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#### 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) 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). The methodology applied in this report supports the data collection for Chapter 8: Ecology and Biodiversity (document reference 6.8) and have been discussed and agreed in advance with Natural England and the Local Planning Authorities.
- 1.1.3 It was anticipated that a range of habitats within the land required for the construction of the Project would provide suitable habitat to support breeding bird activity and particularly birds associated with farmland habitat.
- 1.1.4 The general approach to breeding birds is to ensure that the Project results in an increase in area of better-quality habitat than that affected by the Project and ensure that these habitats are well connected to the wider landscape. This would be achieved through the following mitigation:
  - Avoiding permanent effects to habitats of perceived value where possible
  - Reinstating habitats affected in areas of temporary habitat loss to equal or better condition than existing
  - Improving the quality and availability of ecological networks across the Project.
- 1.1.5 The requirement for breeding bird surveys was based on the results of a preliminary desk-based assessment, focusing on suitable habitat within the land required for construction; largely associated with the 400 kV underground cabling, cable sealing end (CSE) compounds and the new East Anglia Connection Node (EACN) Substation and new Tilbury North Substation. The extent of the Survey Area was defined by the outcome of a two-stage screening exercise looking at:
  - Sites of known importance for breeding birds
  - Areas of potential importance for breeding birds.
- 1.1.6 The Project has also been sub-divided into eight geographical sections for reader accessibility, based largely on Local Planning Authority boundaries. These are shown on Figure A8.7.2 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 To establish a baseline for breeding birds, the following has been undertaken, the results of which are presented in this report:
  - A desk study for breeding birds, looking at existing data
  - A robust breeding bird survey where a list of bird species has been recorded and their breeding status (confirmed, possible, or non-breeding) evaluated. An estimate of the likely number of territories/colonies of breeding bird species of conservation concern has been identified.

#### 1.3 Study and Survey Area

#### Study Area

- 1.3.1 The following Study Areas were used for the breeding bird desk study:
  - Special Protection Areas (SPAs) and Ramsar sites of ornithological importance within the Order Limits plus a 20 km buffer
  - Statutory and non-statutory designated sites of ornithological importance for breeding birds – within the Order Limits plus a 2 km buffer
  - Individual records of breeding bird species within the Order Limits plus a 2 km buffer.

#### Survey Area

- 1.3.2 A total of nine Survey Areas were identified for breeding bird assessment, where there is the potential for significant effects to occur because of temporary or permanent land take and/or disturbance where significant numbers of birds could be present based on habitat suitability. These include locations where the following works have been considered, including a 200 m buffer from the Order Limits:
  - 400 kV underground cables
  - CSE compounds
  - The new EACN Substation and Tilbury North Substation.
- 1.3.3 Further details on the breeding bird Survey Area selection are provided in Section 3 below.

# 2. Relevant Legislation and Policy

#### 2.1 Legal Compliance

2.1.1 The surveys and assessments have been undertaken in accordance with current legislation in the context of the Project. A summary of the relevant legislation and policy is provided in Table A8.7.1.

Table A8.7.1 Legal compliance

Legislation	Details		
Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971 (Ramsar Convention Secretariat,1971)	An international treaty created to ensure the conservation and sustainable management of wetlands, through the designation of Ramsar sites and international cooperation between contracting parties such as the UK government. The Contracting Party responsible for the site must ensure the protection of wintering bird populations, implementing appropriate measures, such as controlling invasive species and maintain suitable water levels.		
Convention on the Conservation of European Wildlife and Natural Habitats 1979 (Council of Europe, 1979)	The Bern Convention, also referred to as the Conservation of European Wildlife and Natural Habitats, outlines the framework for the conservation for a wide range of species and their habitats. The convention encourages its member states to implement strategies for the protection and management of species and establish ecological networks for migration.  For the protection of breeding birds, the UK is responsible under the Bern Convention for the conservation of important habitats such as wetlands and coastal areas and designating protection areas.		
The Wildlife and Countryside Act 1981, as amended (WCA) 1981	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).  Under the Wildlife and Countryside Act 1981 (as amended) all wild birds are protected from killing and injury, and their nests and eggs protected from taking, damage and destruction whilst in use.  Additional protection is extended to species listed under Schedule 1 of the Act, meaning it is also an offence to disturb these species at or near the nest, or whilst they have dependent young during the breeding season.		

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.  49 bird species are s41 listed species and as such identified as Species of Principal Importance in England (hereafter referred to as SPI).		
Directive 2009/147/EC of The European Parliament and of the council of 30 November 2009 on the conservation of wild birds (Directive 2009/147/EC)	The Birds Directive establishes a legal framework across Europe, enforcing the establishment of SPAs in member states of the European Union, to protect bird species. The directive prohibits activities such as deliberate killing, capture, and disturbance of bird species during their breeding, rearing, and migration periods.		
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 (Special Areas if Conservation (SACs) and SPAs and to provide protection for these sites through designation, planning, and other controls.		
	The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals 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.		

### 2.2 Planning Policy

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

# 3. Methodology

#### 3.1 Nomenclature

3.1.1 Common names of species recorded follow English naming conventions in the British Ornithological Union British List (British Ornithologists' Union (2022)). Common names are used throughout this report while scientific names are listed in Annex B, in line with Natural History Museum Species dictionary<sup>1</sup>.

#### 3.2 Desk Study

#### Study Area

- 3.2.1 The following Study Areas were used to inform the methodology and establish the baseline as part of the breeding bird desk study:
  - SPAs and Ramsar sites of ornithological importance within the Order Limits plus a 20 km buffer
  - Statutory and non-statutory designated sites of ornithological importance for breeding birds – within the Order Limits and up to 2 km from the boundary
  - Individual records of breeding bird species within the Order Limits plus a 2 km buffer

#### **Data Search**

- 3.2.2 The desk study was completed in February 2023 to include breeding records (where breeding behaviour is noted, or records dated within the breeding season) of all bird species using data obtained from the previous 10 years (2013 to 2022) as per the national guidance (Department for Environment, Food and Rural Affairs (DEFRA), 2024). Data was obtained from the following sources:
  - British Trust for Ornithology (BTO) Wetland and Estuaries Bird Survey (WeBS)
  - Royal Society for the Protection of Birds (RSPB)
  - Essex Field Club (EFC)
  - Norfolk Biodiversity Information Centre (NBIC)
  - Suffolk Biodiversity Information Service (SBIS).
- 3.2.3 Freely downloadable datasets (available from Multi Agency Geographic Information for the Countryside; MAGIC, Natural England, 2025) and aerial imagery were consulted for information regarding designated sites, qualifying features of SPA and Ramsar sites and general habitat assessment.

<sup>&</sup>lt;sup>1</sup> https://www.nhm.ac.uk/our-science/data/uk-species/index

- 3.2.4 The review of designated sites with ornithological interest identified areas of known importance for breeding birds. Where there was the potential for negative effects to such sites caused by the Project, the areas were included for field survey.
- In addition, a review of the individual bird records from the desk study was used to identify further areas of potential importance for breeding birds. This was combined with a review of aerial imagery and Phase 1 habitat data collected during Project habitat surveys, to determine the suitability of habitats for breeding birds.
- 3.2.6 Areas of potential importance, potentially worthy of field survey, included those which have potential to support a notable assemblage of birds of conservation concern (BoCC), such as red- and amber-listed BoCC (Stanbury *et al.*, 2021).
- 3.2.7 Where such areas are subject to negative effects from the Project, they were identified as potential Survey Areas. These were subject to further desk-study analysis utilising information from nearby third-party reports (i.e., bird survey results and documents relating to other Nationally Significant Infrastructure Projects (NSIPs) and planning applications).
- 3.2.8 Additional desk study analysis for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 was carried out and described in Section 3.4 below.

#### 3.3 Survey Methodology

#### Survey Area

- 3.3.1 Following the desk-study exercise and review of the Project, the area for field surveys was designed to cover areas of greatest impacts to breeding birds due to habitat loss or disturbance. These included the locations where the following works have been considered, including a 200 m buffer from the Order Limits:
  - 400 kV underground cables
  - CSE compounds
  - The new EACN Substation and new Tilbury North Substation.
- 3.3.2 Nine Survey Areas were identified and are shown on Figure A8.7.1 in Annex A. Given the size and scale of the Project, some ecology and biodiversity surveys have continued in 2025 for completeness to strengthen the robust baseline survey information gathered in 2023 and 2024. This report includes data obtained up to the end of March 2025, covering Survey Areas 1 7, surveys conducted beyond the end of March 2025, at Survey Area 8 (Boxted (Section C)) and Survey Area 9 (Tilbury North (Section H)) will be included in a further environmental information report, as reported in Chapter 8: Ecology and Biodiversity (document reference 6.8).

#### **Breeding Bird Surveys**

3.3.3 The targeted surveys followed Bird Survey Guidelines (Bird Survey and Assessment Steering Group, 2021), a revised version of the Common Bird Census (CBS) (Marchant, 1983). This best practise guidance provides sufficient level of confidence when describing the breeding bird community present.

- 3.3.4 Walked transects were made across each of the Survey Areas and were designed to ensure surveyors were able to survey within 50 m of all points within each Survey Area, where practically possible. Survey Area 5 was surveyed in 2023, Survey Areas 1 to 4, 6 and 7 were surveyed in 2024. Survey Areas 8 and 9 will be surveyed in the 2025 breeding season.
- 3.3.5 Whilst most survey visits were completed in a single day, each survey visit to Survey Area 5 took place over period of two consecutive days due to the size of the Survey Area. A breakdown of each Survey Area, its approximate location, and the year in which surveys were completed is provided in Table A8.7.2 below.

Table A8.7.2 Survey areas and year of survey

Project Section(s)	Survey Area	Location	Year of Survey
A, B	1	Diss	2024
В	2	Needham Market	2024
B, C	3	Burstall	2024
С	4	Raydon	2024
С	5	Stratford St Mary	2023
С	6	Ardleigh	2024
D	7	Great Horkesley	2024
С	8	Boxted	2025
Н	9	Tilbury North	2025

- 3.3.6 Within each Survey Area, a total of six breeding bird surveys were undertaken. Survey visits were undertaken in the early morning, commencing at dawn during periods of good visibility and suitable weather conditions. Surveyors walked slowly, observing all suitable habitat along the transect route whilst looking and listening for birds. To minimise bias (as birds may be active at different times of day in different areas) and in accordance with good practice guidance (Bibby *et al*, 2000) the start points, and direction of the route walked was varied between survey visits.
- 3.3.7 The locations of birds seen and heard were mapped with reference to the standard BTO two letter codes and activity symbols. Surveyors only recorded the breeding activity of birds that are red-, or amber-listed BoCC and those species that are listed under Schedule 1 of the Wildlife and Countryside Act 1981. Birds that did not meet the above criteria were noted as part of a general species list for each Survey Area.
- 3.3.8 Following the completion of surveys, bird territory mapping was undertaken (Bibby *et al*, 2000). Breeding status was categorised using BTO breeding evidence criteria as outlined below.
  - Non-breeder (NB) birds observed flying over, considered to be on migration or a non-breeder
  - Possible breeding (PoB) birds observed singing or present in suitable habitat in breeding season

- Probable breeding (PrB) a pair observed in suitable habitat, territorial behaviour observed in the same place on at least two separate occasions, or birds observed visiting a probable nest site, showing courtship or display behaviour in suitable breeding habitat or nest building
- Confirmed breeding (CB) nest containing eggs or young seen or heard, adults observed carrying faecal sac or food, feigning injury as a distraction display, or entering or leaving a nest site in circumstances indicating an occupied nest, a used nest or eggshells found, or recently fledged or downy young recorded (showing evidence of dependency on adults).
- 3.3.9 Confirmed breeding activity for every breeding pair recorded can be difficult to establish when surveying large areas due to the close inspections required to identify a nest site. Therefore, for the purpose of this report, all probable and confirmed breeding birds are grouped together and described as 'breeding' species.
- 3.3.10 Although breeding bird surveys for Survey Areas 8 and 9 will be undertaken over the 2025 season, for the purpose of the Environmental Statement a reasonable worst-case scenario for the results of these surveys has been assumed. The reasonable worst-case position has been based on professional judgement following a review of bird records obtained from the desk study, the results of the breeding bird surveys across the rest of the Project and the type of habitats present in and around the surrounding area for each Survey Area.

#### 3.4 Schedule 1 Species

#### Desk Study

- 3.4.1 Further analysis of the desk study data was undertaken for a more detailed assessment of where disturbance to species specially protected under Schedule 1 of the Wildlife and Countryside Act 1981 could occur. These protected species are identified as 'Schedule 1' species in this report.
- 3.4.2 Desk study data of Schedule 1 species was filtered to show the following:
  - Specific breeding records or records dated within the breeding season only (March to September inclusive)
  - Records for the Schedule 1 species within 250 m of the Order Limits. This
    distance was an upper estimate of the general disturbance distances taken from
    NatureScot guidance (NatureScot accessed 2024)
  - Species with breeding distribution within Norfolk, Suffolk and Essex (counties through which the Order Limits pass).
- 3.4.3 Where confirmed, probable and possible breeding records exist and/or clusters of individual records occur within potential breeding habitat (judged from aerial imagery), these areas were identified as likely Schedule 1 breeding locations.
- 3.4.4 Schedule 1 species were recorded during the breeding bird surveys as described in Section 3.3. The Survey Areas did not cover the entire length of the Order Limits, and therefore Schedule 1 constraints may be present elsewhere within the Order Limits. Incidental Schedule 1 species records were obtained whilst ecologists were in the field undertaking other ecological surveys for the Project. This combined with the

desk study approach identifies areas of potential importance to breeding Schedule 1 species.

#### **Fieldwork**

- In early spring 2024, during breeding bird survey work, a pair of marsh harrier were observed displaying over the Order Limits at Survey Area 1. In addition to the breeding bird survey visits, described in Section 3.3, specific marsh harrier surveys were undertaken across all suitable nesting habitat within 750 m of the displaying pair record. This comprised two visits using a combination of transects and vantage point surveys to observe bird behaviour and watch for birds visiting/leaving a nest, food passing or the presence of young in the area. These visits were undertaken under a marsh harrier Schedule 1 licence specific to the 10 km grid-squares within which the Survey Area was located.
- 3.4.6 Barn owl is a relatively common Schedule 1 listed species in farmland across Norfolk, Suffolk and Essex with numerous desk study records identified. Where access was available, the trees within the Order Limits were assessed for their potential to support barn owl. Where potential existed, notes were taken on occupation evidence and whether features are likely used as a nest site or a roost site.
- 3.4.7 Due to the sensitivity of Schedule 1 breeding bird survey records, the results of both the Schedule 1 desk study and fieldwork is provided in a confidential Annex to this report Annex C.

#### 3.5 Survey Details and Personnel

3.5.1 Lead surveyors were experienced ornithologists and competent at undertaking breeding bird surveys, their details are provided within Table A8.7.3 below.

Table A8.7.3 Surveyor experience

Surveyor	Qualifications	Chartered Institute of Ecology and Environmental Management (CIEEM) Membership	Years' Experience (professional ecology)
1	BSc (Hons)	No	6 years
2	A very experienced ornithologist, with no formal qualifications	No	35 years
3	A very experienced ornithologist, with no formal qualifications	No	27 years
4	BSc (Hons), MSc	Full	13 years

# 3.5.2 Breeding bird survey details including dates and weather conditions are presented in Table A8.7.4 below.

Table A8.7.4 Survey dates and weather conditions

Project Section	Survey Area	Survey Visit	Date	Weather Conditions
		1	12 April 2024	Rain – none, Wind – south-west up to 11 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 16°C
		2	3 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 12°C
		3	17 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 0% – 70%, Temperature: 12°C – 18°C
A, B	1	4	24 May 2024	Rain – none, Wind – south up to 5 kph, Visibility – excellent, Cloud cover – 0%, Temperature: 7°C – 15°C
		5	7 June 2024	Rain – none, Wind – south-west up to 10 kph, Visibility – excellent, Cloud cover – 10%, Temperature: 8°C – 17°C
		6	14 June 2024	Rain – light rain (at times), Wind – south up to 9 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 20°C
		1	12 April 2024	Rain – none, Wind – south-west up to 11 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 16°C
		2	3 May 2024	Rain – drizzle, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 12°C
		3	17 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 0% – 70%, Temperature: 12°C – 18°C
В	2	4	24 May 2024	Rain – none, Wind – south up to 5 kph, Visibility – excellent, Cloud cover – 0%, Temperature: 7°C – 15°C
		5	7 June 2024	Rain – none, Wind – south-west up to 10 kph, Visibility – excellent, Cloud cover – 10%, Temperature: 8°C – 17°C
		6	14 June 2024	Rain – light rain (at times), Wind – south up to 9 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 11°C – 20°C
B C	. 3	1	11 April 2024	Rain – none, Wind – south-west up to 10 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 13°C – 18°C
B, C	3	2	2 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 10% – 100%, Temperature: 11°C – 17°C

Project Section	Survey Area	Survey Visit	Date	Weather Conditions
		3	16 May 2024	Rain – none, Wind – none, Visibility – fog to 300 m, Cloud cover – 100%, Temperature: 11°C – 13°C
		4	23 May 2024	Rain – none, Wind – west up to 13 kph, Visibility – excellent, Cloud cover: 0% – 100%, Temperature: 10°C – 15°C
		5	6 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 100% – 0%, Temperature: 8°C – 16°C
		6	13 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – none, Temperature: 7°C – 16°C
		1	11 April 2024	Rain – none, Wind – south-west up to 10 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 13°C – 18°C
		2	2 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 10% – 100%, Temperature: 11°C – 17°C
С	4	3	16 May 2024	Rain – none, Wind – none, Visibility – fog to 300 m, Cloud cover – 100%, Temperature: 11°C – 13°C
		4	23 May 2024	Rain – none, Wind – west up to 13 kph, Visibility – excellent, Cloud cover: 0% – 100%, Temperature: 10°C – 15°C
		5	6 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 100% – 0%, Temperature: 8°C – 16°C
		6	13 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – none, Temperature: 7°C – 16°C
			5 April 2023	Rain – 0, Wind – Calm, Visibility – Good, Cloud cover – 66 to 99%
		1	6 April 2023	Rain – Had rained before survey and some showers during, Wind – Breezy, Visibility – Poor/Fair, Cloud cover – 66 to 99%
		2	27 April 2023	Rain – 0, Wind – Calm, Visibility – Good, Cloud cover – 33 to 66%
С	5	2	28 April 2023	Rain – Wet ground, Wind – Calm, Visibility – Poor/Fair, Cloud cover – 66 to 99%
			10 May 2023	Rain – 0, Wind – Calm, Visibility – Unknown, Cloud cover – 80%
		3	11 May 2023	Rain – 0, Wind – Light breeze, Visibility – Good, Cloud cover – 80%
		4	25 May 2023	Rain – 0, Wind – Calm, Visibility – Unknown, Cloud cover – 50%

Project Section	Survey Area	Survey Visit	Date	Weather Conditions
			26 May 2023	Rain – 0, Wind – Calm, Visibility – Unknown, Cloud cover – 50%
		5	6 June 2023	Rain – 0, Wind – Light breeze, Visibility – Fine, Cloud cover – Cloudy
		3	7 June 2023	Rain – 0, Wind – Light breeze, Visibility – Fine, Cloud cover – Cloudy
		6	22 June 2023	Rain – Unknown, Wind – Calm, Visibility – Unknown, Cloud cover – 50%
		0	23 June 2023	Rain – Unknown, Wind – Calm, Visibility – Unknown, Cloud cover – 10%
		1	10 April 2024	Rain – none, Wind – south-west up to 9 kph, Visibility – excellent, Cloud cover: 0% – 100% (bright), Temperature: 2°C – 12°C
	6	2	1 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 10% – 100%, Temperature: 11°C – 19°C
С		3	15 May 2024	Rain – drizzle, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 12°C – 16°C
		4	22 May 2024	Rain – light rain (at times), Wind – north-west up to 8 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 13°C – 14°C
		5	5 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – none, Temperature: 8°C – 16°C
		6	12 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 9°C – 15°C
		1	10 April 2024	Rain – none, Wind – south-west up to 9 kph, Visibility – excellent, Cloud cover: 0% – 100% (bright), Temperature: 2°C – 12°C
		2	1 May 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover: 10% – 100%, Temperature: 11°C – 19°C
D	7	3	15 May 2024	Rain – drizzle, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 12°C – 16°C
		4	22 May 2024	Rain – light rain (at times), Wind – north-west up to 8 kph, Visibility – excellent, Cloud cover – 100%, Temperature: 13°C – 14°C
		5	5 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – none, Temperature: 8°C – 16°C
		6	12 June 2024	Rain – none, Wind – none, Visibility – excellent, Cloud cover – 100%, Temperature: 9°C – 15°C

3.5.3 Dates and weather conditions during the specific marsh harrier surveys at Survey Area 1 are provided in Table A8.7.5 below.

