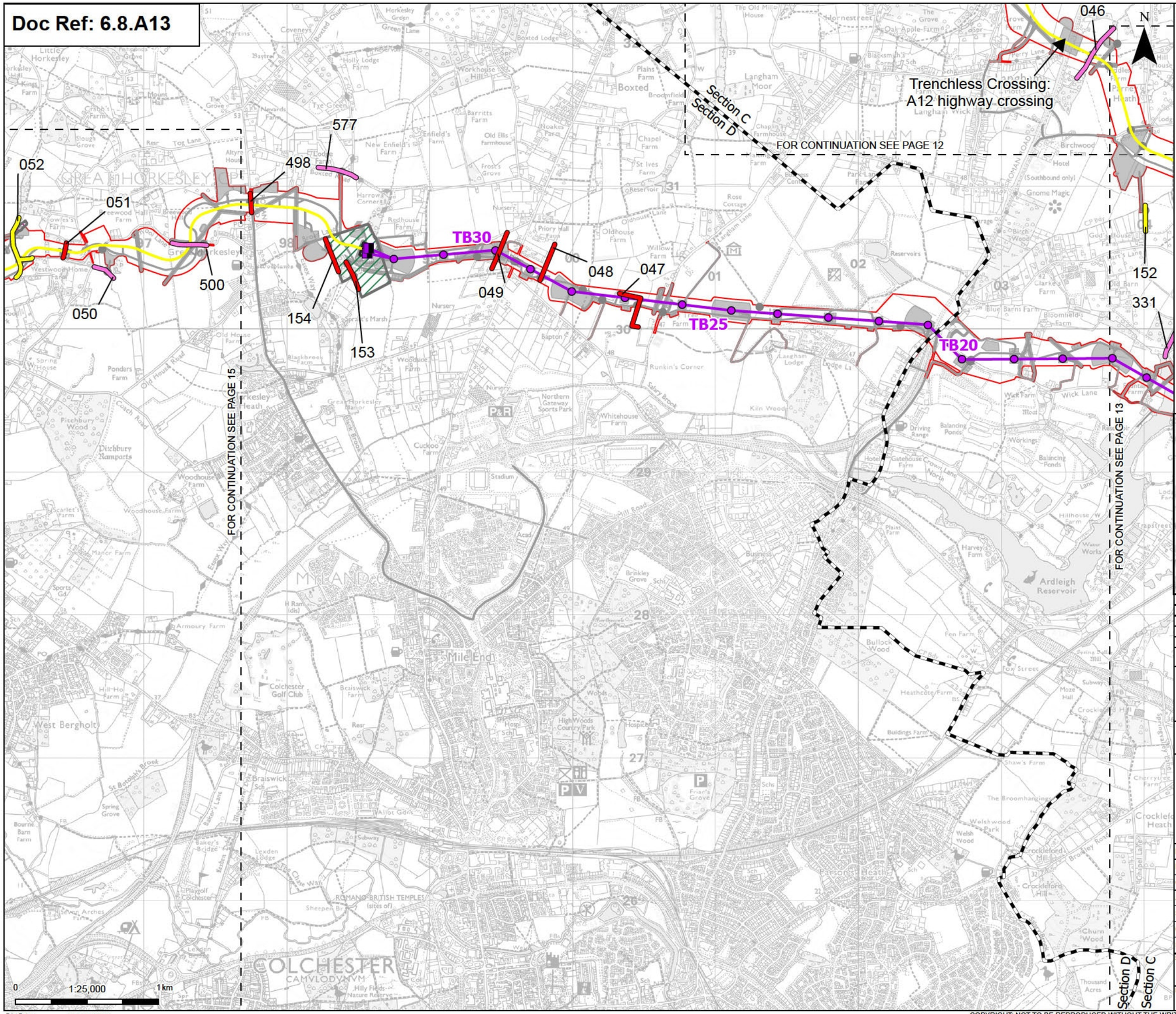
Doc Ref: 6.8.A13



Order limits
Sheet index cutline
Project section line

Proposed project design details

- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
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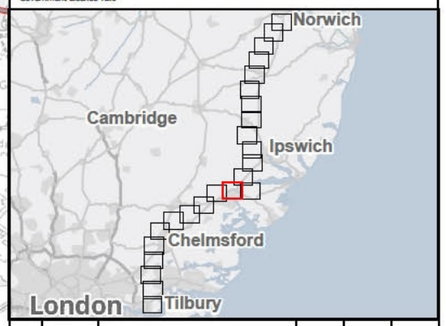

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B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

Print Date: 16-10-25 11:28:48

Doc Ref: 6.8.A13

052
051
155
500
050
TB35
054
053
055(Tributary of River Colne)
TB40
341
056
TB45
183(River Colne)
057
507
349
TB50
352
353
058
TB55
060(Roman river)
357
TB60
059

FOR CONTINUATION SEE PAGE 16

FOR CONTINUATION SEE PAGE 14

0 1:25,000 1 km

Print Date: 16-10-25 11:28:54

N

Order limits
Sheet index cutline

Proposed project design details

- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

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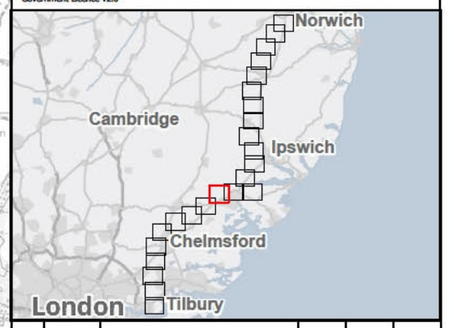

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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