Table A8.7.5 Marsh harrier survey details

Project Section	Visit Number	Date	Weather Conditions
A D	1	13 June 2024	Rain – none, Wind – calm, Visibility – excellent, Cloud cover – none, Temperature: 10°C – 15°C
A, B	2	4 July 2024	Rain – none, Wind – light breeze, Visibility – excellent, Cloud cover – none, Temperature: 14°C – 17°C

#### 3.6 Notes and Limitations

3.6.1 Whilst every effort has been made to record all bird species present, some species are more difficult to detect due to the nature of their ecology (for example, crepuscular species) or their general behaviour (quiet and more secretive). There is a possibility that some species went undetected during surveys. However, as this is a factor that applies to all bird survey types it is not considered to place a significant constraint upon the interpretation of the results for the surveys.

#### 4. Results

#### 4.1 Desk Study Results

#### SPA and Ramsar Sites of Ornithological Importance

4.1.1 A total of 27 SPA/Ramsar sites of ornithological importance were identified within the Study Area, these are listed in Appendix 8.8: Wintering Bird Report (document reference 6.8.A8). Most of these sites are not identified to be of value to breeding birds or were scoped out for consideration in the ES (Volume 6 of the DCO application) with regard to impacts to breeding birds as no impact pathways were considered to exist due to the distance from the Project and/or lack of breeding habitat for qualifying features (National Grid, 2022).

#### Statutory Designated Sites with Ornithological Interest

- 4.1.2 The designated sites of ornithological interest include those with notable breeding bird interest, particularly with regard to the Project. Sites which list general/common woodland bird communities are not included in the desk study results.
- 4.1.3 One statutory designated site with breeding ornithological interest was identified within the Study Area (sites with wintering/passage bird interest are listed in Appendix 8.8: Wintering Bird Report, document reference 6.8.A8). This is a proposed Site of Special Scientific Interest (pSSSI), the details of which is listed in Table A8.7.6. This has not been mapped as the site has not been designated and its boundary is not known. It is known that were the site to be designated it would be situated within the vicinity of Tilbury.

Table A8.7.6 Statutory designated sites with breeding ornithological interest

Project Section	Name of Site	Distance and Direction from Order Limits	Breeding Bird Interest
Н	North Thames Estuary and Marshes pSSSI	Boundary not confirmed but likely within 1 km of Order Limits	Not available but could include a breeding bird community.

#### Non-Statutory Designated Sites of Ornithological Interest

4.1.4 Five non-statutory County Wildlife Sites (CWS) and one Local Wildlife Site (LWS) within the Study Area specifically mentioned breeding birds as a feature of interest. These are listed in Table A8.7.7 and their locations are also shown on Figure A8.7.2 in Annex A.

Table A8.7.7 Non-statutory designated sites with breeding ornithological interest

Project Section(s)	Name of Site	Distance and Direction from Order Limits	Breeding Bird Interest
A and B	River Waveney CWS	Adjacent the Order Limits	Noted for breeding kingfisher.
В	River Gipping CWS	Within Order Limits	Noted for breeding moorhen, coot, kingfisher, reed bunting, reed and sedge warbler, tufted duck and grey wagtail.
В	Forrold Meadow CWS	1.45 km east	Supports Priority Species including dunnock, house sparrow, starling, spotted flycatcher, turtle dove and lesser-spotted woodpecker.
С	Sproughton Park CWS	Within Order Limits	Supports farmland birds: yellowhammer, linnet, bullfinch, starling, house sparrow, reed bunting, song thrush and turtle dove.
С	Wassess Marshes CWS	0.12 km west	Noted for breeding lapwing, redshank and yellow wagtail.
Н	Mucking Creek Wetlands LWS	1.06 km south-east	Regular presence of reed and sedge warbler, water rail and bearded tit. Cetti's warbler also breeds here.

#### Individual Records of Breeding Birds

- 4.1.5 Overall, 103 species of breeding bird (where breeding behaviour is noted or recorded during the breeding season) were recorded within the Study Area comprising 13,502 records. There are 401 records for 84 species within the Order Limits, with most records found within the 2 km buffer. The breeding species recorded within the Order Limits and 2 km buffer are detailed in Table A8.7.12 and Table A8.7.13 respectively in Annex D.
- 4.1.6 The data included a mix of garden/urban birds, farmland birds, woodland birds and wetland birds. The distribution of records, categorised based on their conservation status (excluding Schedule 1 Species) are shown on Figure A8.7.3 in Annex A. The greatest concentrations of records exist around towns/villages and residential areas, as would be expected due to the concentrations of people recording birds in these areas. However, concentrations also occur along river corridors and nature reserves, most notably the River Waveney (Section A and B), the River Stour (Section C) and the River Thames (Section H).

#### Habitat Review of Potentially Important Breeding Bird Areas

- 4.1.7 The Order Limits primarily pass through arable farmland, with areas of grassland and woodlands mainly occurring along river valleys that cross the Project. Field boundaries are typically formed by hedgerows, which are likely to support breeding farmland species, with more densely packed populations likely to be present in the smaller fields. Wetland areas are concentrated around river valleys and provide connectivity throughout the wider landscape.
- 4.1.8 Where the River Waveney CWS passes through the Order Limits, the channel is narrow and lined with trees and scrub. The surrounding habitats are primarily intensely sheep-grazed pasture with some less intensively managed grassland and marshy rush pasture. Roydon Fen Local Nature Reserve is also present in this area which is noted for its fen habitat and wet woodland.
- 4.1.9 Where the River Stour passes through the Order Limits, the channel is fairly narrow with a lake and floodplain area which holds water for large parts of the year. Other habitats include wet grassland and large, open arable fields which provide a mosaic of habitats for a range of birds.
- 4.1.10 The exact boundary of the North Thames Estuary and Marshes pSSSI has not been established at the time of writing this report, but the areas closest to the Order Limits could include a mosaic of grassland, scrub, woodland, lagoons and ditches, while within the Order Limits habitats primarily comprise arable land and grassland with areas of scrub.

#### Third Party Report Review

4.1.11 The desk study revealed that the habitats and breeding bird assemblage around Tilbury are well studied (Section H). This includes areas within the Order Limits and the potentially within North Thames Estuary and Marshes pSSSI. Details of these reports are provided in Table A8.7.8 below.

Table A8.7.8 Summary of breeding bird assessments with regards to third party national significant infrastructure projects

Project Section	Project Name, Distance and Direction (from Project boundary)	Summary of Breeding Bird Results
G	Thurrock Flexible Generation Plant Overlaps with the Project boundary at the southern extent. (RPS Group, 2020)	Assessments undertaken for the construction and operation of Gas Reciprocating engines to the south of West Tilbury. Breeding bird surveys were conducted in 2018 and 2019.  Across both years, 28 species were confirmed to be breeding and 15 were probable / possible breeders. The red- and amber-listed BoCC included: cuckoo, dunnock, house martin, house sparrow, kestrel, linnet, mistle thrush, mallard, meadow pipit, reed bunting, skylark, stock dove, starling, swift, song thrush, yellowhammer and yellow wagtail.

Project Section	Project Name, Distance and Direction (from Project boundary)	Summary of Breeding Bird Results
		The report concludes the breeding assemblage is of local/district importance.
H	Tilbury 2 Approximately 1 km to the south-west. (Port of Tilbury London Limited, 2017)	This application was for a proposed port terminal at the former Tilbury Power Station site. Breeding bird surveys were conducted in 2015 and repeated in 2017.  The 2017 results recorded territories for red-listed BoCC including cuckoo, linnet, nightingale, song thrush (now downgraded to amber) and yellowhammer. Amber-listed BoCC breeding birds included dunnock, mallard, reed bunting and stock dove.
H	Lower Thames Crossing Overlaps with the Project around Tilbury. (National Highways, 2022)	This proposed new road connecting Kent, Thurrock and Essex included an extensive Study Area (including and extending beyond West Tilbury to the north-west and south) within which ecological surveys were conducted. Breeding bird surveys were undertaken between 2017 and 2020.  The desk study and survey results of the redline boundary north of the River Thames include extensive records of waterbirds, songbirds, raptors and owls.
Н	Tilbury to Grain and Tilbury to Kingsnorth Cable Tunnel Replacement project Approximately 1.5 km south of the Project (AECOM (2023))	The site for Tilbury to Grain and Tilbury to Kingsnorth Cable Tunnel Replacement project comprised two areas: one at Gravesend (south side of the Thames) and one at Tilbury (north side of the Thames). The results at the Tilbury site are summarised here. Breeding bird surveys were completed over June and July 2023.  A total of 21 breeding bird species (confirmed / probable/possible breeders) were present within the Tilbury site. Red- and amber-listed BoCC within this assemblage included moorhen, woodpigeon, skylark, whitethroat, wren, song thrush, dunnock, greenfinch and linnet.  The report concludes the breeding bird assemblage is of Local Importance with no species recorded in numbers of any great significance.

- 4.1.12 Surveys were also conducted in support of Tilbury Energy Centre (RWE, 2017), although breeding bird information from this application is not publicly available.
- 4.1.13 These reports revealed that the breeding bird community in the Tilbury area, primarily comprises scrubland and farmland birds.

#### **Desk Study Conclusion**

- 4.1.14 Based on the review of designated sites, individual bird data, habitats third-party reports and the potential for significant effects to arise because of the Project, the areas outlined below were noted being potentially important for breeding birds and where works of higher impact are proposed. Breeding bird surveys were undertaken at:
  - River Waveney CWS and surrounding habitats (Survey Area 1 to 5 in Table A8.7.2)
  - River Stour and surrounding habitats (Survey Area 6 and 7 in Table A8.7.2)
  - Tilbury, the North Thames Estuary and Marshes pSSSI and surrounding habitats (Survey Area 8 and 9 in Table A8.7.2).

#### 4.2 Survey Results

#### Overview

- 4.2.1 As identified above, the River Waveney and River Stour were identified as potentially important bird areas and so breeding bird surveys have been undertaken in these areas (Survey Area 1 and Survey Area 5 respectively).
- 4.2.2 The other areas that have been selected for survey are where the Project has the potential to cause the greatest disruption and impact to habitats to breeding birds as described in the survey methodology.
- 4.2.3 Results for each Survey Area are summarised below. Full species lists along with breeding status at each Survey Area, and conservation status, is provided in Annex B. This table also identifies the minimum (confirmed and probable) and maximum (confirmed, probable and possible) number of territories for red and amber-listed BoCC, except for wren and woodpigeon. Although these two species are amber-listed BoCC, they are common birds, and a high number of observations were made during the surveys, it was impractical to determine the number of territories for these two species.
- 4.2.4 Territory maps of all red-listed BoCC are shown in Annex A. The Schedule 1 data is provided in a confidential report in Annex C, and recorded as 'present' in the text below.

#### Survey Area 1 Diss - Sections A/B

- 4.2.5 50 species were recorded during the surveys. Six red-listed BoCC were likely breeding (cuckoo, grey partridge, lapwing, linnet, skylark and yellowhammer) and two were possible breeders (greenfinch and mistle thrush). 11 amber-listed BoCC were breeding (dunnock, kestrel, mallard, moorhen, song thrush, stock dove, tawny owl, whitethroat, willow warbler, woodpigeon and wren) and three were possible breeders (meadow pipit, reed bunting and sparrowhawk).
- 4.2.6 The species recorded were primarily farmland birds. The number of territories for BoCC was low due to the small size of this Survey Area. Yellowhammer had the greatest number of territories (maximum 10). Dunnock, skylark and song thrush all had a maximum of seven territories. This is the only Survey Area where a confirmed

breeding lapwing territory was found (a possible territory was present in Survey Area 5). The pair were recorded on multiple visits within an arable field displaying distraction behaviour.

#### Survey Area 2 Needham Market - Section B

- 4.2.7 49 species were recorded during the surveys. Eight red-listed BoCC were likely breeding (greenfinch, house sparrow, linnet, marsh tit, mistle thrush, nightingale, skylark and yellowhammer) and one was a possible breeder (lesser spotted woodpecker). Six amber-listed BoCC were breeding (dunnock, song thrush, stock dove, whitethroat, woodpigeon and wren) and three were possible breeders (kestrel, mallard, moorhen).
- 4.2.8 Ancient woodland with open areas and scrub was present on the west side of the Survey Area and red-listed species associated with such habitat were recorded including marsh tit, nightingale and lesser spotted woodpecker. Dunnock, song thrush, whitethroat and yellowhammer had the highest number of BoCC territories in this area which shows the scrubby nature of the habitats in this area.

#### Survey Area 3 Burstall - Section B, C

- 4.2.9 47 species were recorded during the surveys. Four red-listed BoCC were likely breeding (house sparrow, linnet, skylark and yellowhammer) and two were possible breeders (greenfinch and grey partridge). Six amber-listed BoCC were breeding (dunnock, song thrush, stock dove, whitethroat, woodpigeon and wren) and four were possible breeders (moorhen, reed bunting, sparrowhawk and tawny owl).
- 4.2.10 Small woodlands and large arable fields were present within this Survey Area and a mix of farmland and woodland birds was recorded. The largest numbers of BoCC territories were that of skylark (maximum 26) followed by song thrush (maximum 20).

#### Survey Area 4 Raydon - Section C

- 4.2.11 56 species were recorded during the surveys. Eight red-listed BoCC were likely breeding (grey partridge, house martin, house sparrow, linnet, nightingale, skylark, yellow wagtail and yellowhammer) and three were possible breeders (cuckoo, greenfinch and mistle thrush). Nine amber-listed BoCC were breeding (dunnock, reed bunting, rook, song thrush, sparrowhawk, stock dove, whitethroat, woodpigeon and wren) and six were possible breeders (greylag goose, kestrel, mallard, meadow pipit, tawny owl and willow warbler).
- 4.2.12 This Survey Area is larger than Survey Area 1, 2 and 3 and more species were recorded. Residential houses and farm buildings within the Survey Area attracted nesting species such as house martin and house sparrow. The primary habitat was farmland and the highest number of BoCC territories was that of skylark (maximum 87), followed by whitethroat (maximum 26) and yellowhammer (maximum 23).

#### Survey Area 5 Stratford St Mary - Section C

4.2.13 83 species were recorded during the surveys. Eight red-listed BoCC were likely breeding (cuckoo, greenfinch, house martin, house sparrow, linnet, mistle thrush, skylark and yellowhammer) and three were possible breeders (lapwing, nightingale and yellow wagtail). 12 amber-listed BoCC were breeding (dunnock, kestrel, mallard,

- moorhen, reed bunting, rook, sedge warbler, song thrush, stock dove, whitethroat, woodpigeon and wren) and two were possible breeders (redstart and shelduck).
- 4.2.14 The highest number of species was recorded in this Survey Area. It is a larger Survey Area; the river Stour also runs through it, and it contains a variety of other habitats including farmland (with farm buildings), woodland and wetlands/lagoons. It therefore has greater potential to attract and support a variety of birds. Many non-breeding birds were recorded along the Stour, with breeding numbers comparative to Survey Areas of a similar size. Skylark was the BoCC present in greatest breeding numbers (maximum 69), followed by whitethroat (maximum 36) and dunnock (maximum 34). Lapwing, nightingale, redstart and shelduck were notable possible breeding species. This was the only Survey Area with breeding sedge warbler.

#### Survey Area 6 Ardleigh - Section C

- 4.2.15 56 species were recorded during the surveys. Seven red-listed BoCC were likely breeding (corn bunting, greenfinch, house sparrow, linnet, skylark, yellow wagtail and yellowhammer) and four were possible breeders (cuckoo, mistle thrush, starling and swift). 11 amber-listed BoCC were breeding (dunnock, kestrel, mallard, moorhen, rook, song thrush, sparrowhawk, stock dove, whitethroat, woodpigeon and wren) and one was a possible breeder (meadow pipit).
- 4.2.16 This Survey Area is primarily farmland as indicated by the breeding BoCC which included several specialist farmland birds. A single corn bunting territory was found, the only location where this species was recorded during all the survey work. Skylark was the BoCC with the highest number of territories (maximum 77), while up to five yellow wagtail territories were present.

#### Survey Area 7 Great Horkesley- Section D

- 4.2.17 55 species were recorded during the surveys. Nine red-listed BoCC were likely breeding (cuckoo, greenfinch, house sparrow, linnet, nightingale, skylark, starling, yellow wagtail and yellowhammer) and one was a possible breeder (mistle thrush). Seven amber-listed BoCC were breeding (dunnock, rook, song thrush, stock dove, whitethroat, woodpigeon and wren) and five were possible breeders (bullfinch, kestrel, mallard, oystercatcher and sparrowhawk).
- 4.2.18 The breeding species and numbers were similar to Survey Area 4 and 6 which are of a similar size and comprise similar habitats. Skylark was the BoCC with the highest number of territories (maximum 42) followed by dunnock (maximum 26) and whitethroat (maximum 21). This was the only Survey Area where oystercatcher was recorded which was categorised as a possible breeder.

# Survey Area 8 Boxted (Section C) and Survey Area 9 Tilbury North (Section H)

4.2.19 Surveys in the vicinity of Boxted (Survey Area 8) and the new Tilbury North Substation (Survey Area 9) are to be completed in 2025. Based on the desk study records and habitats present, it is considered likely that only common and widespread farmland bird species would be identified in these areas. However, this baseline report assumes a reasonable worst-case scenario and has assigned medium value / county importance to the breeding bird assemblage for both Survey Area 8 and 9.

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

# 5. Conclusion

5.1.1 The survey results reveal a range of bird species were recorded across the Survey Areas; these primarily consist of farmland and woodland birds. Skylark was recorded in good numbers across many of the Survey Areas, while a range of specialist farmland species was also recorded occasionally. The Survey Area at the River Stour supported the greatest diversity of birds likely due to the variety of habitats available and good connectivity to the wider landscape.

# **Abbreviations**

Abbreviation	Full Reference
CIEEM	Chartered Institute of Ecology and Environmental Management
BoCC	Birds of Conservation Concern
ВТО	British Trust for Ornithology
СВ	Confirmed Breeding
CBS	Common Bird Census
CSE	Cable Sealing End
CWS	County Wildlife site
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
EFC	Essex Field Club
ES	Environmental Statement
LWS	Local Wildlife Site
MAGIC	Multi Agency Geographic Information for the Countryside
NB	Non-breeder
NBIC	Norfolk Biodiversity Information Centre
NERC	Natural Environment and Rural Affairs
NSIP	Nationally Significant Infrastructure Project
РоВ	Possible Breeding
PrB	Probable Breeding
pSSSI	Potential Site of Special Scientific Interest.
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SBIS	Suffolk Biodiversity Information Service
SPA	Special Protection Area
S41	Section 41
WCA	Wildlife and Countryside Act
WeBS	Wetland and Estuaries Bird Survey

# **Glossary**

Term	Description
Assemblage	The collection of species, of a particular group, which occur in the same habitat or area.
Cable	An insulated conductor designed for underground installation.
Cable Sealing End Compound	Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground acts as the principal transition point.
County Wildlife Site	Non-statutory designated areas of land important for their wildlife and nature conservation value (Norfolk and Suffolk).
Fauna	All the animals in a given area.
Habitat	The natural home or environment of an animal, plant, or other organism.
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.
Ornithology	The scientific study of birds.
Ramsar	Wetlands of international importance designated under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971.
Sites of Special Scientific Interest	Sites 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 Area 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.
Special Protection Area	An area designated under the European Union's Birds Directive (Directive 2009/147/EC) aimed at protecting rare, vulnerable, and migratory bird species and their habitats of European importance
Species	A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.

Term	Description
Statutory Designated Site	An area that has been legally designated and protected for its importance to biodiversity.
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a higher to lower voltage to allow it to be transmitted to local homes and businesses.
Territory	A defended area within that home range.
Territory Mapping	Identifying, defining and visually representing the geographic areas thar animals/groups of animals defend and used for activities such as feeding mating and nesting.
Transect	A defined path along which observations, measurements, or samples are taken in order to study the distribution and abundance of organisms, physical features, or other environmental variables.
Underground Cabling	An insulated conductor carrying electric current designed for underground installation. Underground cables link together two cable sealing end compounds.
Vantage Point	A location that offers a broad and elevated view of an area, which is used to observe bird activities.

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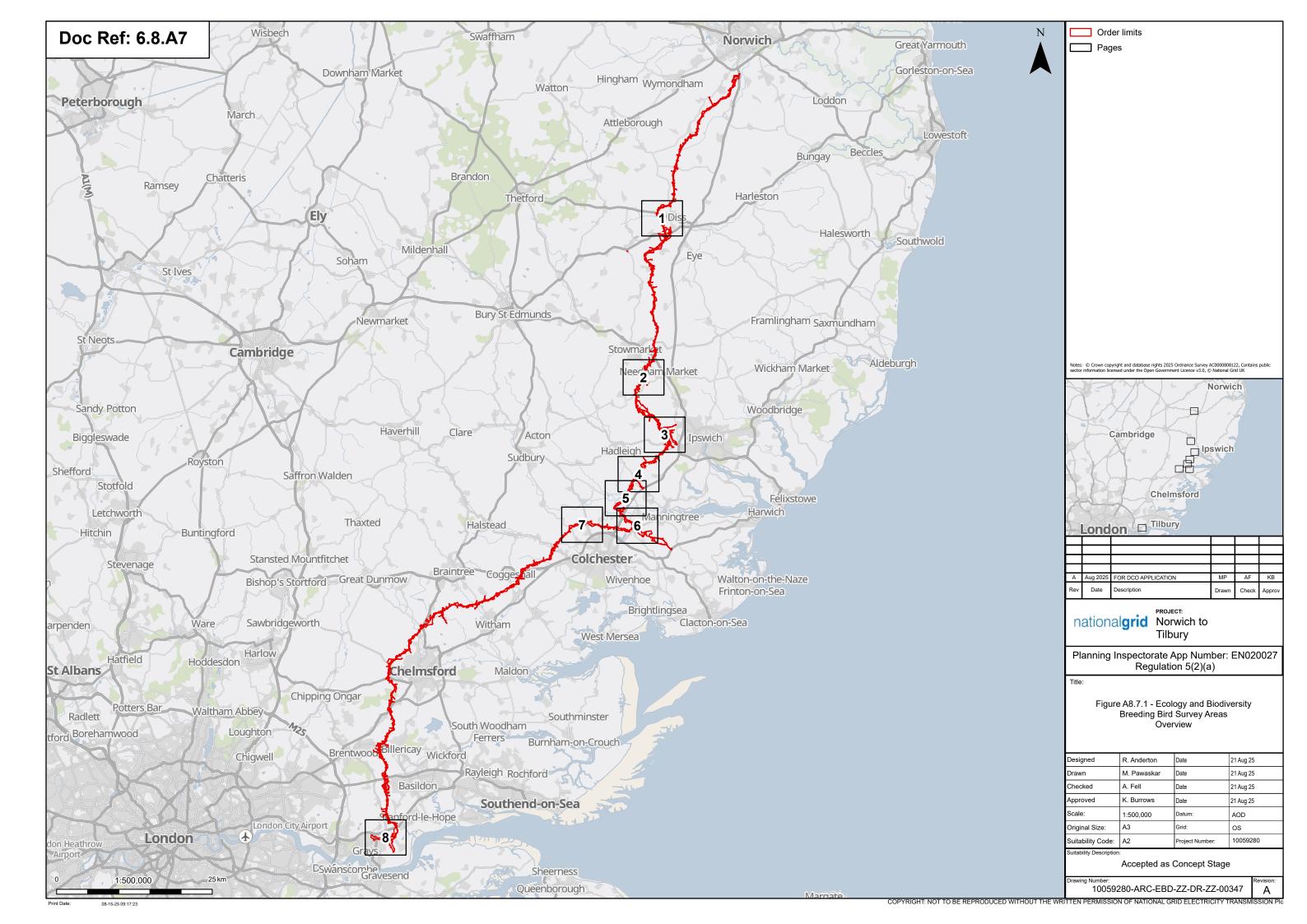
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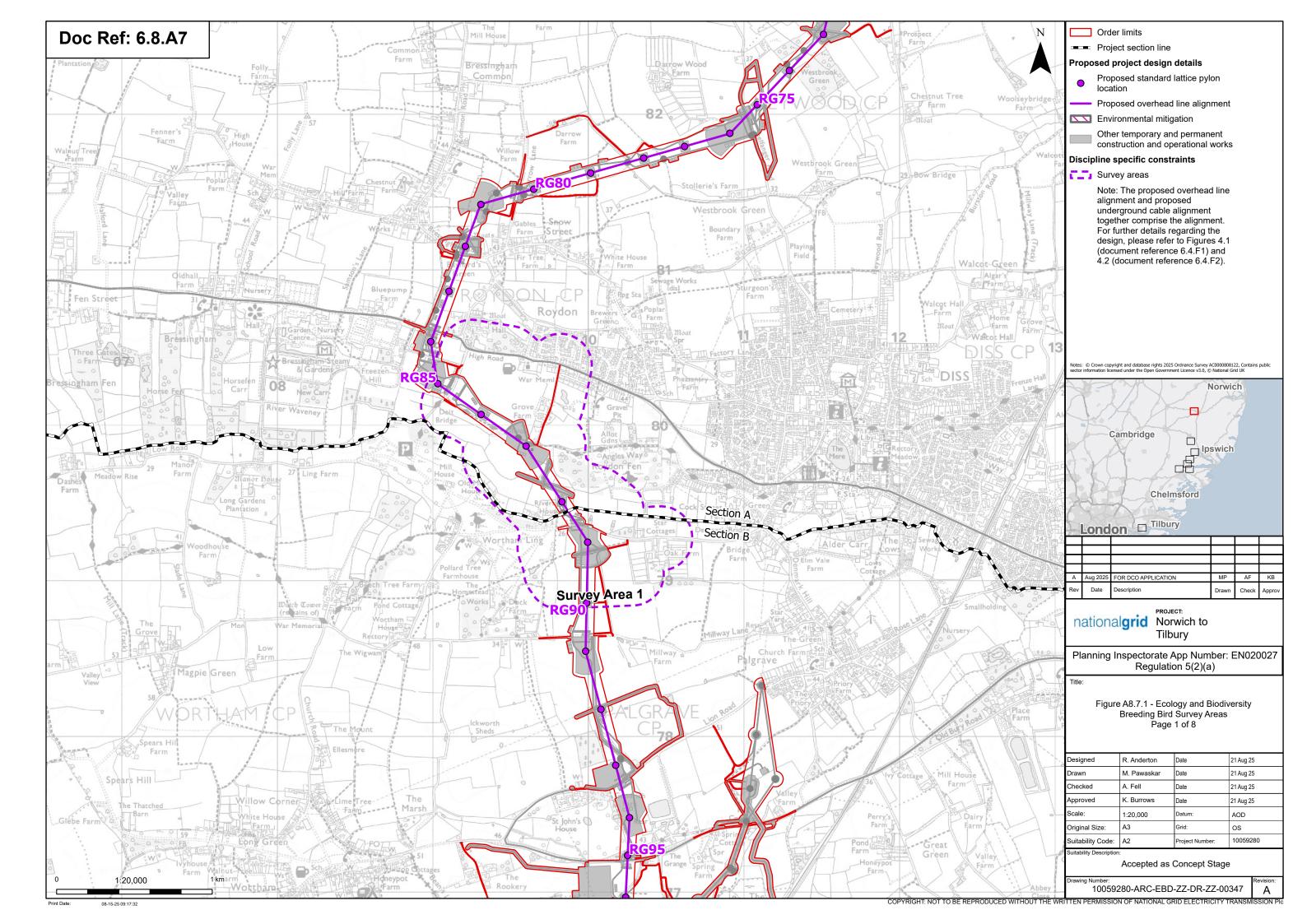
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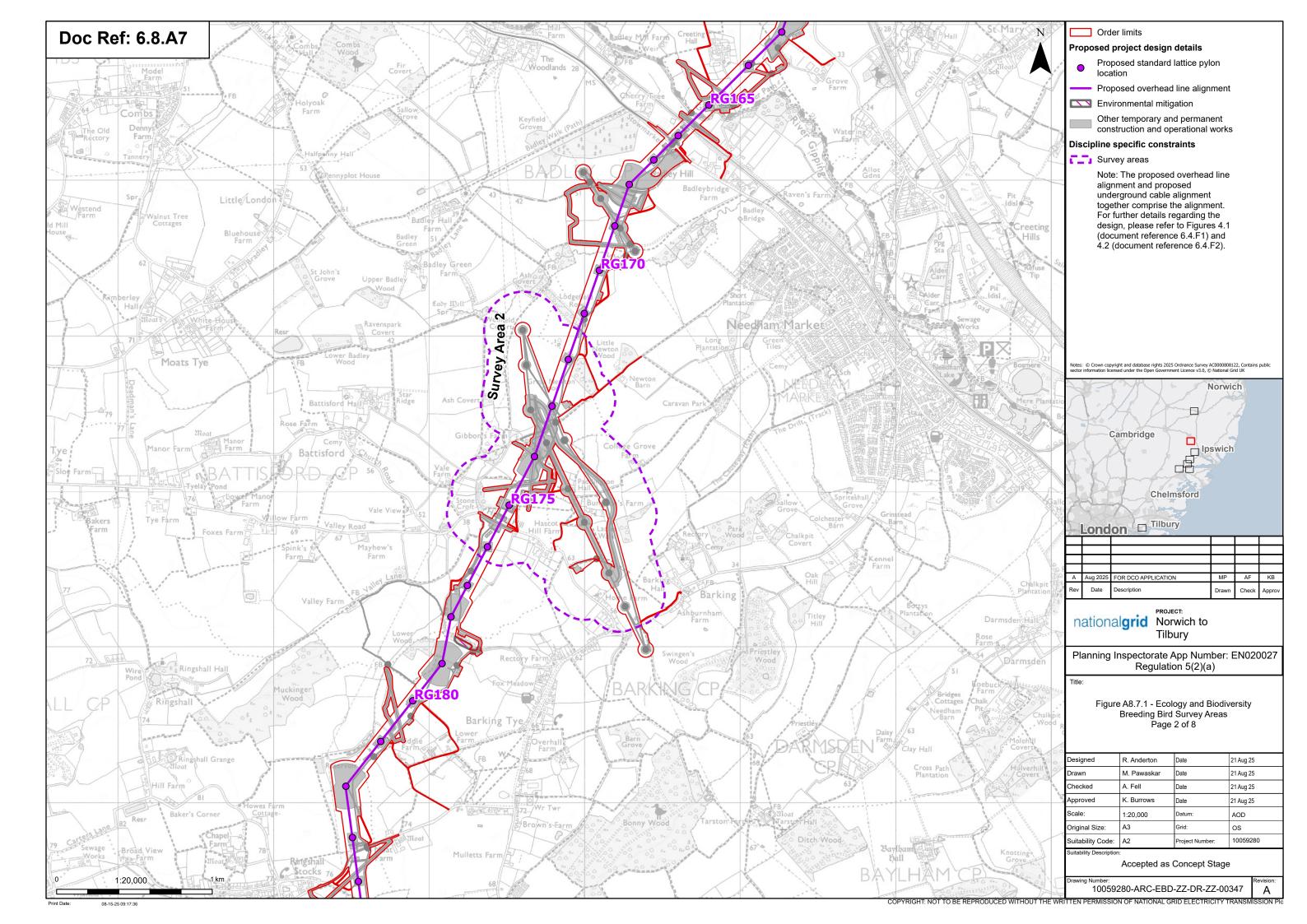
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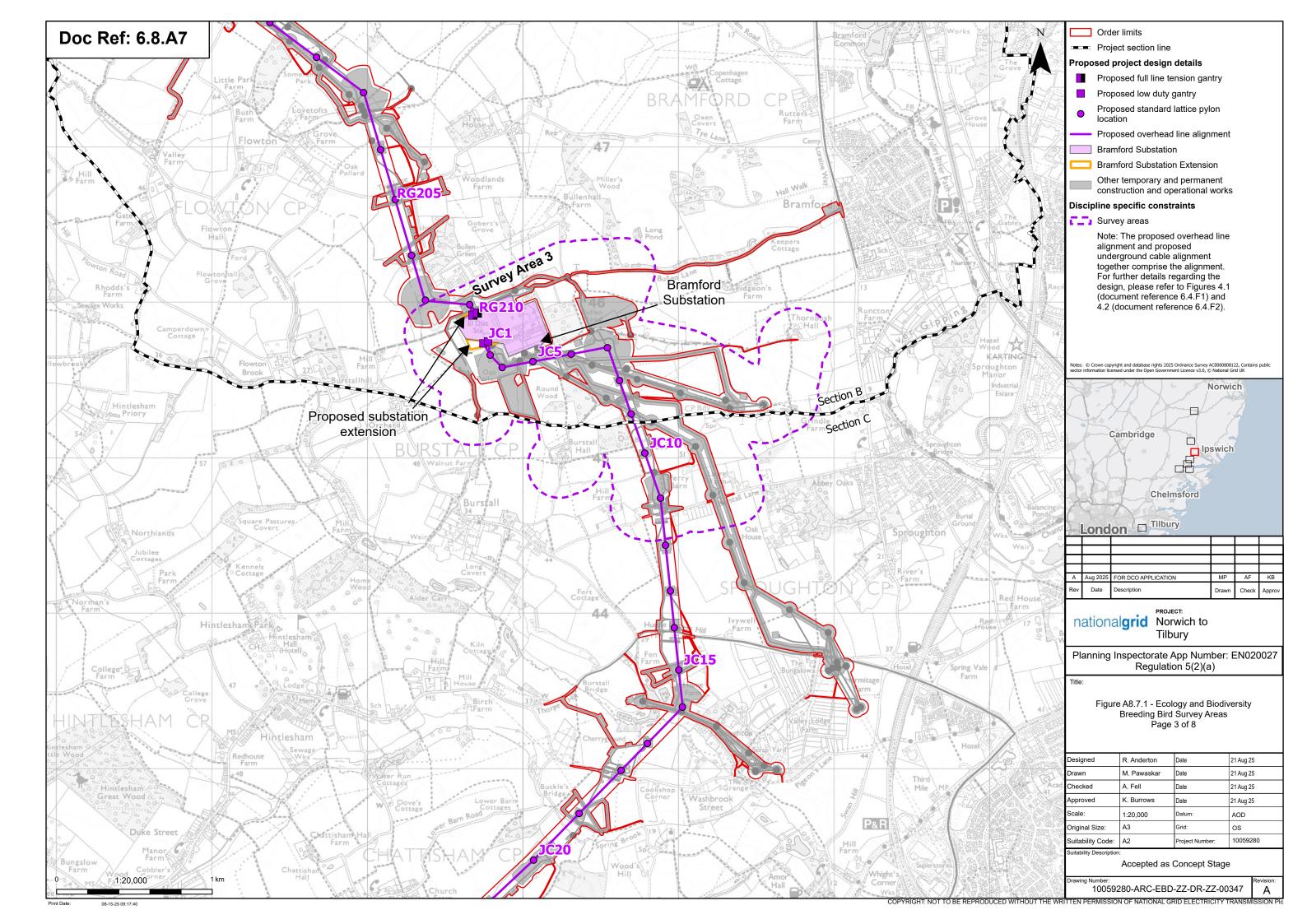
# Annex A. Figures