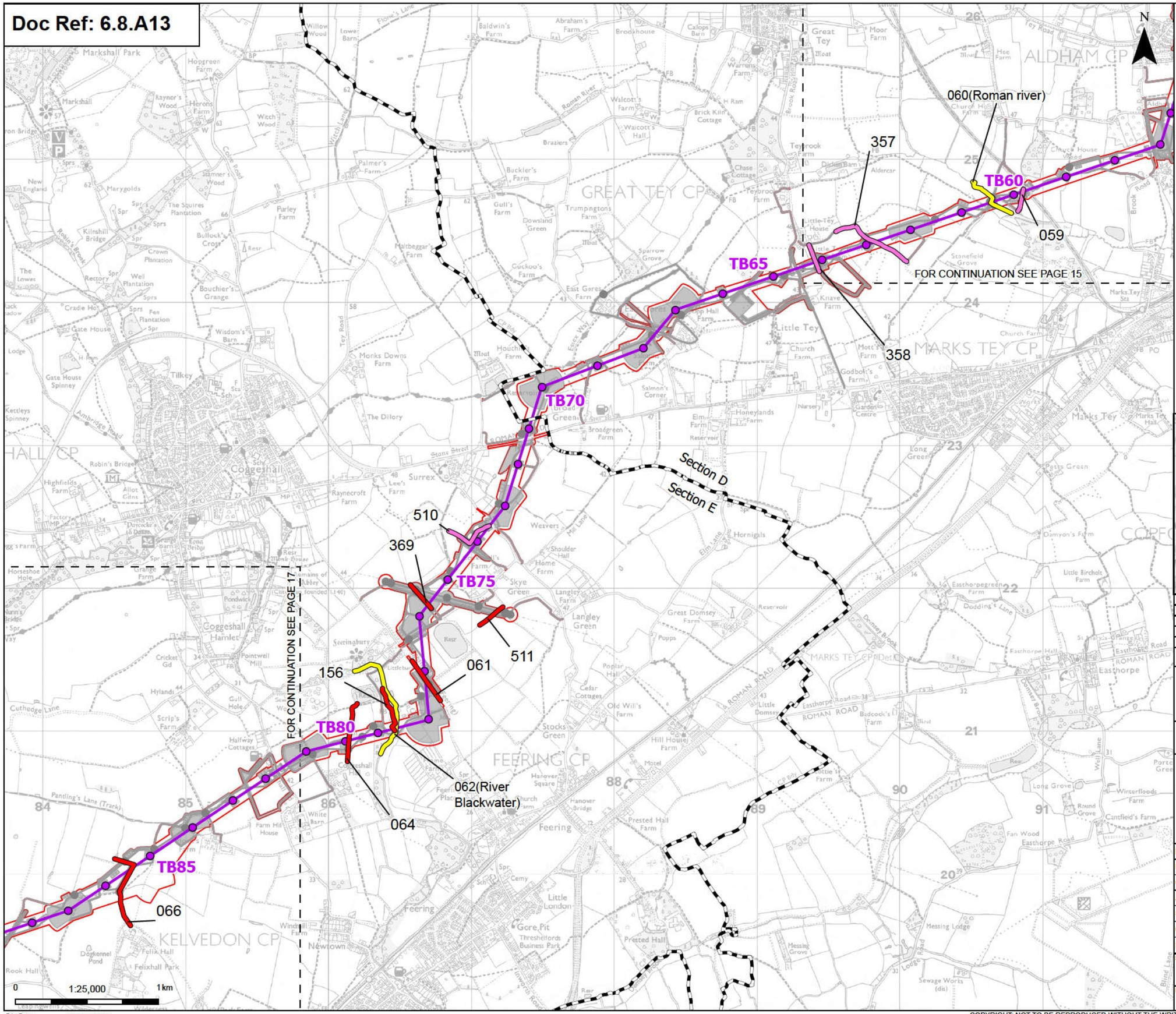
Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 15 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273 Revision: B

Doc Ref: 6.8.A13



Order limits
Sheet index cutline
Project section line

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
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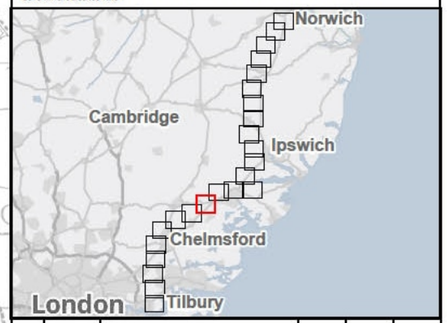

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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 16 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

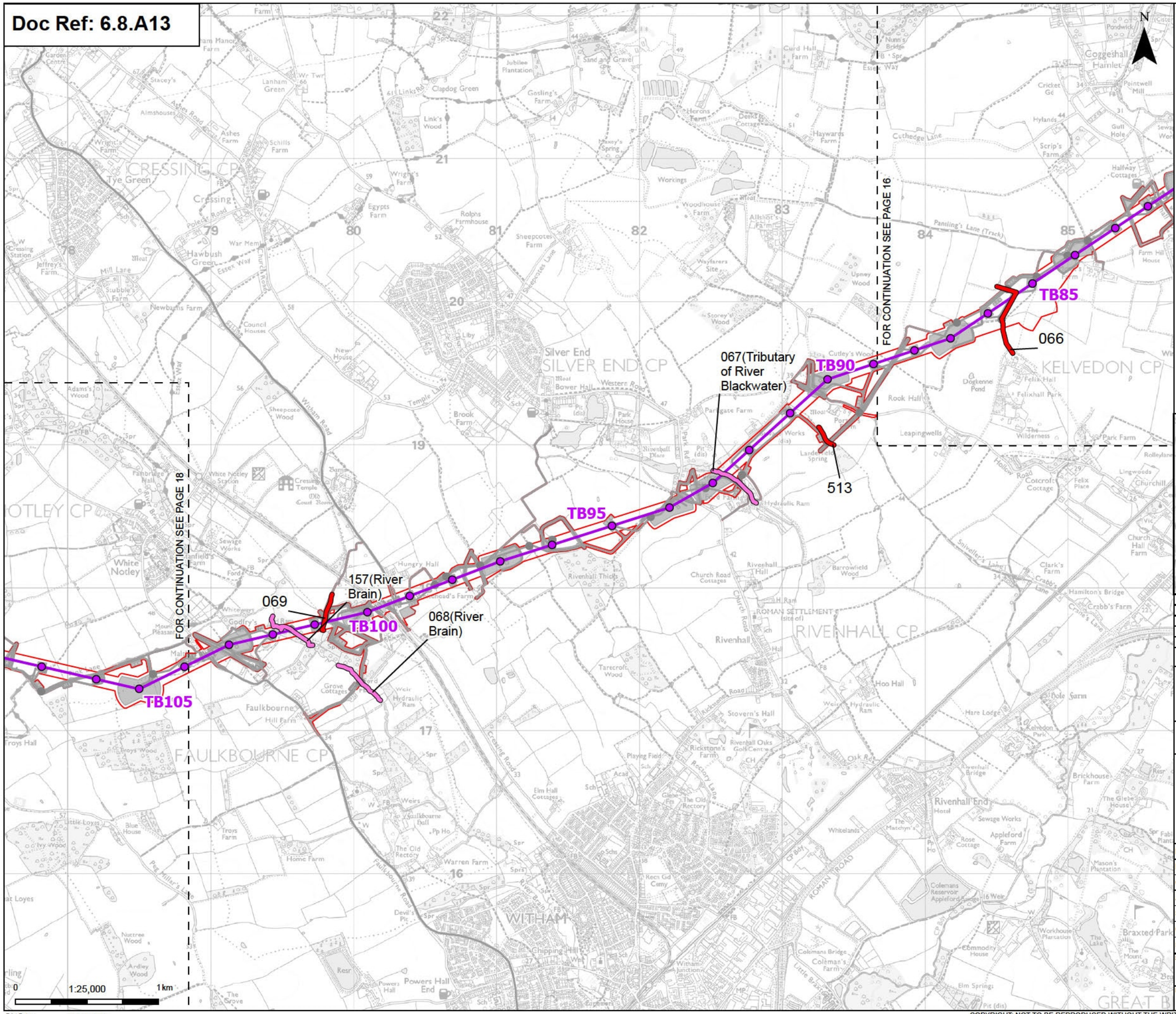
Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:28:59