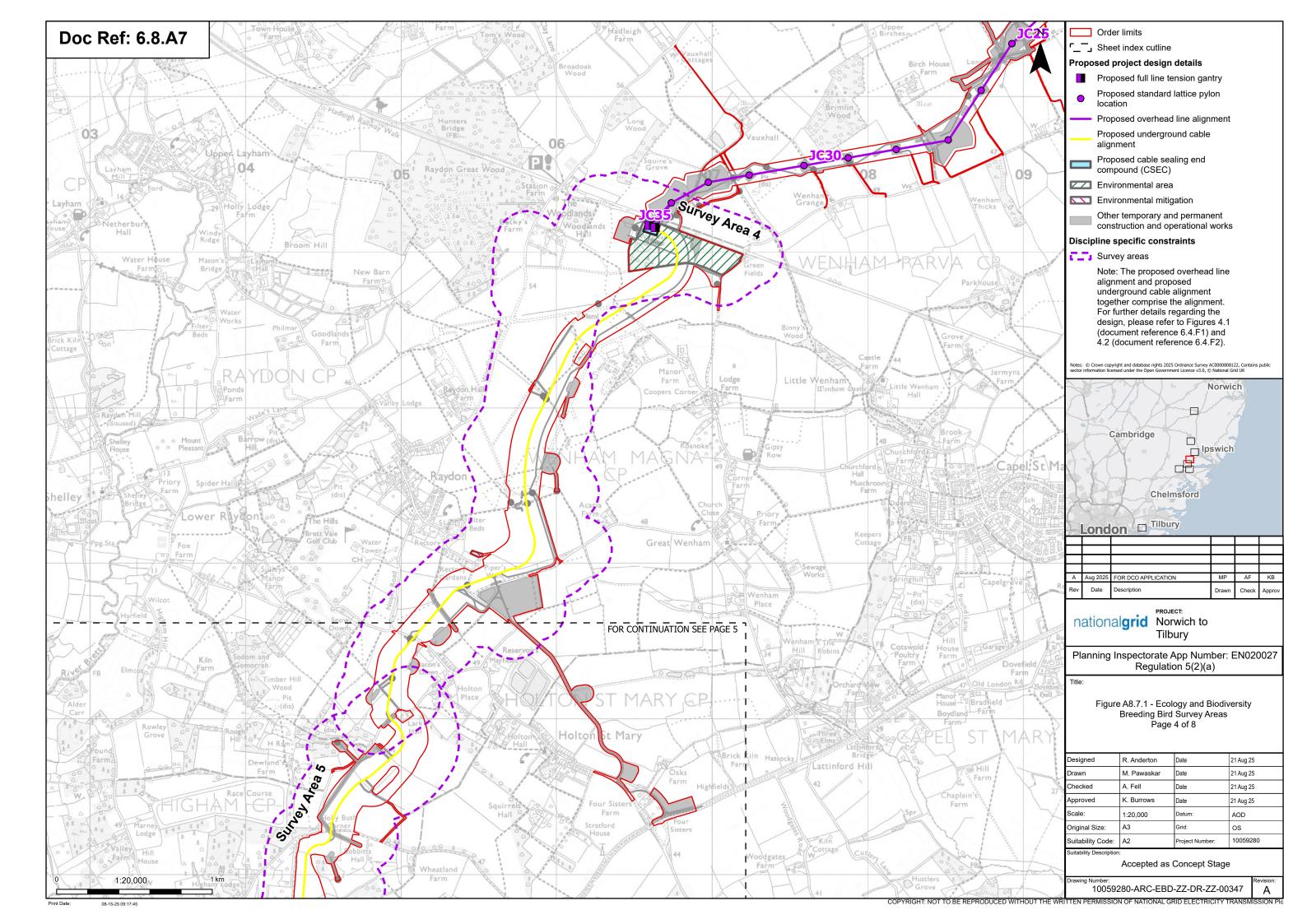


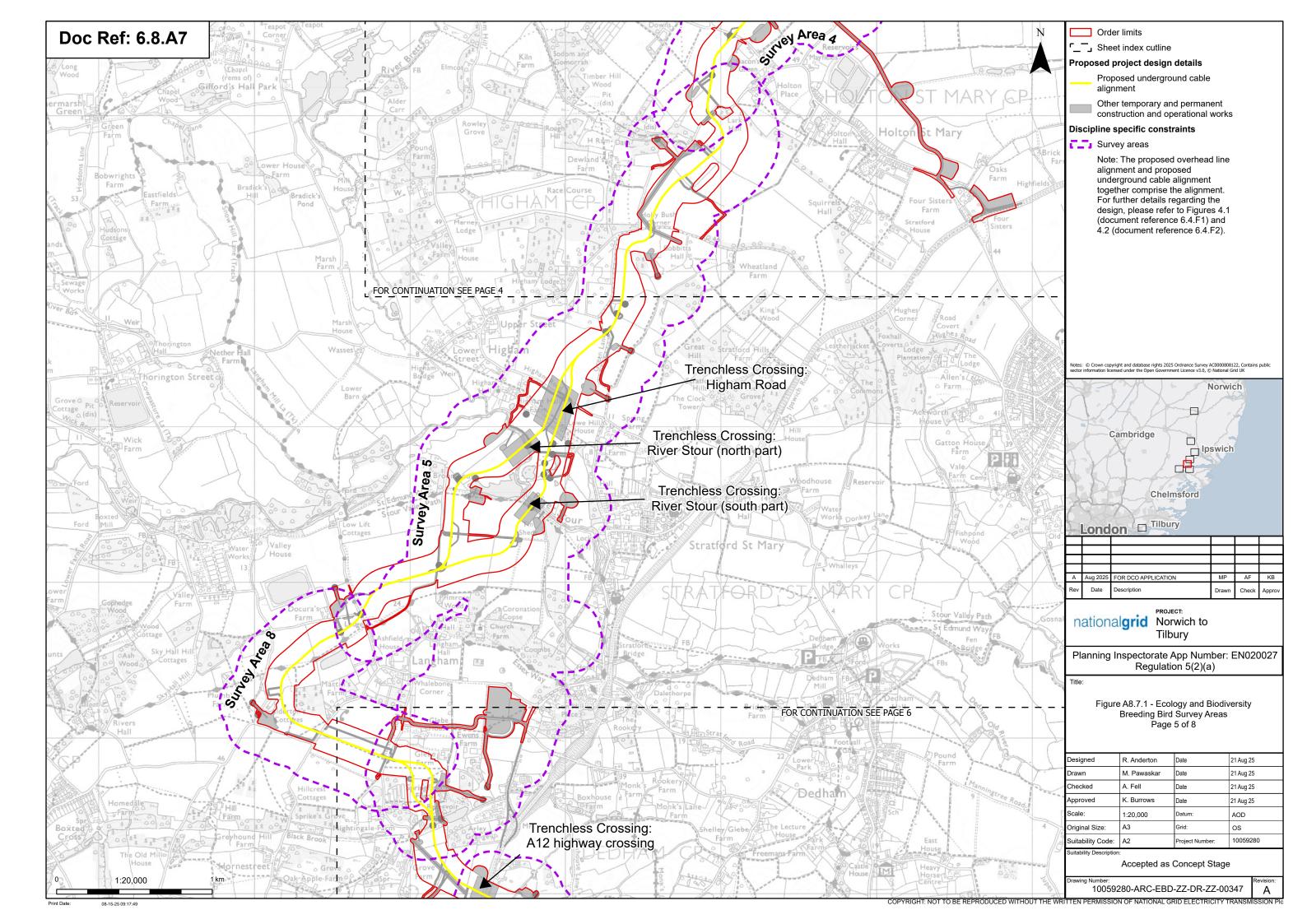


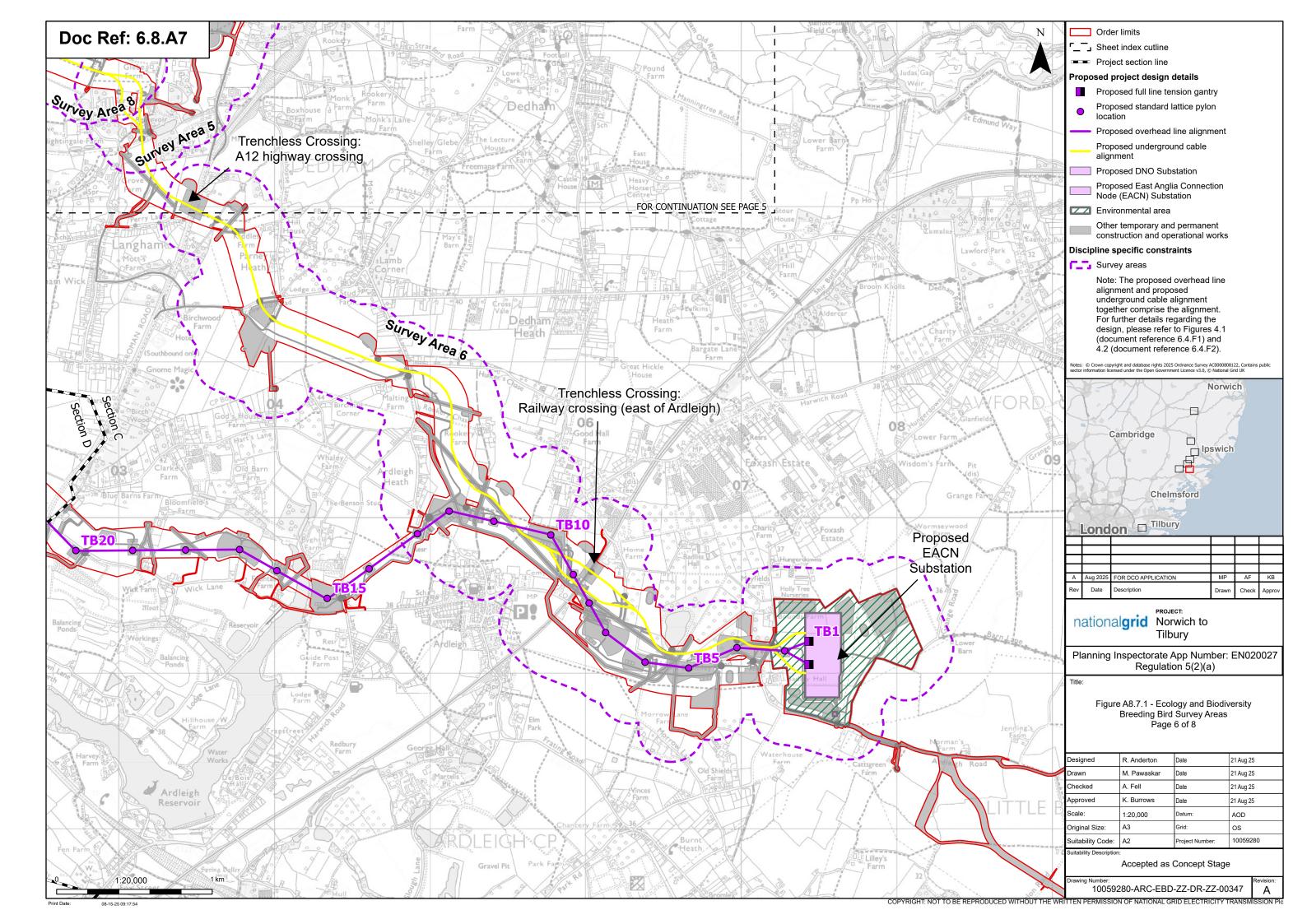


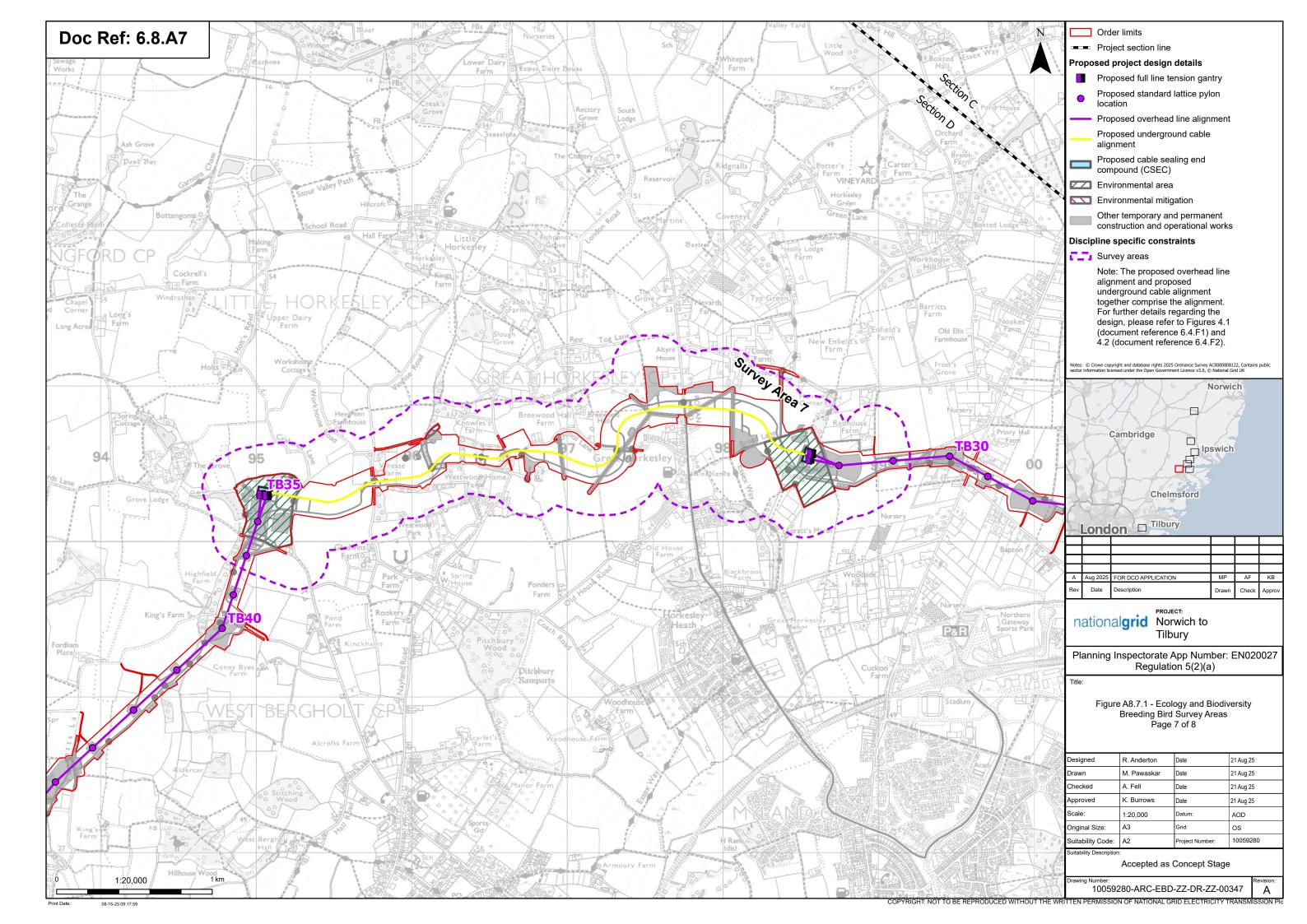


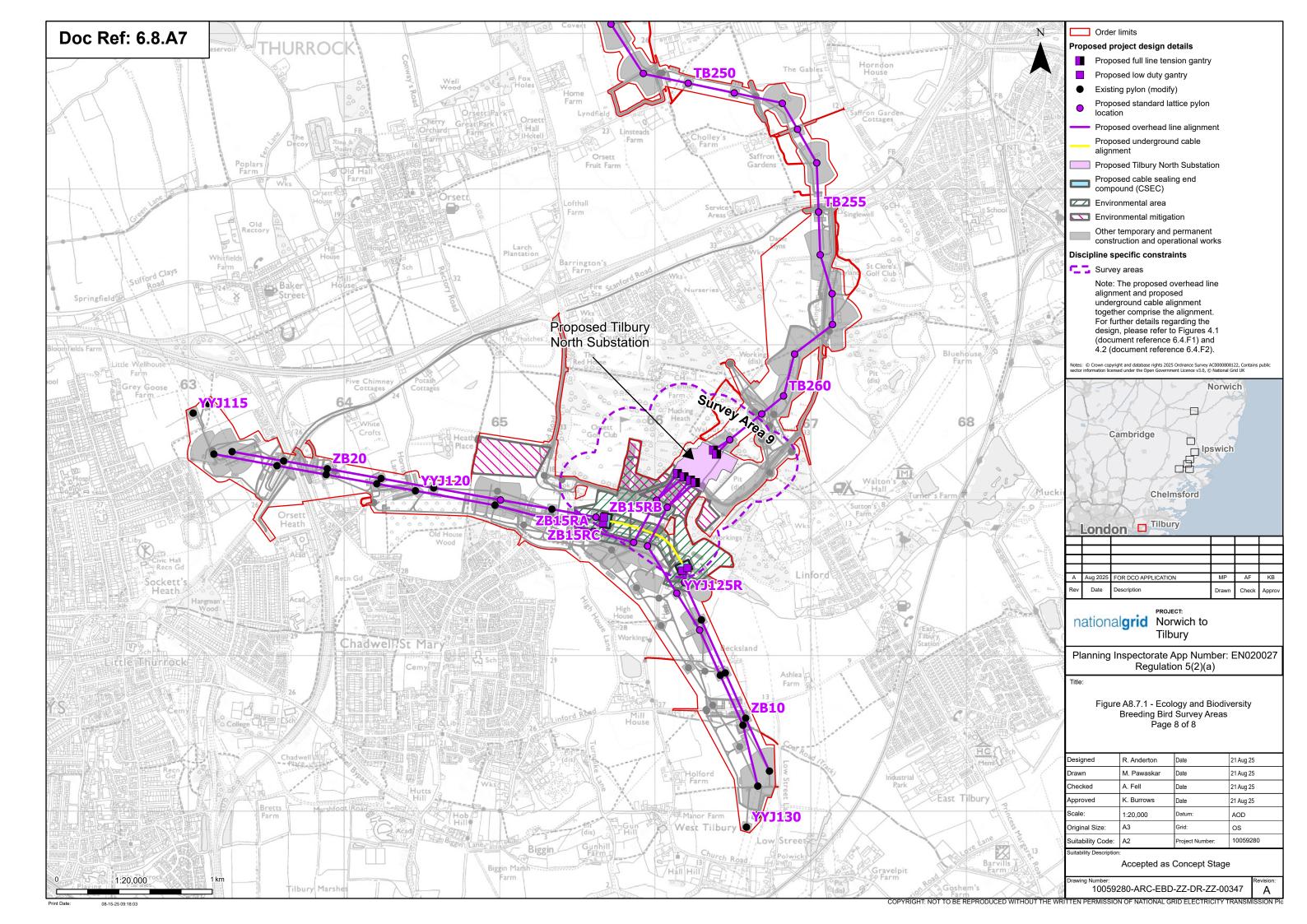


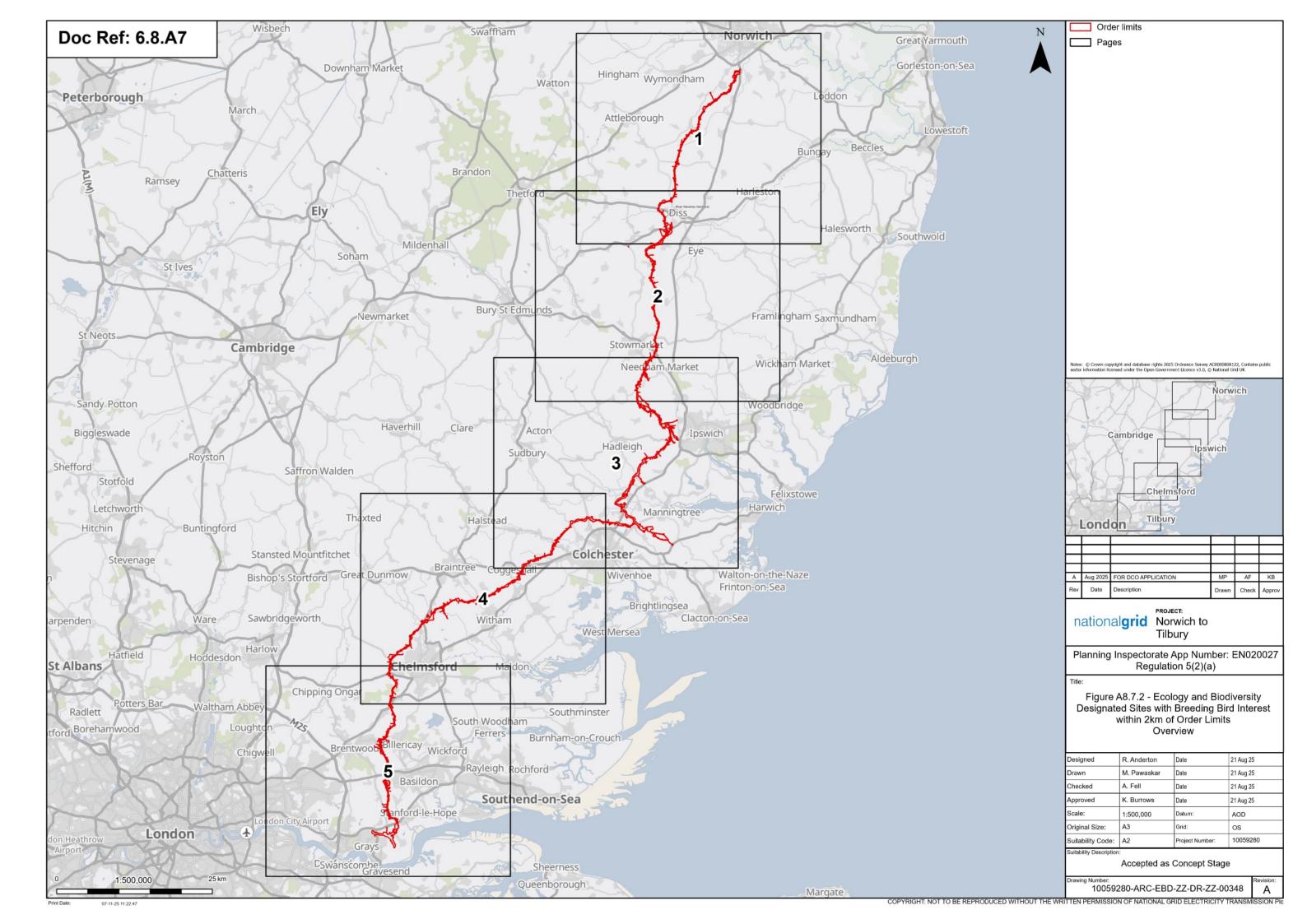


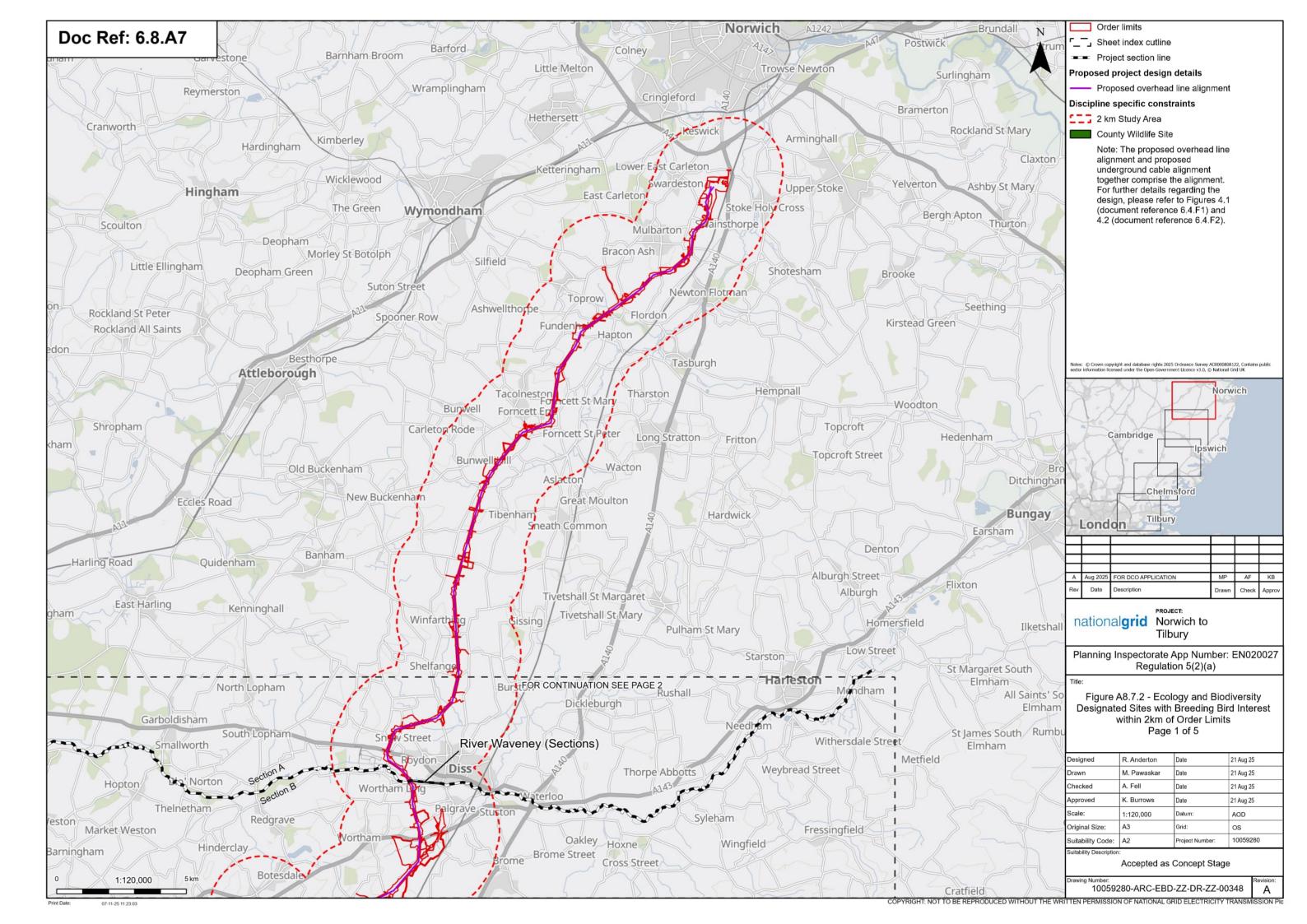


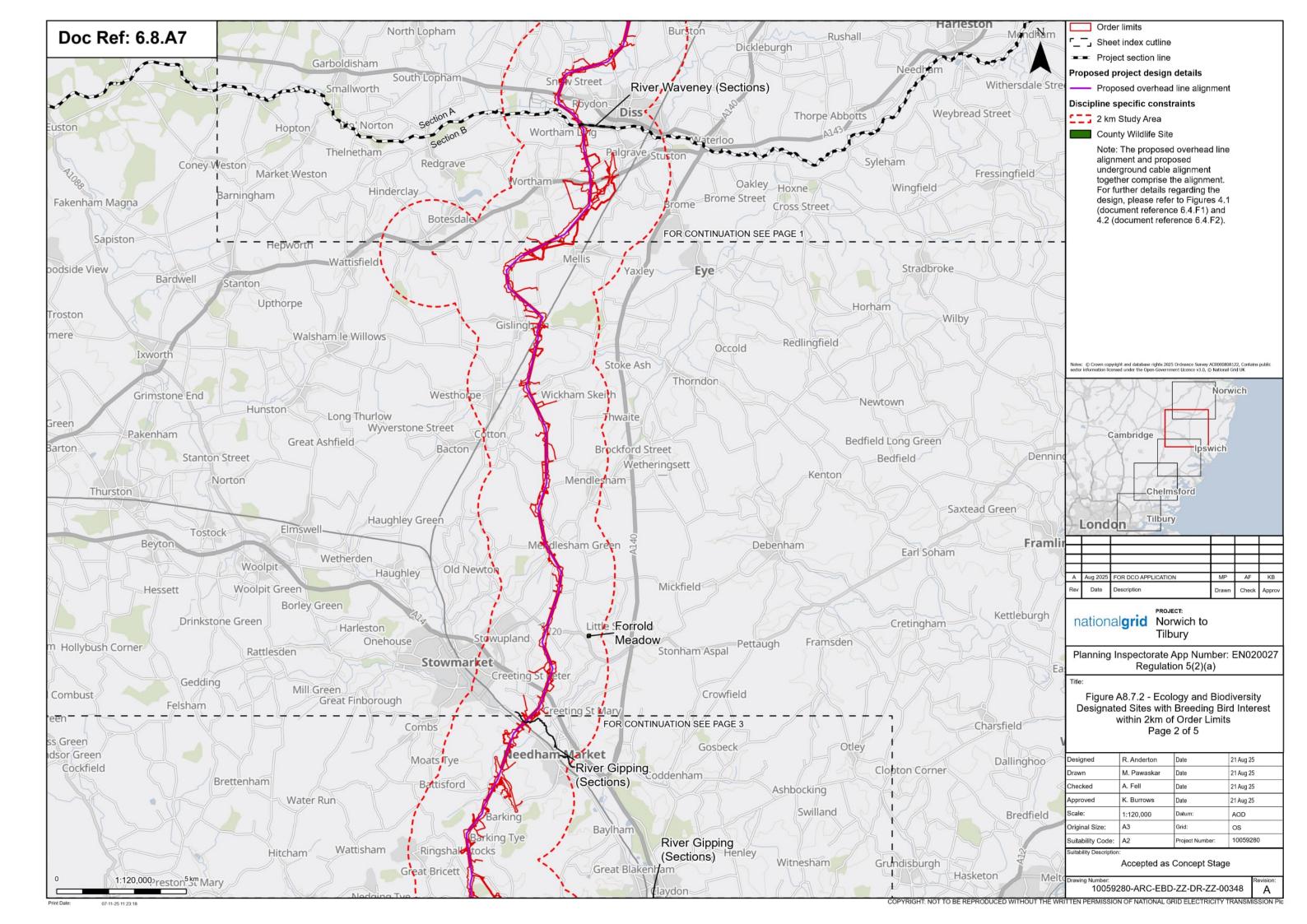


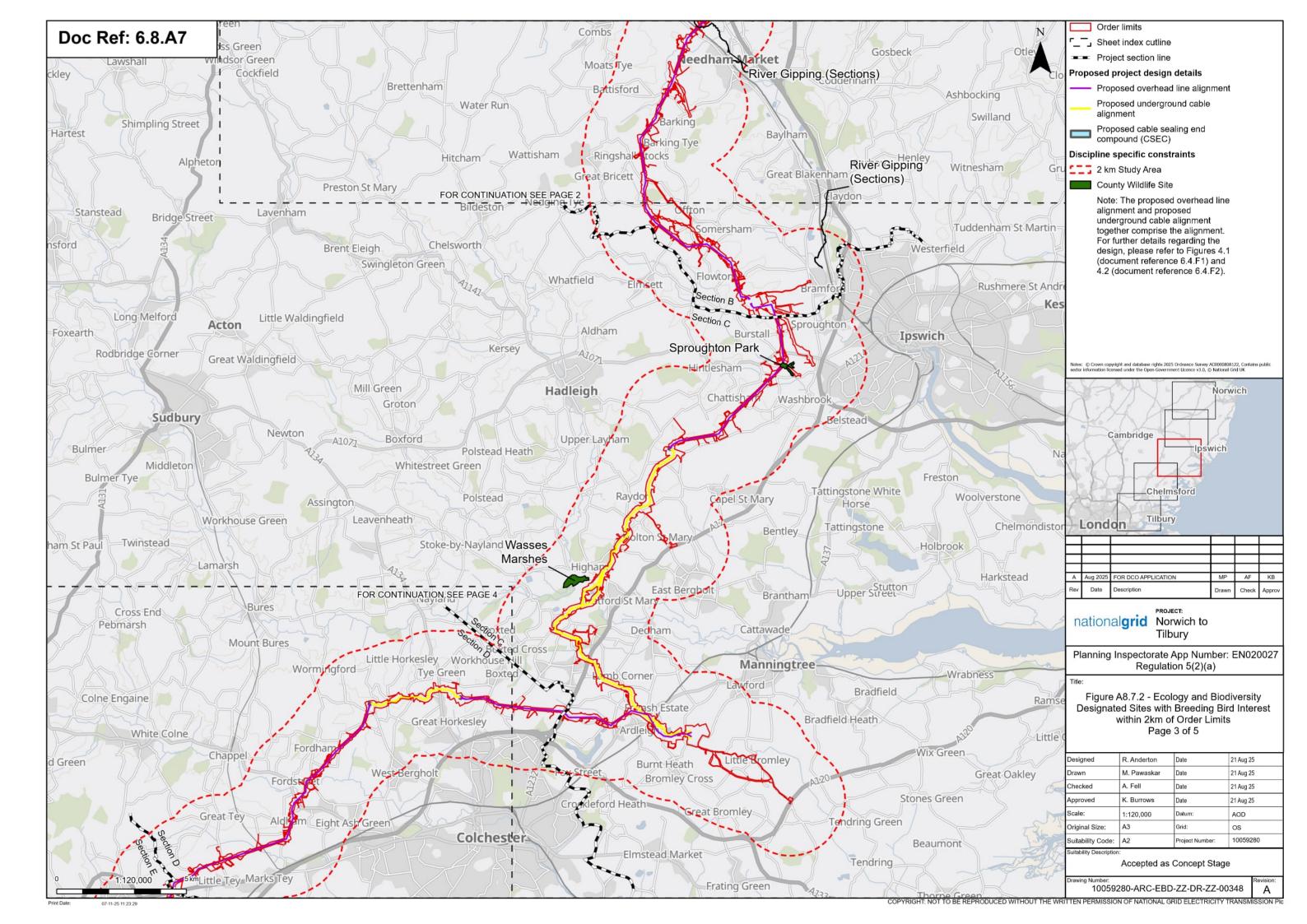


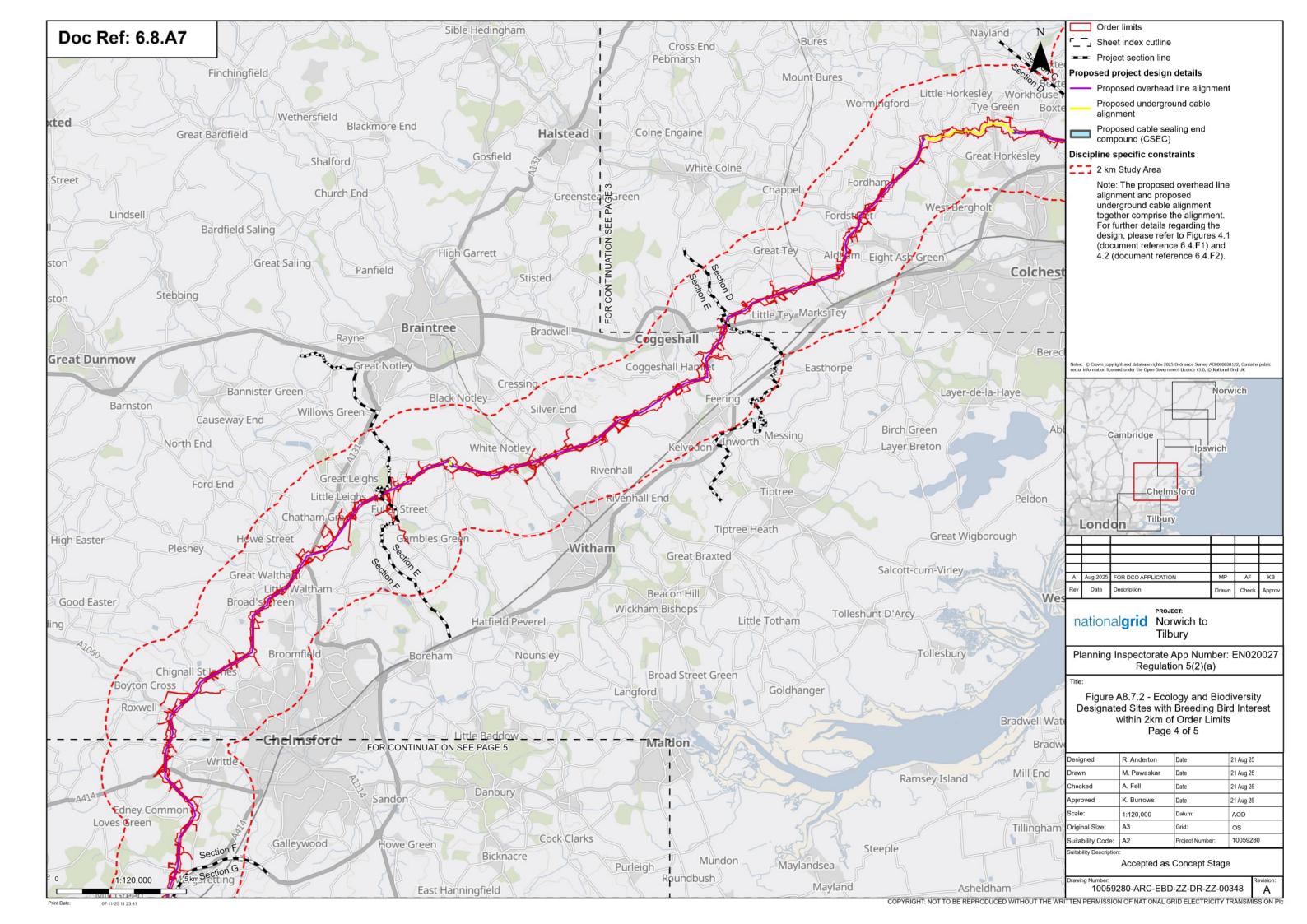