Doc Ref: 6.8.A13



Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

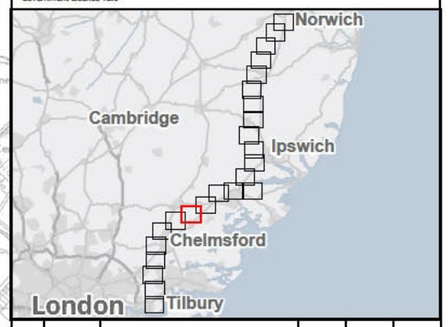
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - unsuitable habitat confirmed through field survey

Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 17 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:29:05

Doc Ref: 6.8.A13

N

071(Tributary of River Ter)

TB115

TB110

TB105

TB120

383

072

519

073(River Ter)

TB125

TB130

074

075

160

TB135

523

161

397

398

FOR CONTINUATION SEE PAGE 17

FOR CONTINUATION SEE PAGE 19

Section E

Section F

0 1:25,000 1 km

Print Date: 16-10-25 11:29:11

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed low duty gantry
Proposed low height pylon location
Proposed standard lattice pylon location
Proposed overhead line alignment
Proposed underground cable alignment
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)
Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
Surveyed - unsuitable habitat confirmed through field survey
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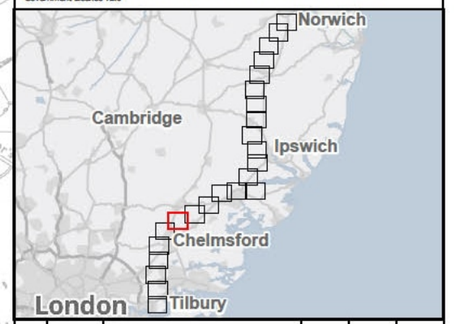


Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

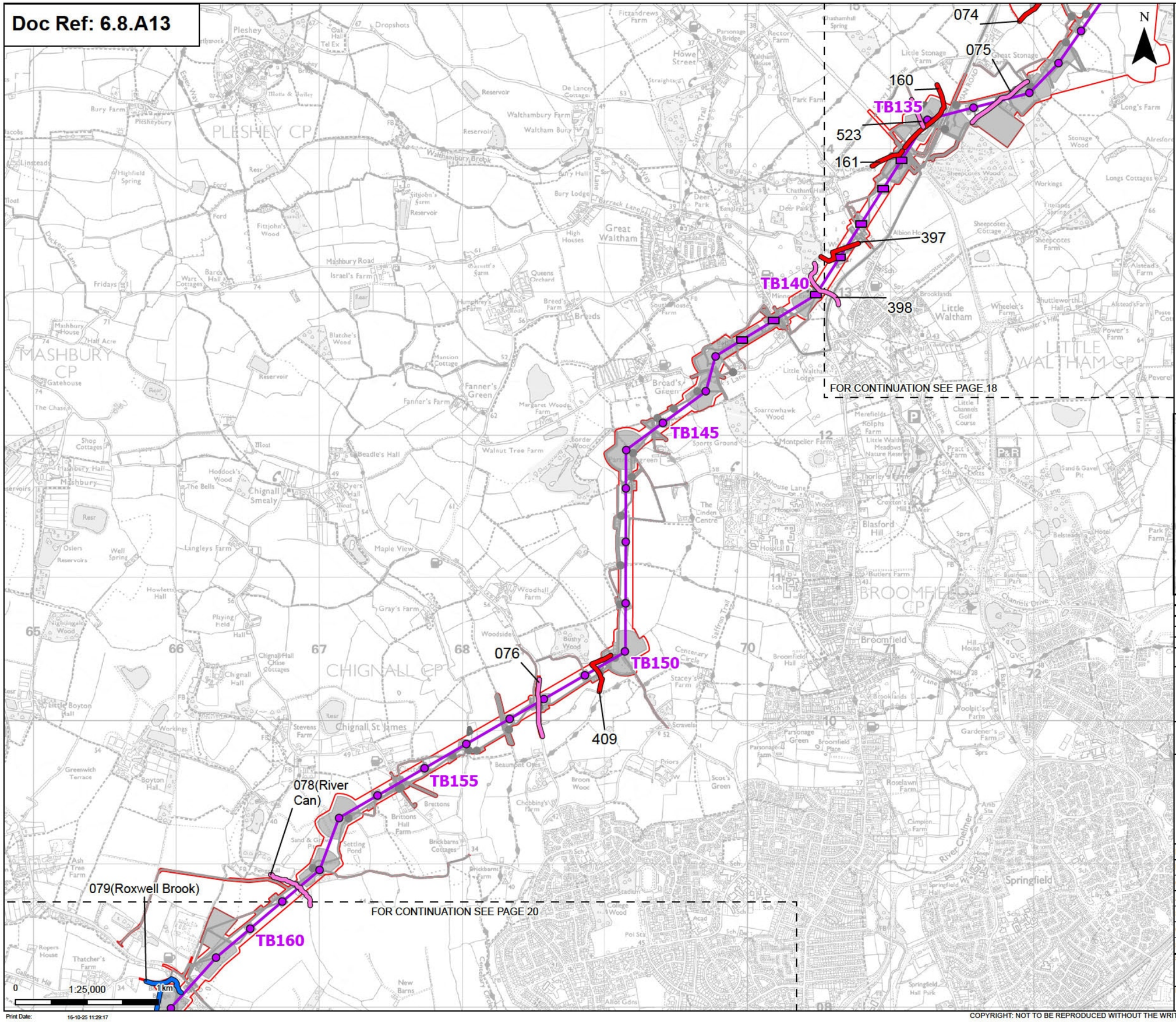
Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 18 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

Doc Ref: 6.8.A13



Order limits

Sheet index cutline

Proposed project design details

- Proposed low height pylon location
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - confirmed presence (water vole sighting or latrine identified)
- Surveyed - unsuitable habitat confirmed through field survey
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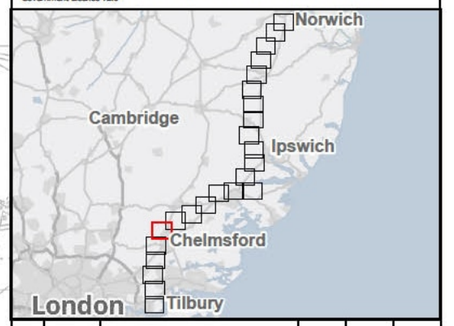

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 19 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273

Revision: B

Print Date: 16-10-25 11:29:17

Doc Ref: 6.8.A13

TB160

FOR CONTINUATION SEE PAGE 19

079(Roxwell Brook)

181

080

081(Tributary of Roxwell Brook)

TB165

082

084

TB170

083

085

086

087

TB175

TB180

088

FOR CONTINUATION SEE PAGE 21

089(Tributary of River Wid)

N

0 1:25,000 1 km

Print Date: 16-10-25 11:29:22

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

Surveyed - confirmed presence (water vole sighting or latrine identified)
Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
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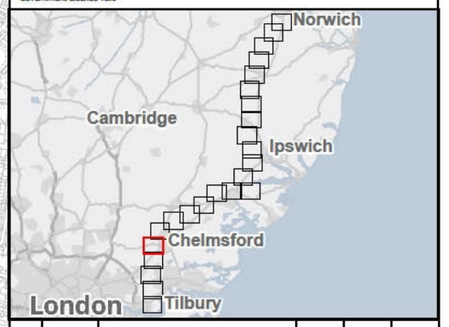

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
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089(Tributary of River Wid)

FOR CONTINUATION SEE PAGE 20

Section F

Section G

090

TB185

091

092

093(River Wid)

TB190

094(Stock Brook)

TB195

095(River Wid)

TB200

097(River Wid)

098(Havering's Grove Brook)

FOR CONTINUATION SEE PAGE 22

TB205

0 1:25,000 1 km

Print Date: 16-10-25 11:29:28

N

- Order limits
- Sheet index cutline
- Project section line

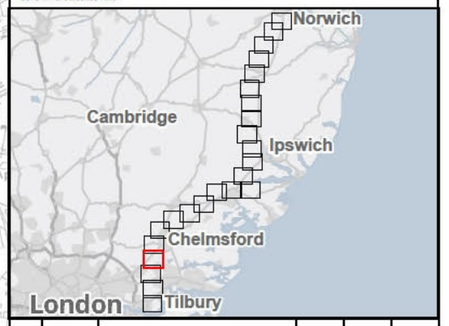
Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
- Surveyed – poor, sub-optimal, or optimal habitat. No field signs identified and presumed absence
- Not surveyed - presence assumed

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 21 of 24

Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
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Scale:	1:25,000	Datum:	AOD
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Suitability Code:	A2	Project Number:	10059280

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098(Havering's Grove Brook)

097(River Wid)

TB205

FOR CONTINUATION SEE PAGE 21

TB210

099

100(Havering's Grove Brook)

TB215

TB220

102

103

538

TB225

FOR CONTINUATION SEE PAGE 23

0 1:25,000 1 km

Print Date: 16-10-25 11:29:33

N

- Order limits
- Sheet index cutline

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

- Surveyed - potential presence (no sighting or latrine to confirm presence, but other field signs identified)
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nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
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Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
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Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

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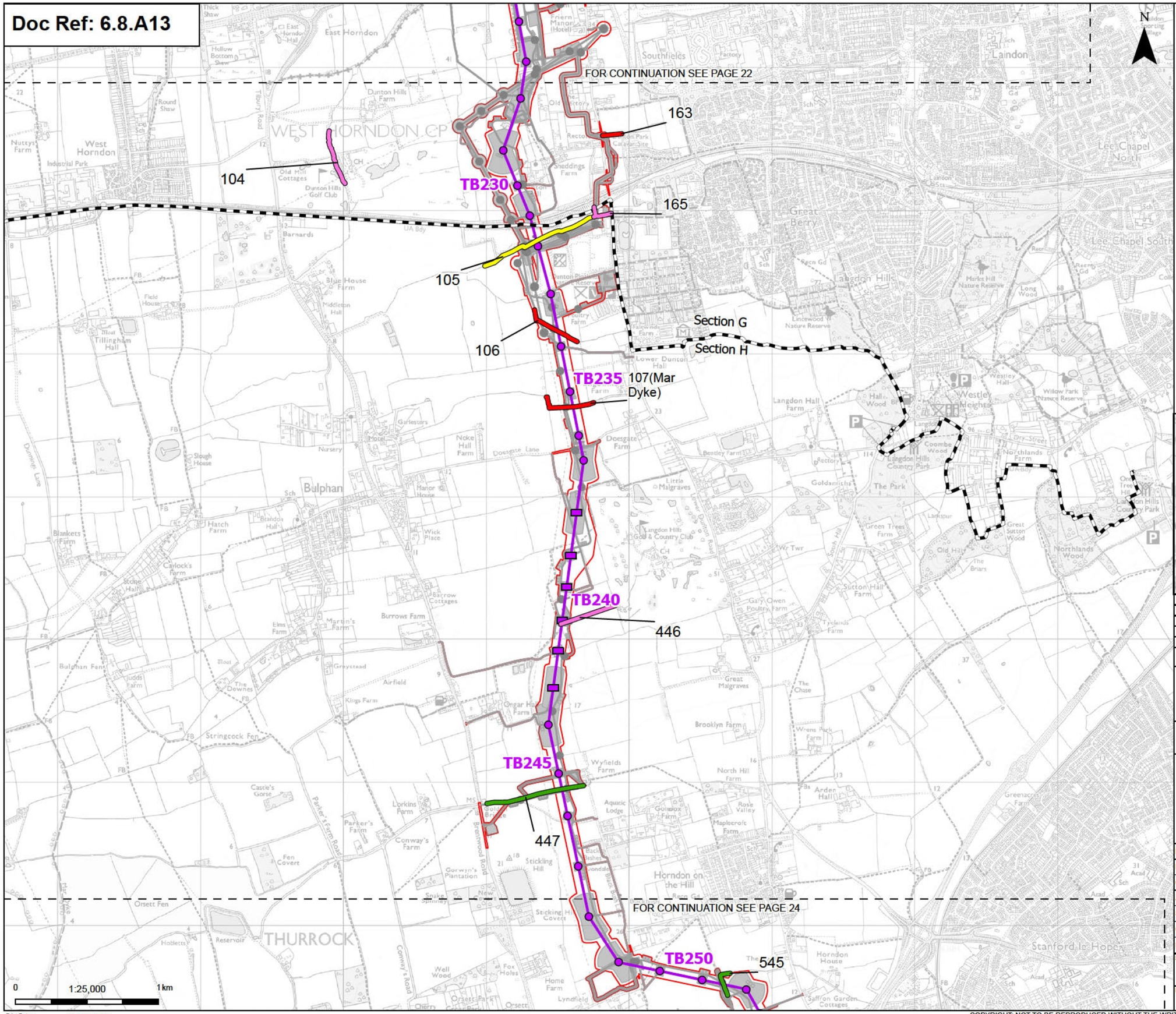

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed low height pylon location
Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)