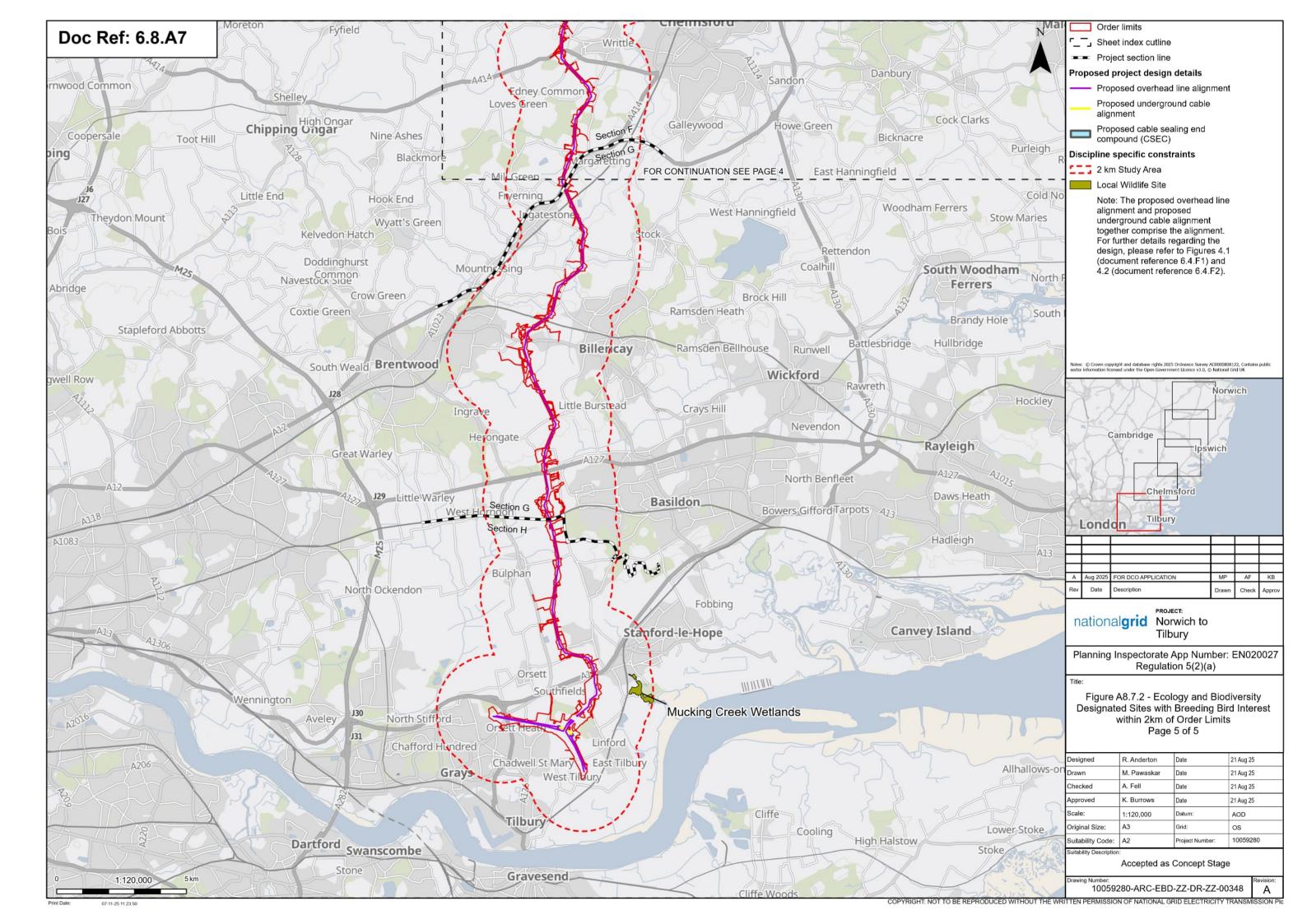


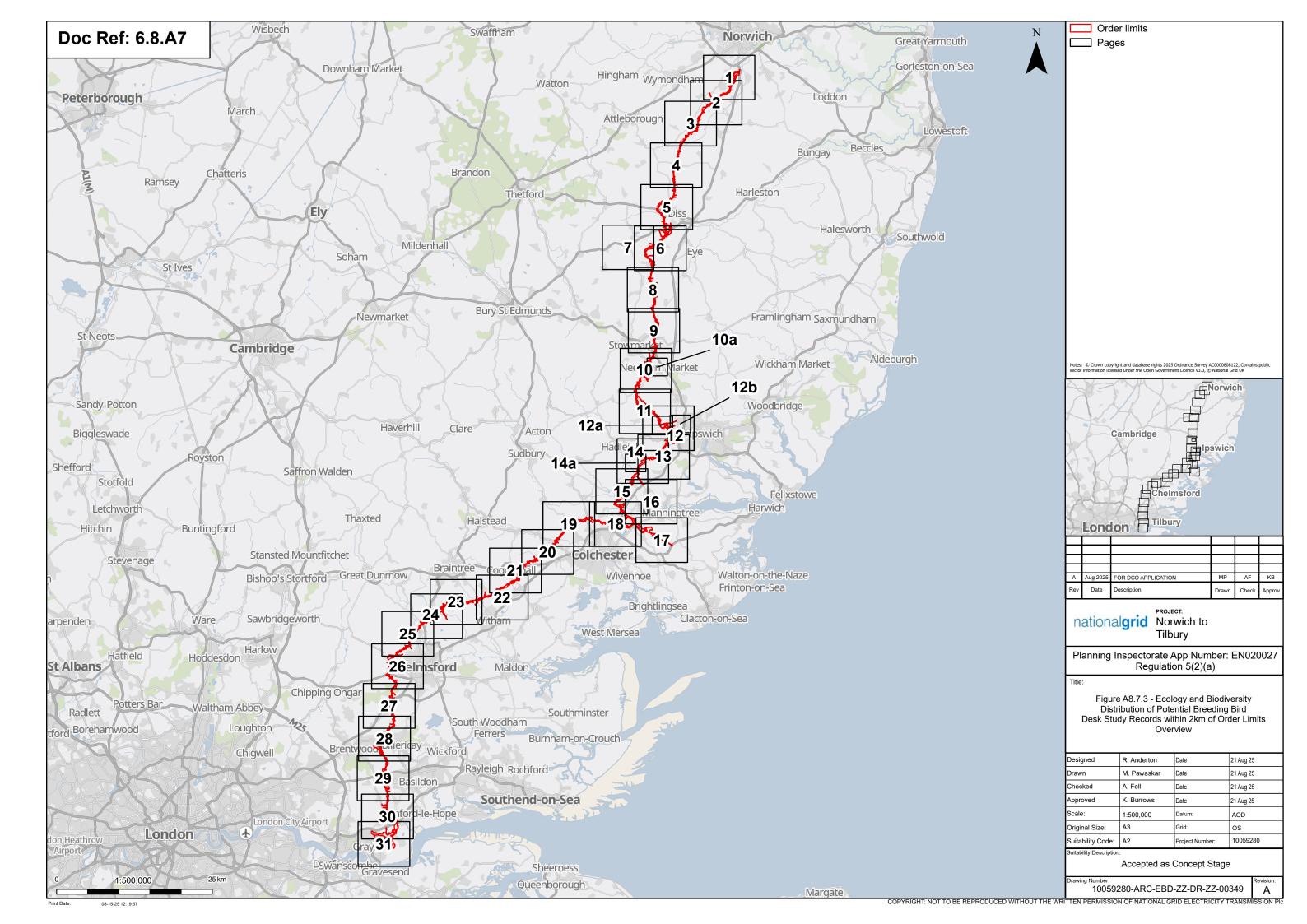


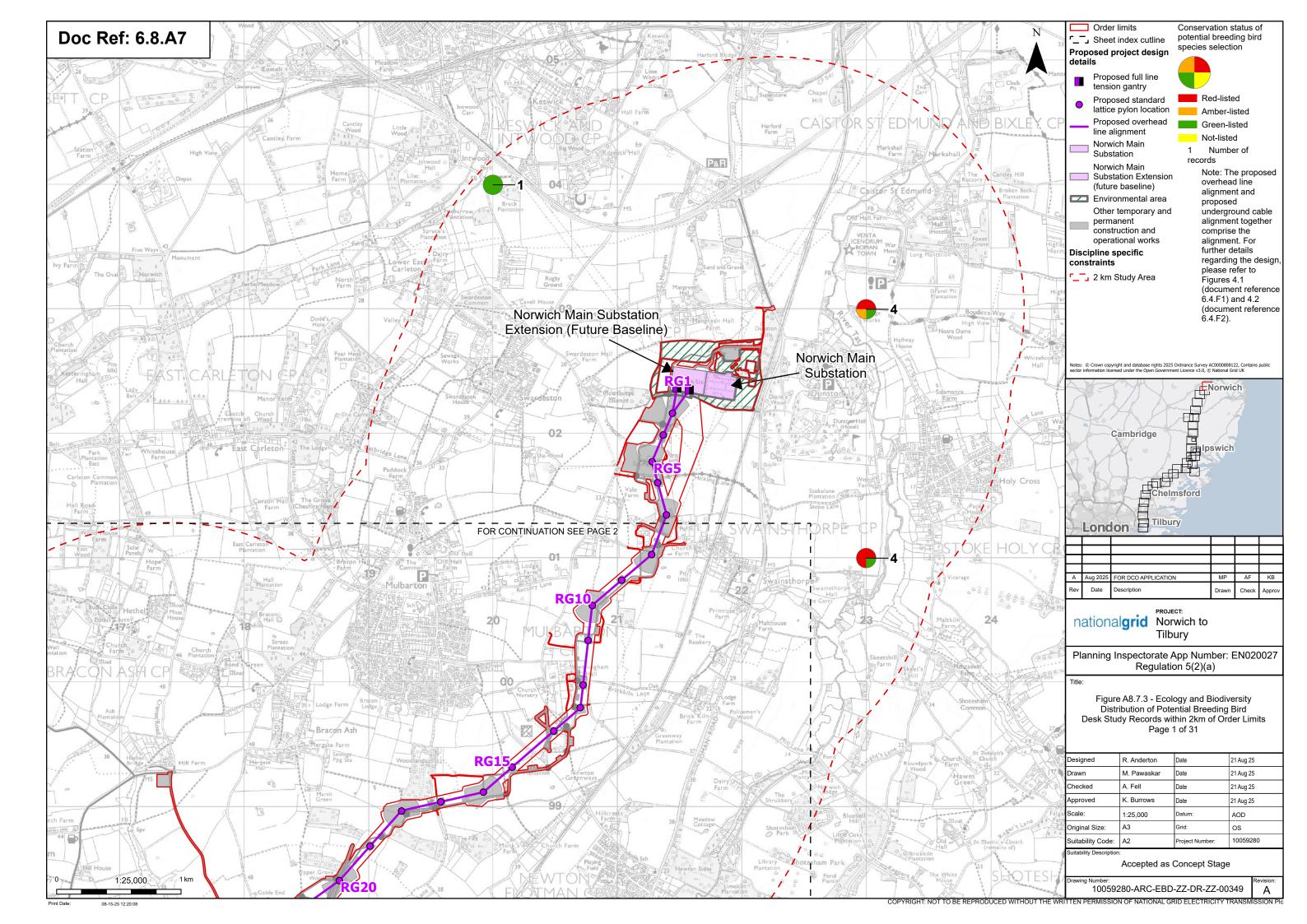


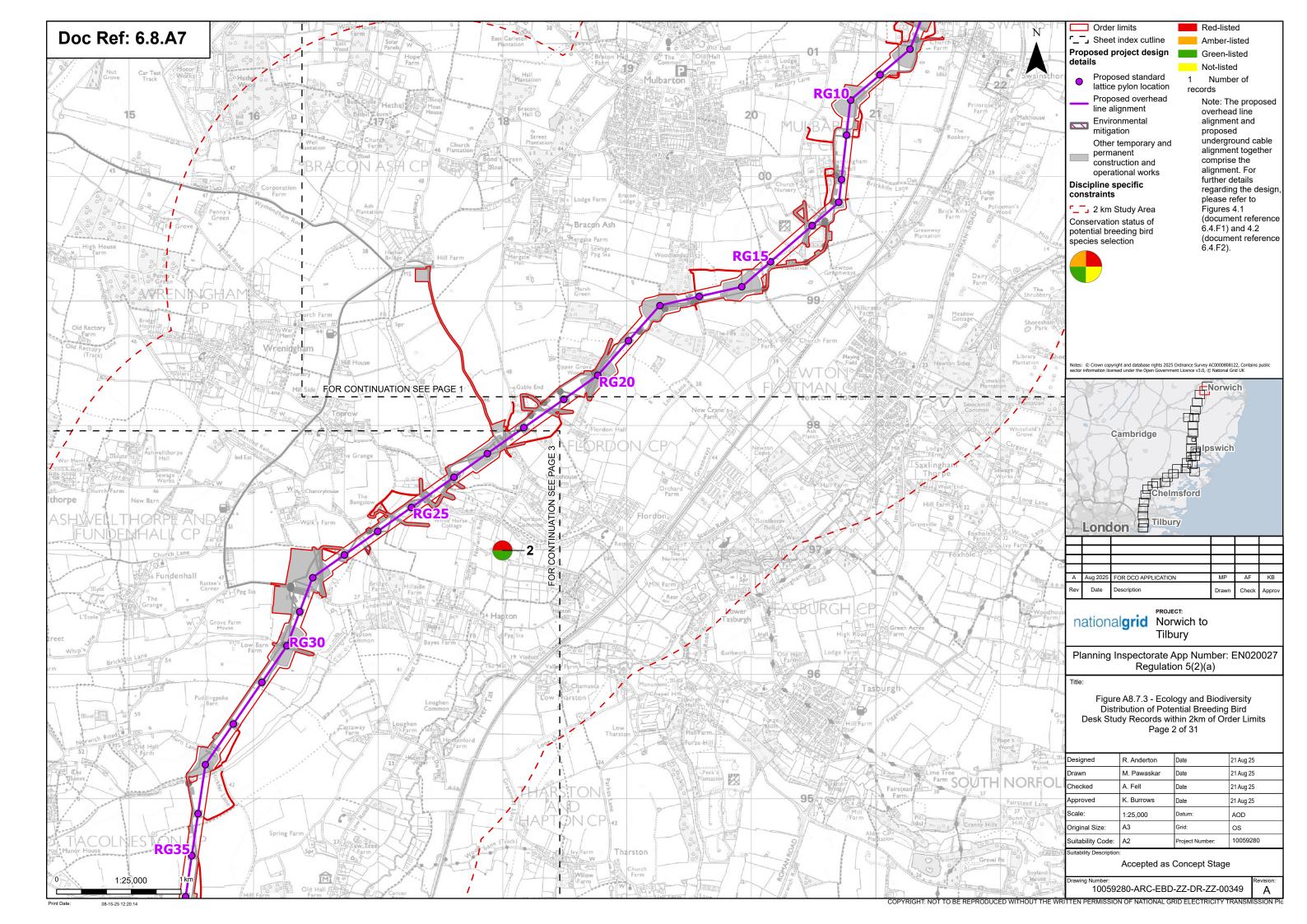


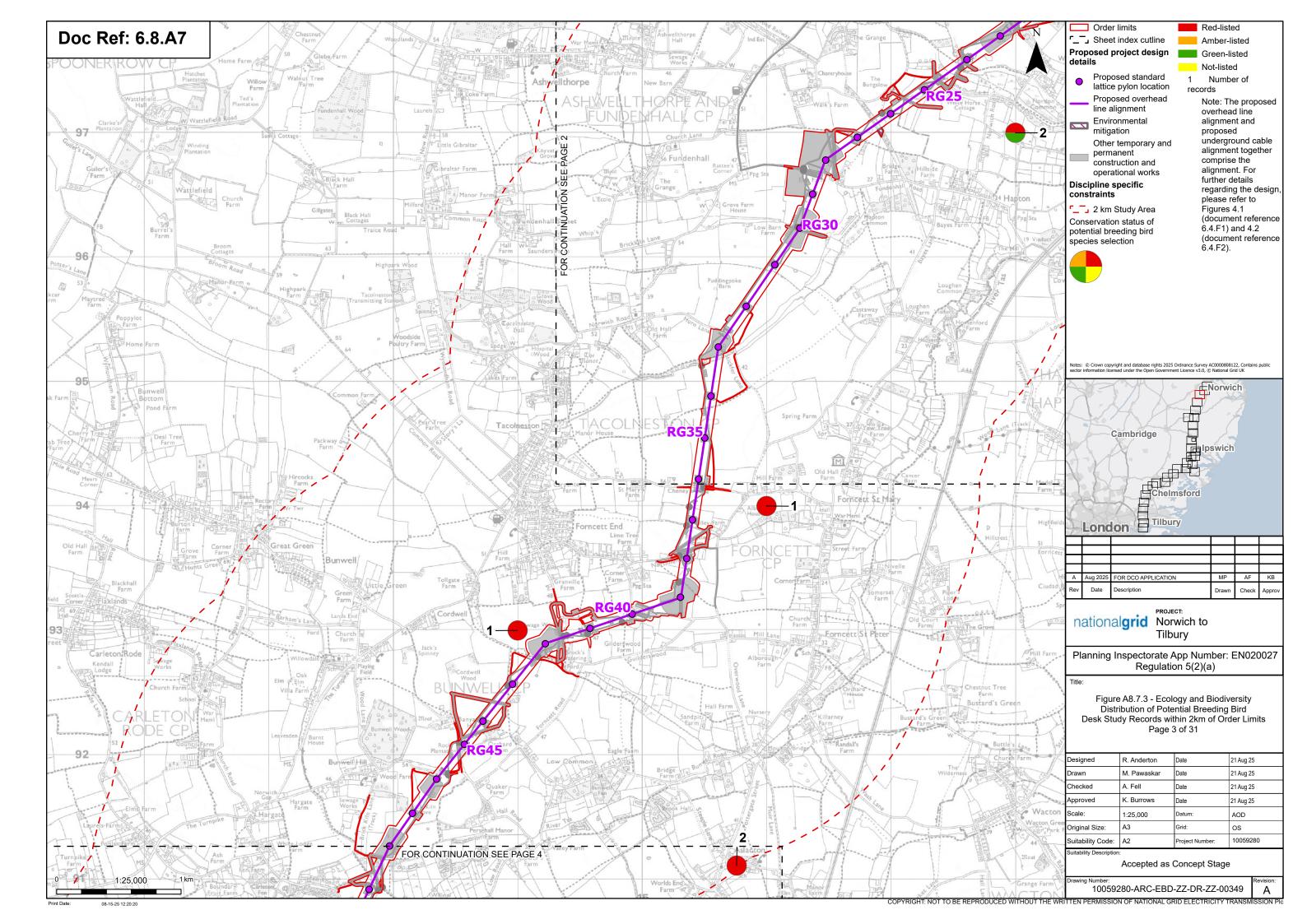


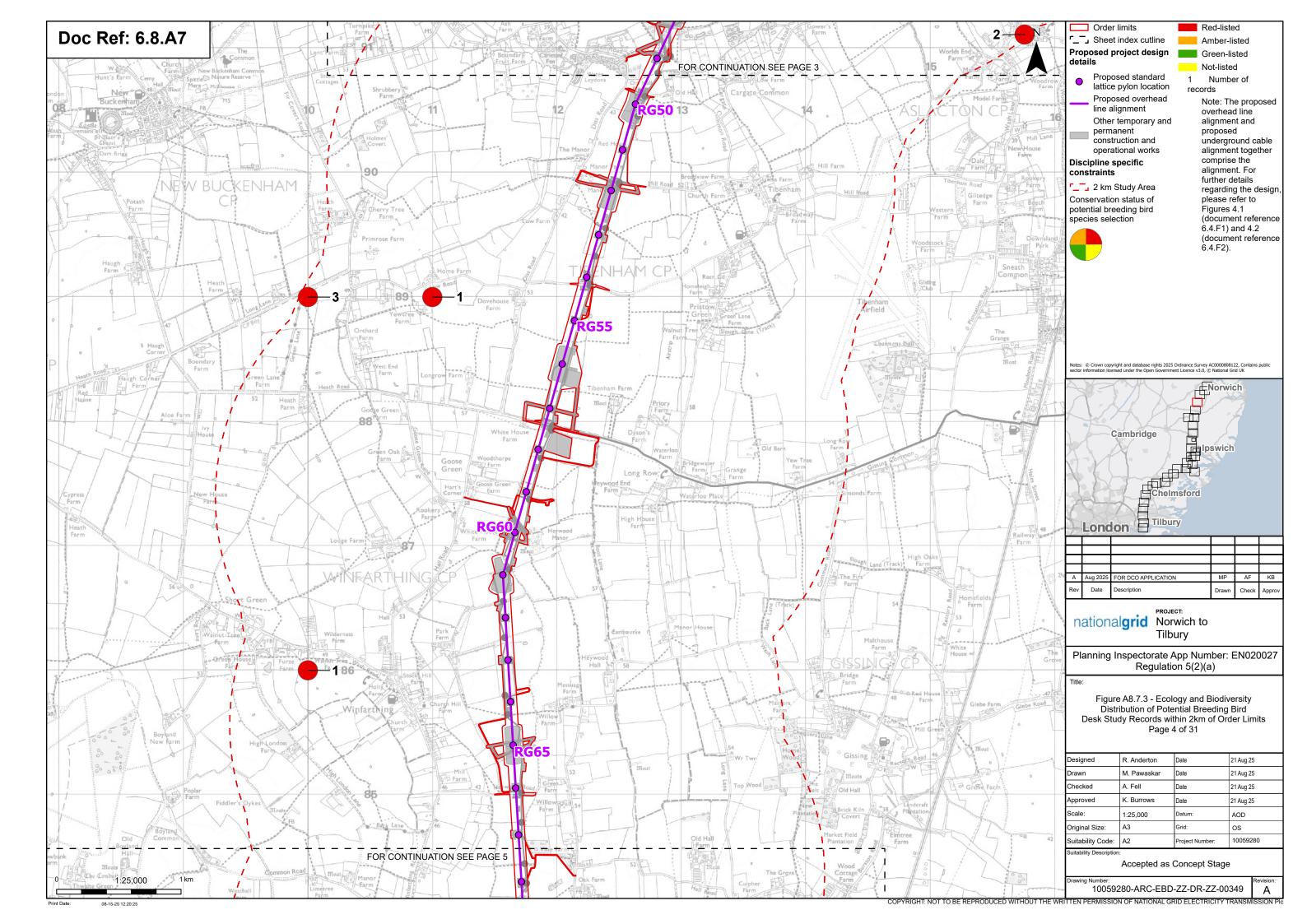