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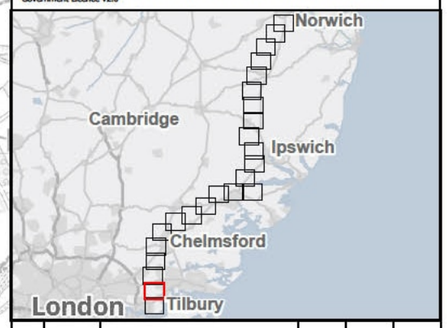

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nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
Page 23 of 24

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Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273 Revision: B

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Doc Ref: 6.8.A13

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TB250
545
TB255
108
TB260
Proposed Tilbury North Substation
YYJ115
ZB20
YYJ120
ZB15RA
166
ZB10
YYJ130

N

Order limits
Sheet index cutline

Proposed project design details
- Proposed full line tension gantry
- Proposed low duty gantry
- Existing pylon (modify)
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed Tilbury North Substation
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation

Other temporary and permanent construction and operational works

Watercourses (labelled by watercourse ID)
- Surveyed - unsuitable habitat confirmed through field survey
- Not surveyed - presence assumed

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the proposed alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Rev	Date	Description	Drawn	Check	Approv
B	Oct 2025	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure A8.13.3 - Ecology and Biodiversity - Water Vole Field Survey Results
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Designed	D. Macaulay	Date	October 25
Drawn	K. Fischer	Date	October 25
Checked	A. Fell	Date	October 25
Approved	K. Burrows	Date	October 25
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00273
Revision: B

0 1:25,000 1 km

Print Date: 16-10-25 11:29:45

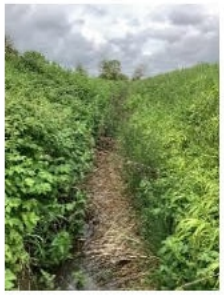
Annex B. Otter and Water Vole Survey Results for Impacted Watercourses

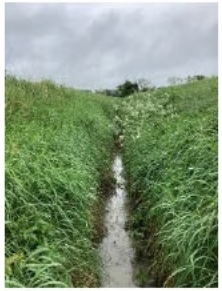
Table A8.13.9 Otter and water vole survey results for impacted watercourses

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	1	08/08/23, 14/05/24		None	No signs recorded	Sub-optimal habitat	Latrines, burrows, footprints 	Confirmed presence
A	2	08/08/23, 01/05/25~~.~~		None	No signs recorded	Poor habitat	None	Confirmed absence~~Unknown (1 survey)~~

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	3	08/08/23, 14/05/24		None	No signs recorded	Sub-optimal Habitat	Considered absent: no further survey required	Confirmed absence
A	4	15/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	5	15/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	6	15/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	7	15/05/24, 15/08/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
A	8	15/05/24, 15/08/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	9	15/05/24		None	No signs recorded	Sub-optimal habitat	Latrine, burrows 	Confirmed presence
A	10	16/05/24		None	No signs recorded	Sub-optimal habitat	Latrine, burrow, feeding station 	Confirmed presence

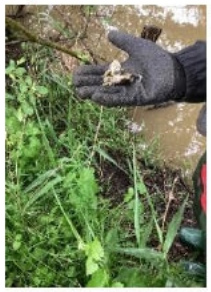
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
A	11	16/05/24, 14/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
A	12	16/05/24, 14/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	13	08/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	14	09/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	16	16/09/24, 30/04/25	[redacted]			Sub-optimal habitat	Potential water vole burrow.	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
			[redacted]					
A	17	09/08/23, 30/04/25		None	No signs recorded	Sub-optimal habitat	~~None~~Latrine and feeding station 	~~Unknown (1 survey)~~Confirmed presence
A	18	09/08/23, 16/05/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

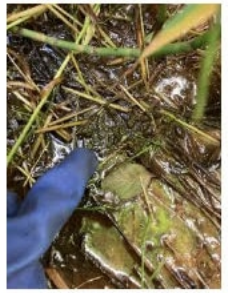
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	19	09/08/23, 17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	22	17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	116	14/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	117	17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	118	14/05/24, 15/08/24		Footprints 	Confirmed presence	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
A	119	15/05/24	None	None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	120	14/05/24, 15/08/24		Spraint 	Confirmed presence	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

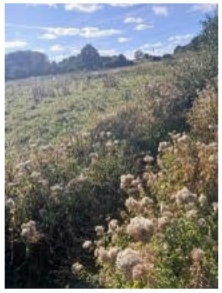
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	123[38]	21/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	124[39]	22/05/24		Spraints 	Confirmed presence	Sub-optimal habitat	Latrine 	Confirmed presence

[38] This watercourse is no longer impacted by the Project.

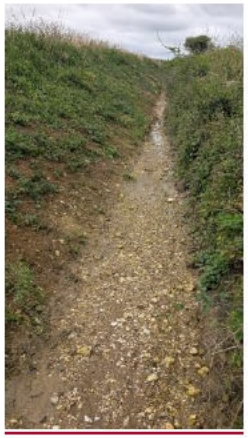
[39] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	126 (a)[40]	22/05/24		Spraints 	Confirmed presence	Optimal habitat	Latrine, feeding stations.  	Confirmed presence
A	126 (b)	22/05/24	No image provided.	Spraints	Confirmed presence	Optimal habitat	Latrine, feeding stations.	Confirmed presence
A	178	14/05/24, 15/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

[40] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 126 (a) and 126 (b).

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	179	17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
A	182	16/09/24		No signs but landowner showed a recent photograph of otter in the stream.	Confirmed presence	Sub-optimal habitat	Latrine 	Confirmed presence
A	201 (a)[41]	16/09/24		None	No signs recorded	Optimal habitat	Latrines, burrows, feeding station 	Confirmed presence

[41] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 201 (a) and 201 (b).

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	201 (a)[42]	16/09/24	No image provided.	None	No signs recorded	Optimal habitat	Latrines, burrows, feeding station	Confirmed presence
A	212	19/05/25, 04/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
A	224	01/05/25, 10/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence

[42] During 2025 surveys, this watercourse was found to be two linked watercourses and now separated into 201 (a) and 201 (b).

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	240	30/04/25, 10/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence
A/B	125	21/05/24, 14/08/24		Otter signs confirmed at nearby connected watercourses 124 and 126.	Confirmed presence	Optimal habitat	Potential burrow	Potential presence
B	25	22/05/24, 16/10/24		None	No signs recorded	Sub-optimal habitat	Latrine 	Confirmed presence
B	27	10/08/23, 29/04/25~~.~~		None	No signs recorded	Sub-optimal habitat	None	~~Unknown (1 survey)~~Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	28	23/05/24, 24/09/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
B	30	24/09/24		None	No signs recorded	Optimal habitat	Latrine, burrow, feeding station 	Confirmed presence
B	31	26/09/23, 23/05/24		None	No signs recorded	Optimal habitat	Latrine, burrow, feeding station 	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
B	32	03/06/24	[redacted]			Sub-optimal habitat	Latrines, burrows, feeding station  	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	33	03/06/24, 25/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
B	34	04/06/24, 25/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
B	35	26/09/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
B	36	04/06/24, 25/09/24		None	No signs recorded	Optimal habitat	Considered absent: no further survey required	Confirmed absence

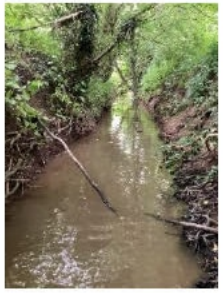
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	37	26/09/23, 04/06/24		None	No signs recorded	Optimal habitat	Latrine, feeding stations 	Confirmed presence
B	38	05/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
B	127[43]	21/05/24, 14/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

[43] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	128	22/05/24, 13/08/24		None	No signs recorded	Poor habitat	Latrine, burrow 	Confirmed presence
B	129[44]	22/05/24, 13/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
B	131	22/05/24, 13/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

[44] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	132	20/06/24, 31/10/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
B	133	23/05/24, 24/09/24		None	No signs recorded	Sub-optimal habitat	Latrine, burrows, feeding station. 	Confirmed presence
B	134	24/09/24		None	Confirmed absence	Optimal habitat	Latrine, burrows, feeding station 	Confirmed presence

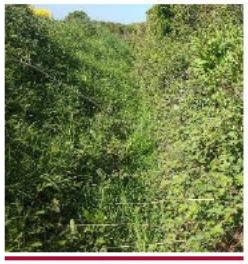
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	135	24/09/24		None	Confirmed absence	Optimal habitat	Latrine, burrows, feeding station 	Confirmed presence
B	136	04/06/24, 25/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
B	137[45]	04/06/24, 17/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

[45] This watercourse is no longer impacted by the Project.

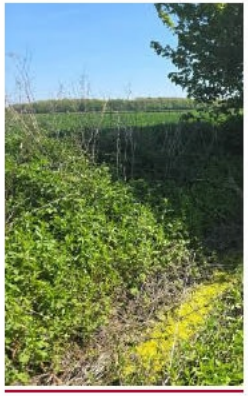
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	138[46]	17/09/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
B	249	30/04/25, 10/07/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence

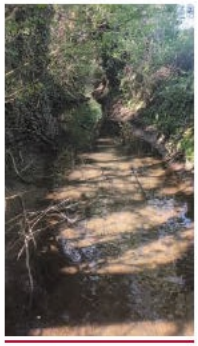
[46] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	251	29/04/25, 10/07/25	[redacted]			Optimal habitat	None	Confirmed absence
B	254	16/10/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	257	29/04/25, 09/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence
B	258	29/04/25, 09/07/25	 	None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	297	29/04/25, 09/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence
B	455	29/04/25, 10/07/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence
B	457	29/04/25, 09/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	458	28/04/25, 09/07/25		None	No signs recorded	Sub-optimal habitat	Potential run / pathway	Potential presence
B	459	28/04/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
B	468	29/04/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
B	479	29/04/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

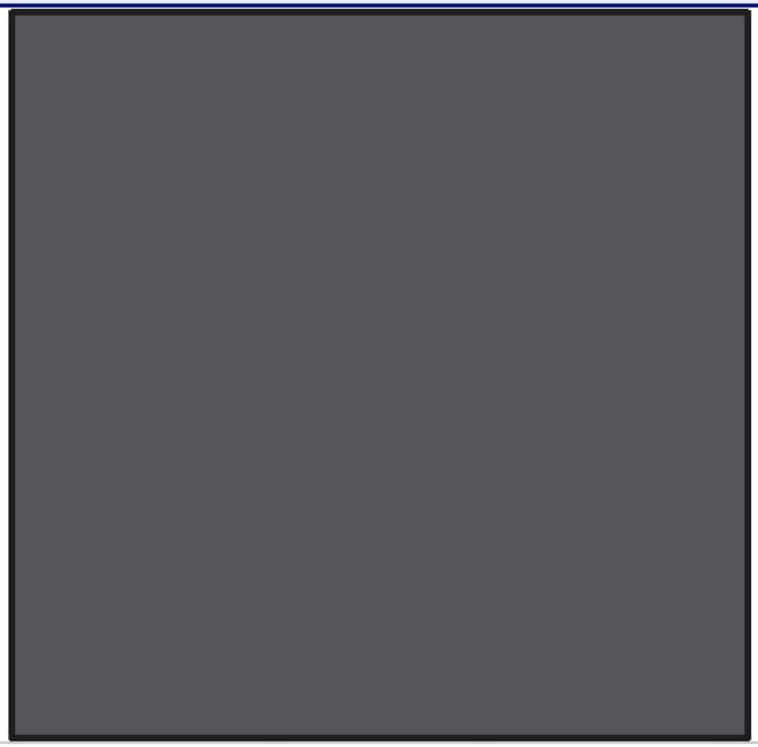
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	480	29/04/25, 09/07/25		None	No signs recorded	Optimal habitat	None	Confirmed absence
B	556	29/04/25, 09/07/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence
B	558	19/05/25, 04/08/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	39	26/09/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
C	41(a)	19/06/24		Spraint 	Confirmed presence	Sub-optimal habitat	Sighting, latrine, feeding station  	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	41(b)	10/08/23, 19/06/24		None	No signs recorded	Optimal habitat	Potential feeding stations 	Potential presence
C	42	19/06/24, 26/09/24		No signs at this location but otter signs identified further along this river at watercourse 41(a).	Confirmed presence	Optimal habitat	Latrine, feeding station  	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	43	30/04/25, 08/07/25		None	No signs recorded	Sub-Optimal habitat	Feeding station, potential burrow	Potential presence
C	45	20/06/24, 18/09/24		Spraints 	Confirmed presence	Poor habitat	Considered absent: no further survey required.	Confirmed absence
C	46	18/09/24, 30/04/25		None	No signs recorded	Poor habitat	None	Confirmed absence~~Unknown (1 survey)~~

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	139	05/06/24, 17/09/24	[redacted]			Sub-optimal habitat	Latrines, burrow 	Confirmed presence
C	140	17/09/24, 29/04/25	[redacted]			Sub-optimal habitat~~Poor habitat~~	Latrine, feeding station~~None~~	Confirmed presence~~Unknown (1 survey)~~

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
C	141	05/06/24, 26/09/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
C	142	05/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	143	06/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
C	144	06/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
C	145	05/06/24, 26/09/24	[redacted]			Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	146	06/06/24, 26/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
C	147	06/06/24, 26/09/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
C	148	19/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
C	150	20/06/24, 18/09/24		None	No signs recorded	Sub-optimal habitat	Potential feeding station	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	151[47]	20/06/24, 18/09/24		Spraint, feeding remains  	Confirmed presence	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