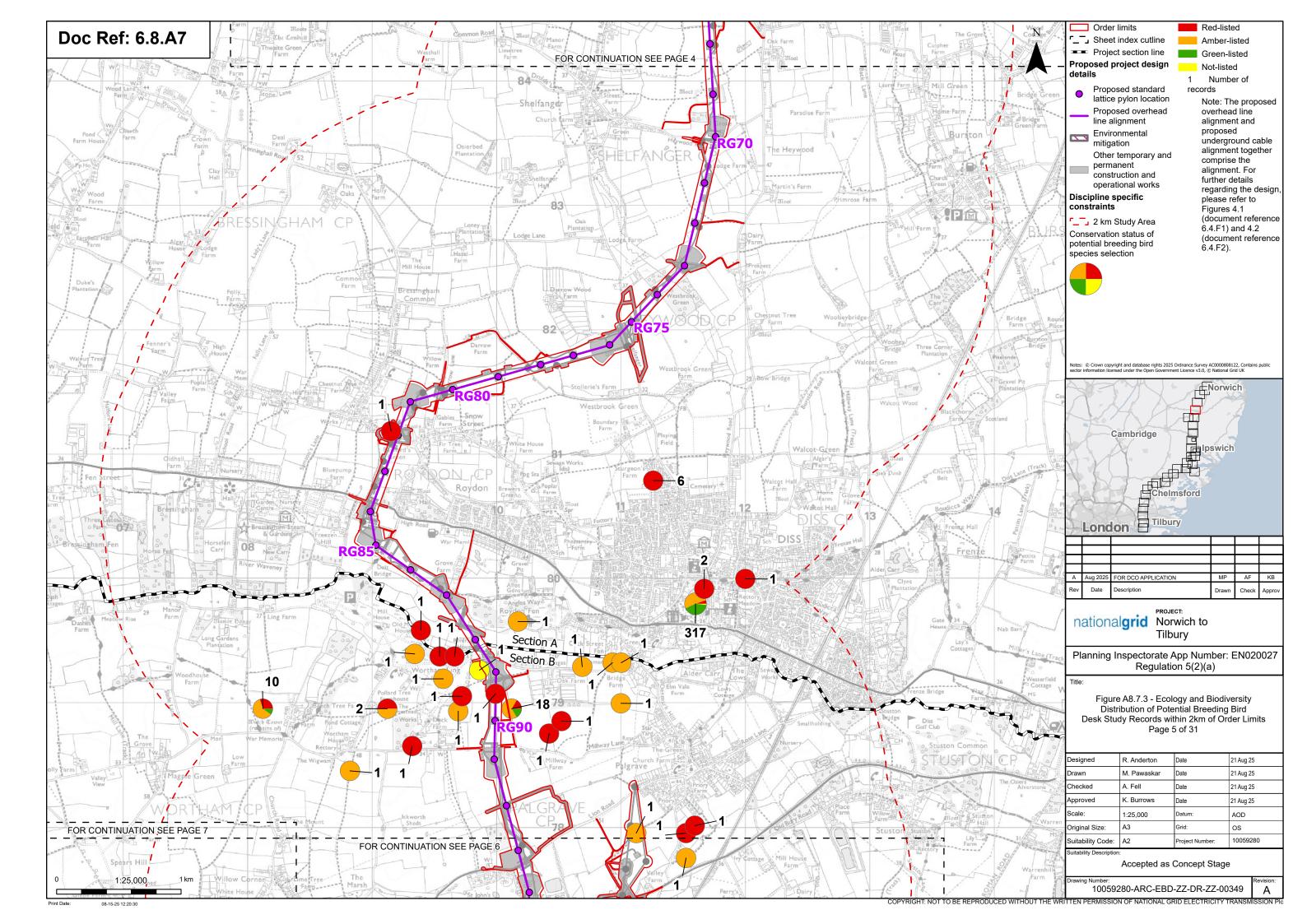


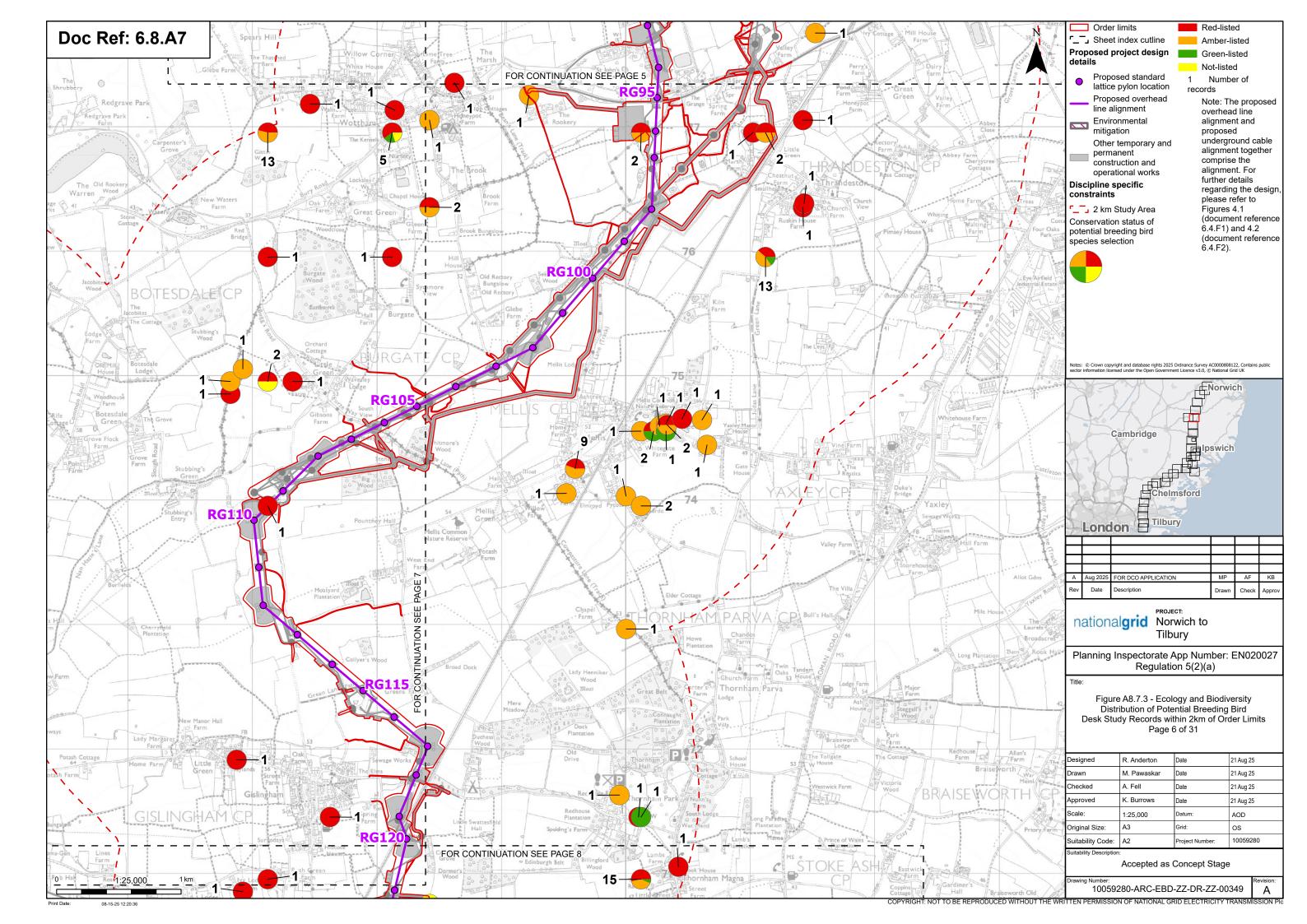


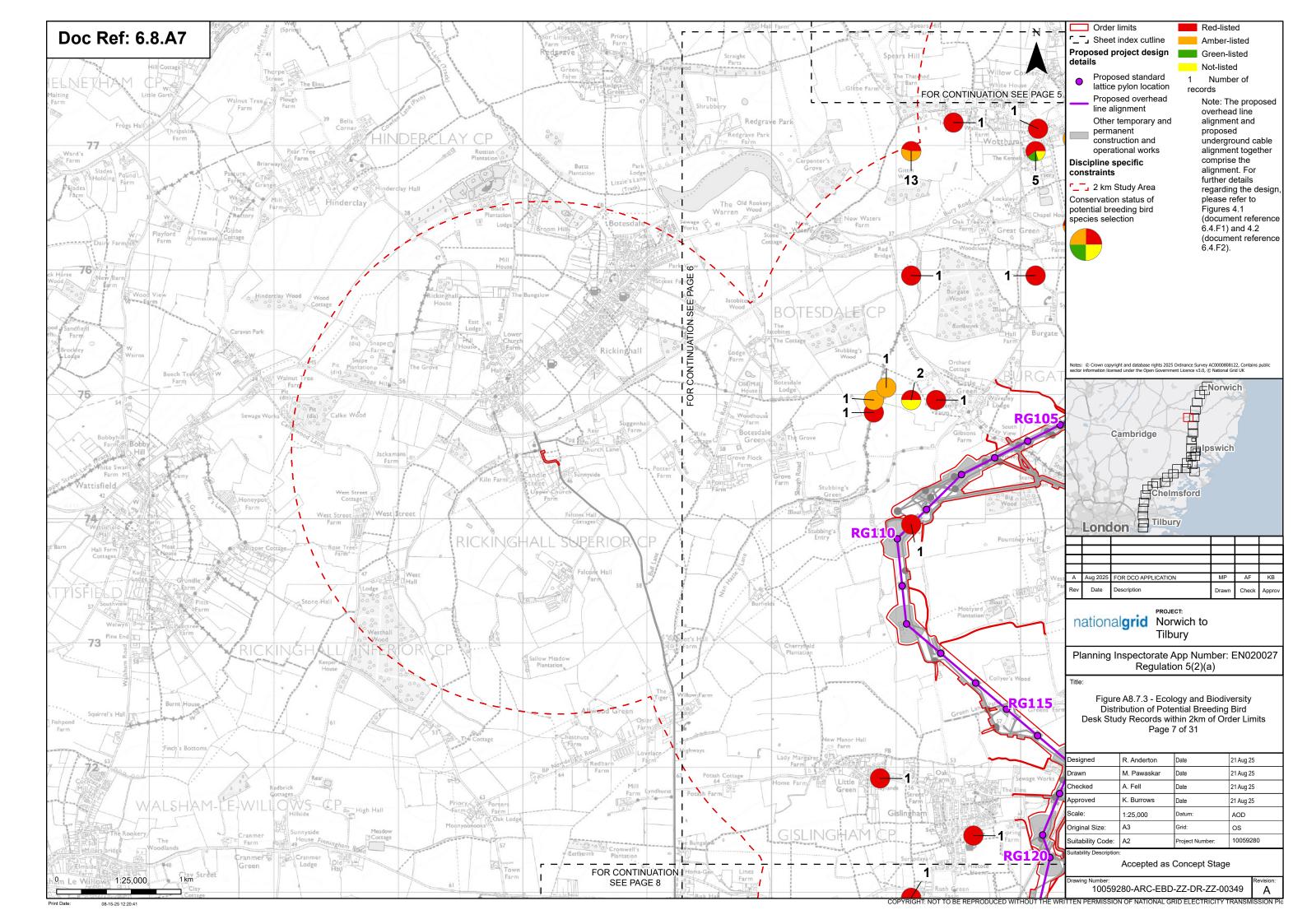


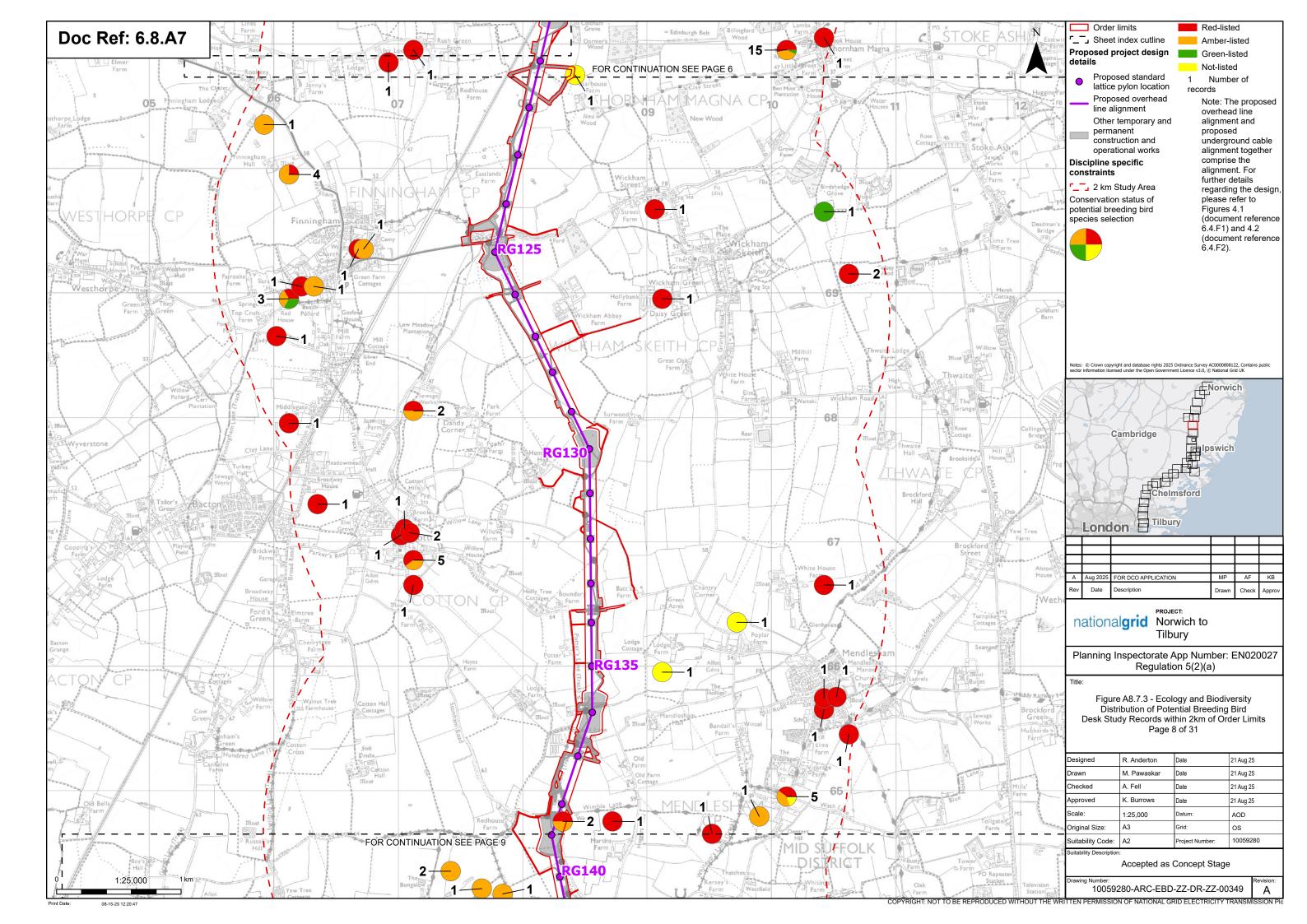


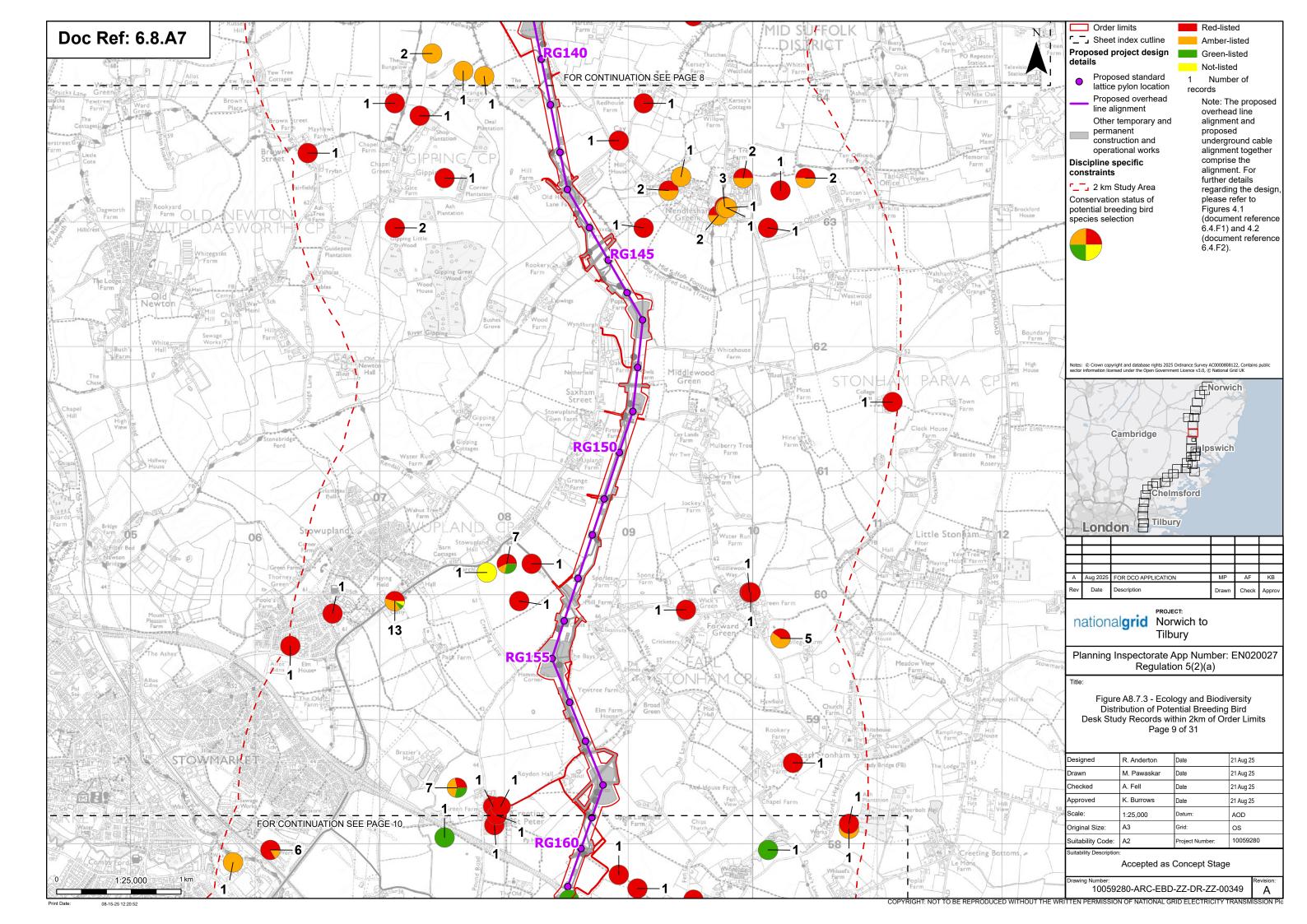