[47] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	152	30/04/25, 08/07/25		None	No signs recorded	Sub-Optimal habitat	Potential pathway	Potential presence
C	322	19/05/25, 04/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
C	326	30/04/25		None	No signs recorded	Optimal habitat	Latrine, burrows, feeding station.	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
							pathways 	
C	328	30/04/25, 08/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence
C	483	06/06/24, 26/09/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	484	30/04/25		None	No signs recorded	Unsuitable habitat	None	Confirmed absence, habitat Unsuitable habitat
C	486	20/05/25, 05/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
C	565	19/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

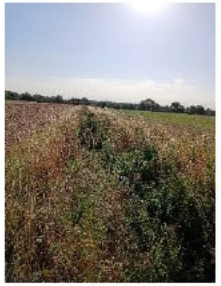
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	567	30/04/25, 08/07/25		None	No signs recorded	Poor habitat	None	Confirmed absence
C	569	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
C	Ardleigh reservoir	Incidental finding 05/08/25				Not Applicable (N/A)	N/A	N/A

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	47	20/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
D	48	20/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required.	Confirmed absence
D	49	20/06/24, 18/09/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required.	Confirmed absence
D	50	19/06/24, 20/05/25		None	No signs recorded	Poor habitat	None	Confirmed absence~~Unknown (1 survey)~~
D	51	10/08/23	No photo	None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	52	11/08/23, 20/06/24		None	No signs recorded	Poor habitat	Potential burrow, footprints  	Potential presence
D	53[48]	11/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

[48] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	54	26/09/23, 13/05/24		Spraint, potential otter path  	Confirmed presence	Optimal habitat	Potential burrows 	Potential presence
D	55	14/05/24, 12/08/24	No photo.	Otter spraint.	Confirmed presence	Optimal habitat	Considered absent: no further survey required	Confirmed absence
D	56	19/06/24, 19/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	57	14/05/24, 20/05/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence~~Unknown (1 survey)~~
D	58	14/05/24, 13/08/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
D	59	14/05/24, 13/08/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

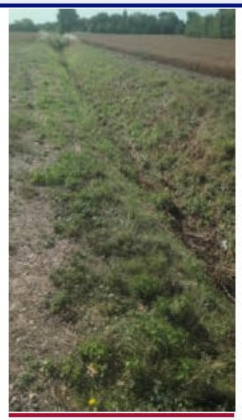
Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	60	14/05/24, 13/08/24		Spraint 	Confirmed presence	Optimal habitat	Potential footprints	Potential presence
D	153	20/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
D	154	20/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	155	19/06/24, 19/09/24		None	Confirmed presence	Poor habitat	Considered absent: no further survey required	Confirmed absence
D	[redacted]	29/08/24	[redacted]			Optimal habitat	Latrine, burrow 	Confirmed presence

[49] This watercourse is no longer impacted by the Project. Potential holt O7 is also not impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
D	341	20/05/25, 05/08/25		None	No signs recorded	Sub-Optimal habitat	None	Confirmed absence
D	349	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
D	352	21/05/25, 05/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	353	21/05/25, 06/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
D	357	21/05/25, 06/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
D	358	21/05/25, 05/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
D	498	21/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
D	500	20/05/25, 04/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
D	507	20/05/25, 05/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
D	577	30/04/25, 11/07/25		None	No signs recorded	Sub-optimal habitat	None	Confirmed absence
E	61	14/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E	62	17/08/23 15/05/24	[redacted]			Optimal habitat	Potential burrows.	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
E	64	17/08/23, 18/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E	66	18/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
E	67	15/05/24, 13/08/24		Potential otter feeding remains	Potential presence	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
E	68	17/08/23, 15/05/24		Potential slide, grooming area 	Potential presence	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
E	69	18/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
E	71	16/05/24, 14/08/24		None	No signs recorded	Sub-optimal habitat	Potential feeding stations	Potential presence
E	156[50]	15/05/24, 13/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E	157[51]	15/05/24, 14/08/24		Spraint 	Confirmed presence	Optimal habitat	Considered absent: no further survey required	Confirmed absence

[50] This watercourse is no longer impacted by the Project.

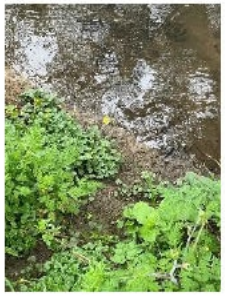
[51] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
E	383	20/05/25	No images provided	None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E	385	N/A				Unsuitable habitat	N/A	N/A
E	510	21/05/25, 06/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
E	511	21/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E	513	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
E and F	72	16/05/24, 14/08/24		None	No signs recorded	Sub-optimal habitat	Potential burrows	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	73	28/09/23, 16/05/24		None	No signs recorded	Optimal habitat	Potential footprints, feeding stations	Potential presence
F	74	16/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	75	16/05/24, 15/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
F	76	20/05/24, 15/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	78	20/05/24, 15/08/24	[redacted]			Optimal habitat	None	Confirmed absence
F	79	21/05/24		Spraint, footprint.  	Confirmed presence	Optimal habitat	Latrine, feeding station 	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	80	21/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	81	09/04/24, 28/08/24		Otter spraints identified 	Confirmed presence	Sub-optimal habitat	Potential footprints 	Potential presence
F	82	17/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	83	17/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	84	17/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	85	21/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	86	21/05/24, 28/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	87	18/08/23, 22/05/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
F	88	18/08/23		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	89	18/08/23, 22/05/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
F	90	22/05/24, 28/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	91[52]	22/05/24, 28/08/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence
F	160	17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	161	17/05/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

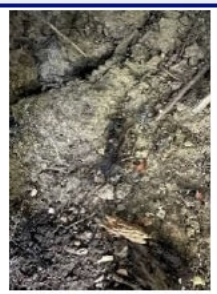
[52] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	181	28/08/24, 20/05/25		None	No signs recorded	Optimal habitat	None	~~Unknown (1 survey)~~Confirmed absence
F	397	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	409	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
F	519	20/05/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	523	20/05/25 06/08/25		None	No signs recorded	Poor habitat	None	Confirmed absence
G	93	23/05/24, 10/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
G	94	23/05/24, 10/09/24		Sighting, spraint, footprint  	Confirmed presence	Optimal habitat	Considered absent: no further survey required	Confirmed absence
G	95	23/05/24, 10/09/24		None	No signs recorded	Sub-optimal habitat	Potential feeding station 	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
G	97	24/05/24, 11/09/24				Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence
G	98	24/05/24, 11/09/24				Sub-optimal habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
								
G	99	03/06/24, 29/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
G	100	03/06/24, 29/08/24		None	No signs recorded	Sub-optimal habitat	Potential burrows, feeding stations 	Potential presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
G	102	04/06/24, 29/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
G	103	04/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
G	163	11/09/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
G and H	165	11/09/24, 22/05/25		None	No signs recorded	Sub-optimal habitat	None	~~Unknown (1 survey)~~Confirmed absence
H	105[53]	06/06/24, 16/08/24		None	No signs recorded	Sub-optimal habitat	Potential footprints 	Potential presence
H	106	06/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

[53] This watercourse is no longer impacted by the Project.

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
H	107	06/06/24, 29/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
H	108	07/06/24	None	None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
H	166	05/06/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
H	446	22/05/25, 07/08/25		None	No signs recorded	Optimal habitat	None	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
H	447	22/05/25		None	No signs recorded	Optimal habitat	None	Unknown (1 survey) and therefore assumed
G	538	22/05/25 07/08/25		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
H	545	22/05/25		None	No signs recorded	Poor habitat	None	Unknown (1 survey) and therefore assumed

Table A8.13.10 Otter holts or resting places

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description
[redacted]							

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description

[54] This watercourse no longer crossed by the Project and potential holt O3 is also not impacted by the Project.

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description

[55] This feature was re-surveyed in 2025 and no further otter signs were identified, O4 did not have suitability for use as a natal holt and was not monitored.

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description
							

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description

[56] This watercourse no longer crossed by the Project and potential holt O14 is also not impacted by the Project.

[57] This watercourse no longer crossed by the Project and potential holt O7 is also not impacted by the Project.

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description

Project Section	ID	Watercourse ID	Approximate Grid Reference	Images	Type	Otter Evidence	Description

Annex C. Otter and Water Vole Survey Results for Watercourses Which are No Longer Impacted

Table A8.13.11 Otter and water vole survey results for watercourses no longer impacted

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
A	177	21/05/24, 14/08/24		Potential footprint 	Potential presence	Sub-optimal habitat	Potential feeding stations, footprints  	Potential presence
B	23	09/08/23	N/A	N/A	No signs recorded	Unsuitable habitat. No longer affected due to design change	N/A	Confirmed absence
B	24	22/05/24, 13/08/24		None	No signs recorded	Sub-optimal habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
B	26	09/08/23, 22/05/24		None	No signs recorded	Optimal habitat	Potential feeding stations 	Potential presence
B	128(b)	22/05/24, 13/08/24		None	Confirmed absence	Sub-optimal habitat	Latrine 	Confirmed presence
B	175	04/06/24		Unknown	No signs recorded	Optimal habitat	None found but watercourse is direct continuation of confirmed water vole ditch (37)	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	40	10/08/2023		None	No signs recorded	Poor habitat	None	Unknown (1 survey)
C	180	26/09/24		None	No signs recorded	Optimal habitat	Latrine, feeding station  	Confirmed presence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	149	19/06/24, 18/09/24		Spraint, potential resting places 	Confirmed presence	Sub-optimal habitat	Potential feeding station 	Potential presence
C	331	15/10/24	[redacted]			Unsuitable habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
C	332	22/10/24		None	No signs recorded	Poor habitat	None	Unknown (1 survey)
E	158	15/05/24, 14/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	399	14/10/24. ~~2nd visit planned for 2025.~~		None	No signs recorded	Sub-optimal habitat	None	Unknown (1 survey)
H	167	17/06/24, 12/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Project Section	Watercourse ID	Survey Dates	Image	Otter Field Signs Observed	Otter Presence	Water Vole Habitat suitability	Water Vole Field Signs Observed	Water Vole Presence
E	158	15/05/24, 14/08/24		None	No signs recorded	Unsuitable habitat	Considered absent: no further survey required	Confirmed absence
F	399	14/10/24. 2nd visit planned for 2025.		None	No signs recorded	Sub-optimal habitat	None	Unknown (1 survey)
H	167	17/06/24, 12/09/24		None	No signs recorded	Poor habitat	Considered absent: no further survey required	Confirmed absence

Annex D. Otter Camera Monitoring

Table A8.13.12 Otter camera monitoring dates and limitations

Project Section	Watercourse ID and Holt Number	Holt number	Duration of Monitoring	Limitations
		O1	13/08/2025 to 11/09/2025	None reported.
		O2	09/07/2025 to 15/08/2025	Due to access constraints the camera could not be deployed facing the holt, it was deployed facing the area next to the cavity. Otter presence would have been recorded (if present).
		O12	10/07/2025 to 11/08/2025	Vegetation obscured the camera on occasion but O12 remained visible.
		O3	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O4	N/A	N/A Not monitored – feature not suitable as a holt
		O5	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O6	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O13	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O7	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O8	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O9	21/05/2025 to 07/07/2025	Roe deer *Capreolus capreolus* knocked the camera on 13/06/2025 and the feature was no longer in focus. Otter presence and movement towards feature could still be recorded.
		O10	21/05/2025 to 06/07/2025	Vegetation obscured the camera on occasion but O10 was visible.

Project Section	Watercourse ID and Holt Number	Holt number	Duration of Monitoring	Limitations
[redacted]		O14	N/A	N/A Not monitored – potential holt not impacted by the Project.
		O11	22/05/2025 to 07/07/2025	Vegetation obscured the camera on occasion but O11 was visible.

Table A8.13.13 Otter camera monitoring results

Project Section	Watercourse ID	Holt Number	Number of Otter	Summary of Otter Behaviour	Incidental Sightings of Note (Other Species Using Holt)	Date of Record and Time	Conclusion from Evidence
[redacted]		O1	0	Otter investigating trail camera and entering the water.	None recorded.	09/09/2025, 05:20AM	**One otter investigated the camera and entered the water, no signs of otter using the resting site.**
		O2	0	None recorded.	A badger was observed foraging around the potential holt on several occasions.	N/A	**No signs of otter using the resting site.**
		O12	0	None recorded.	None recorded.	N/A	**No signs of otter occupation at the time of monitoring.**
		O9	0	None recorded.	None recorded.	N/A	**No signs of otter using the holt site.**
		O10	1	Investigating trail camera and entering the water.	None recorded.	06/05/2025, 20:25 PM	**One otter investigated the camera and entered the water, no signs of otter using the holt / resting site.**

Project Section	Watercourse ID	Holt Number	Number of Otter	Summary of Otter Behaviour	Incidental Sightings of Note (Other Species Using Holt)	Date of Record and Time	Conclusion from Evidence
		O11	0	None recorded.	A mink was identified inspecting the holt for approximately three seconds before exiting	28/05/2025, 13:53 PM	**No signs of otter using the holt / resting site, site visited by mink on three occasions.**
			0	None recorded.	A mink was identified inspecting the holt for approximately three seconds before exiting	09/06/2025, 00:42 AM	
			0	None recorded.	A mink was identified inspecting the holt for approximately six seconds before then exiting	07/07/2025, 13:30 PM	

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