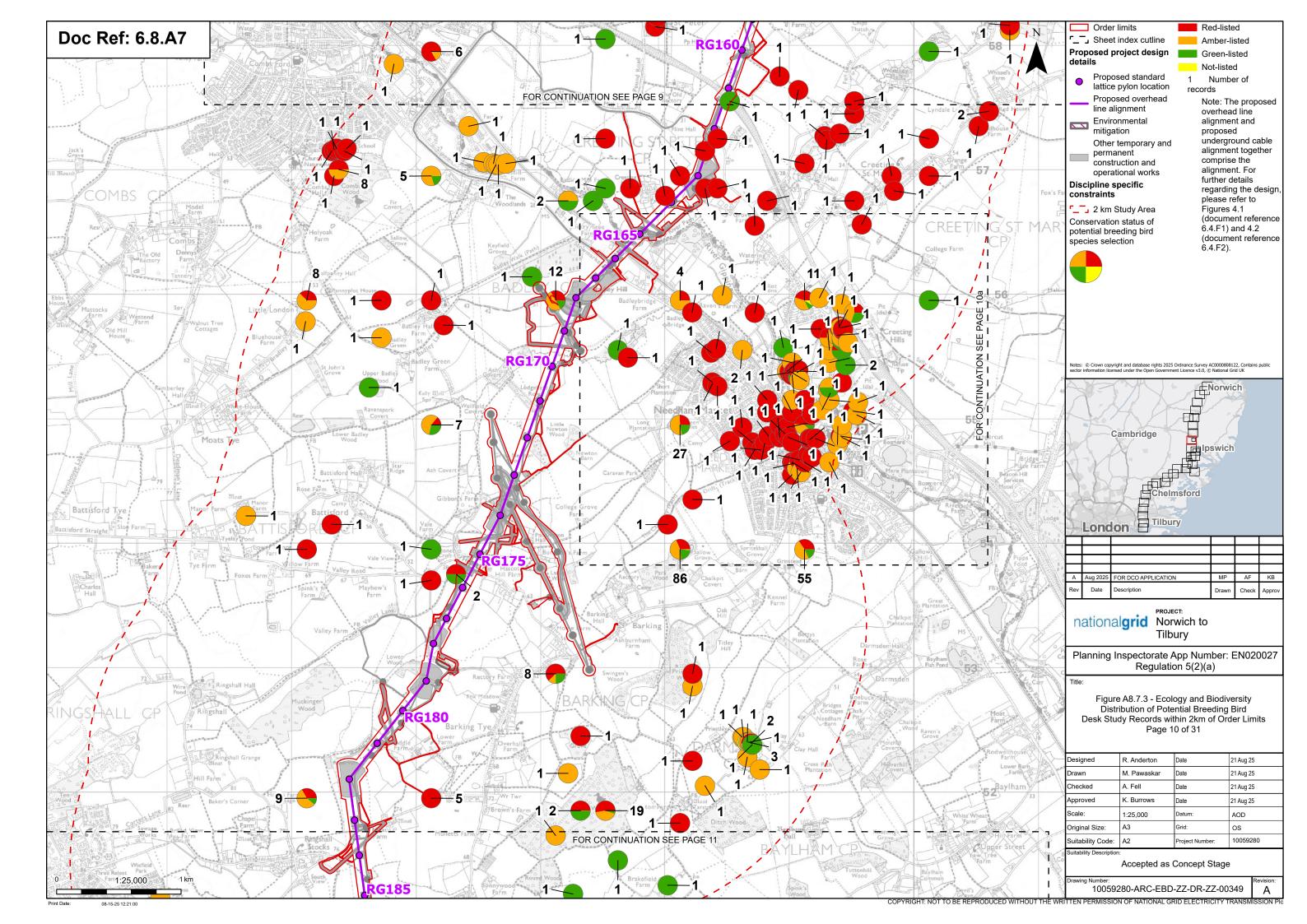


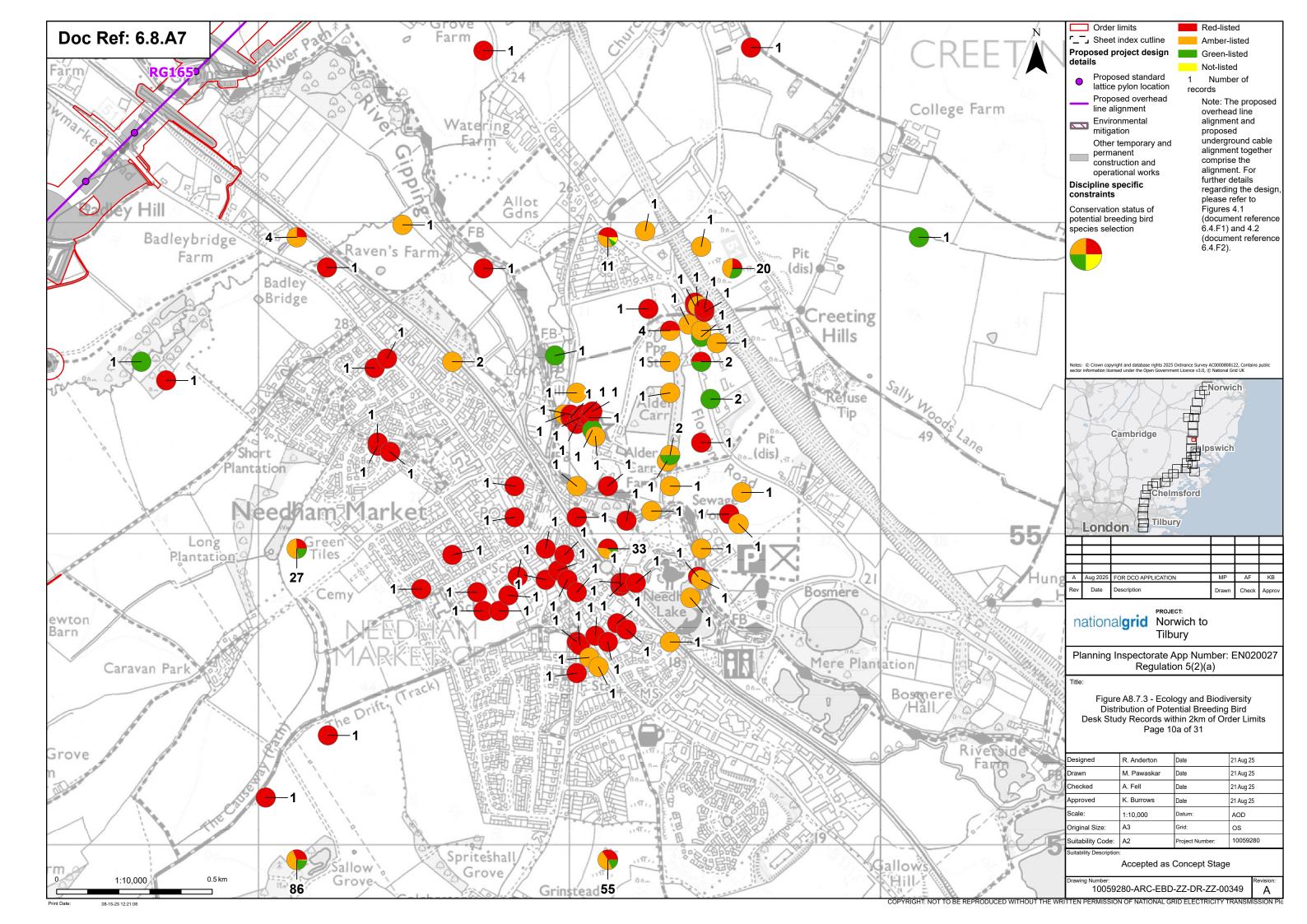


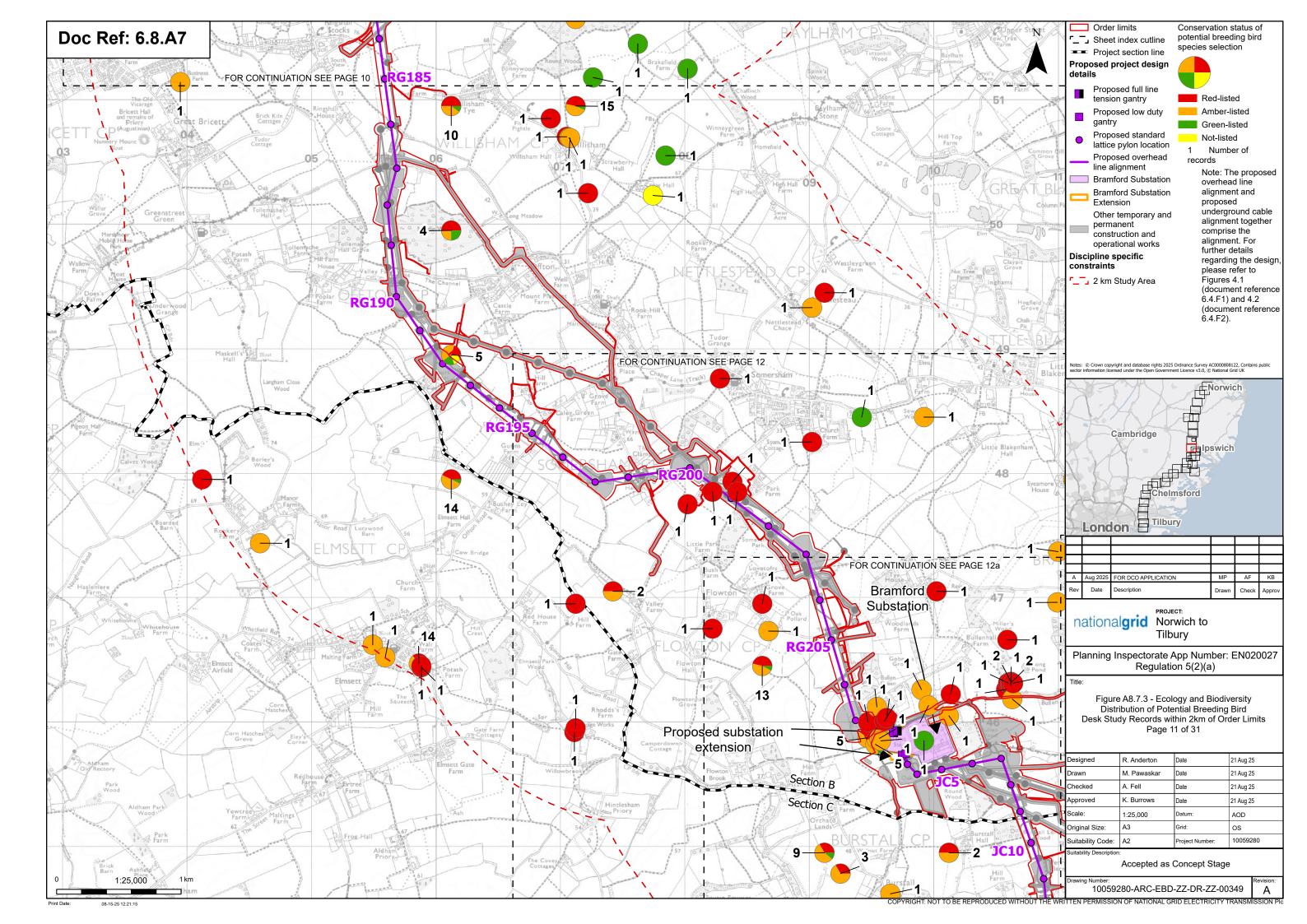


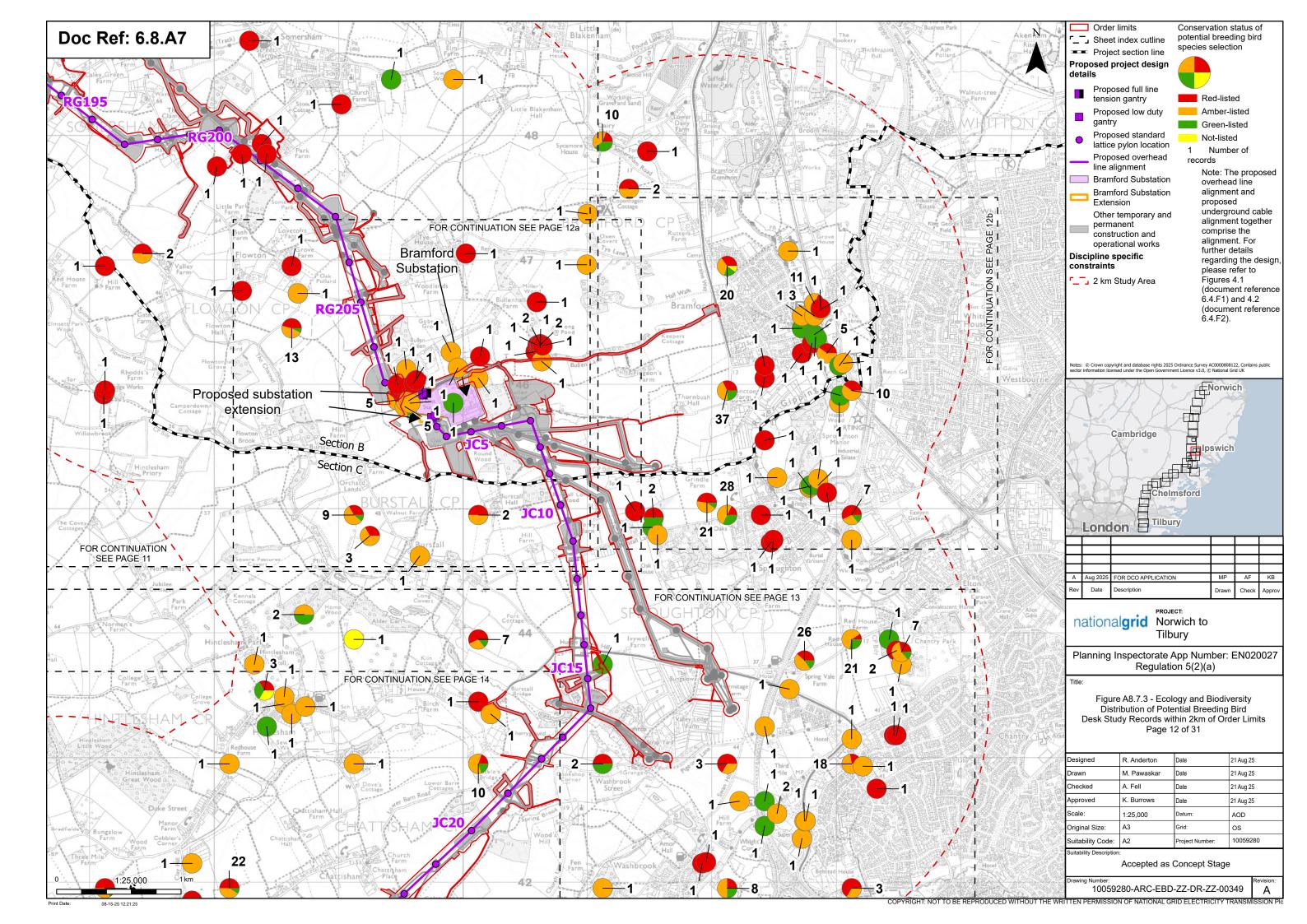


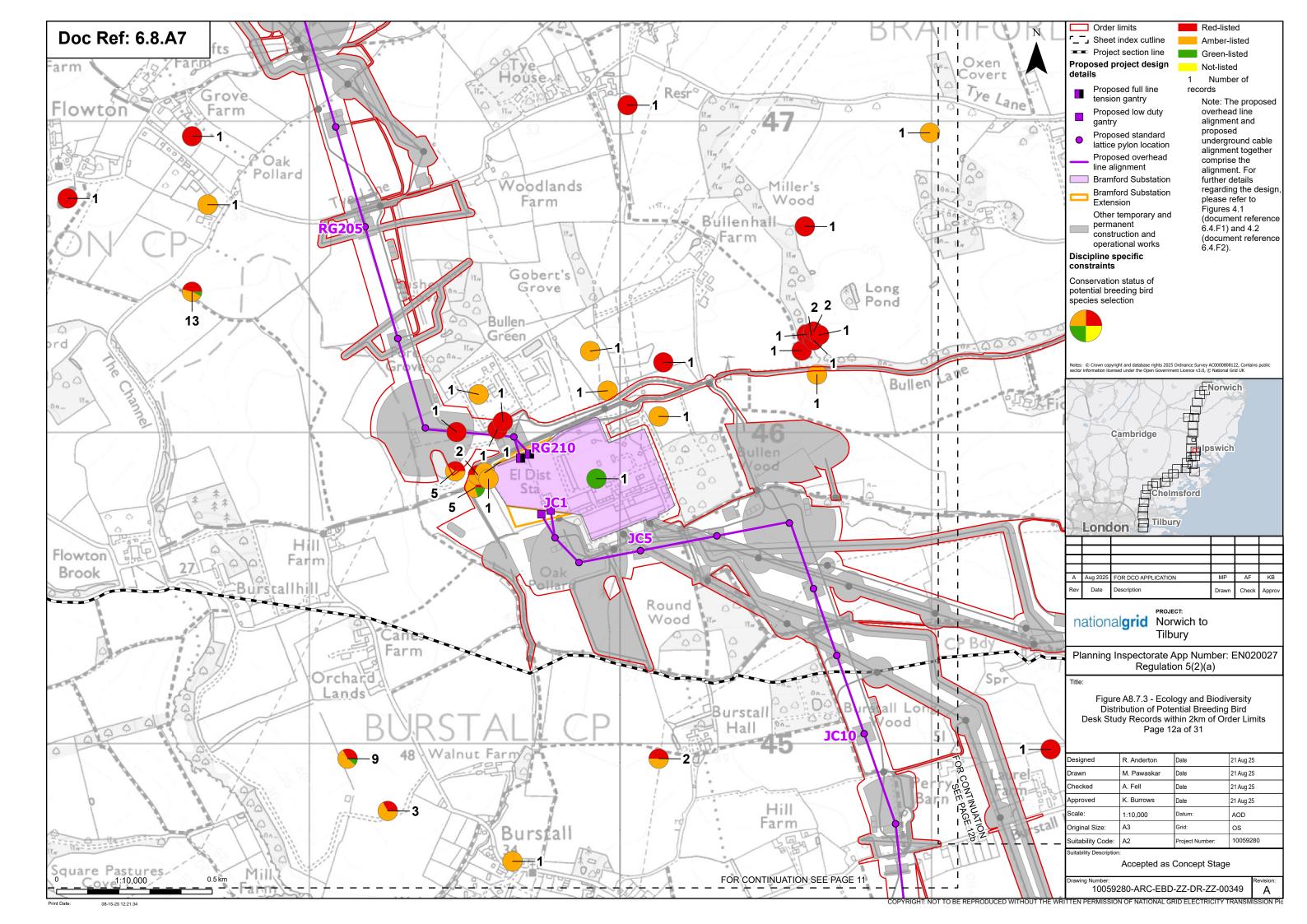


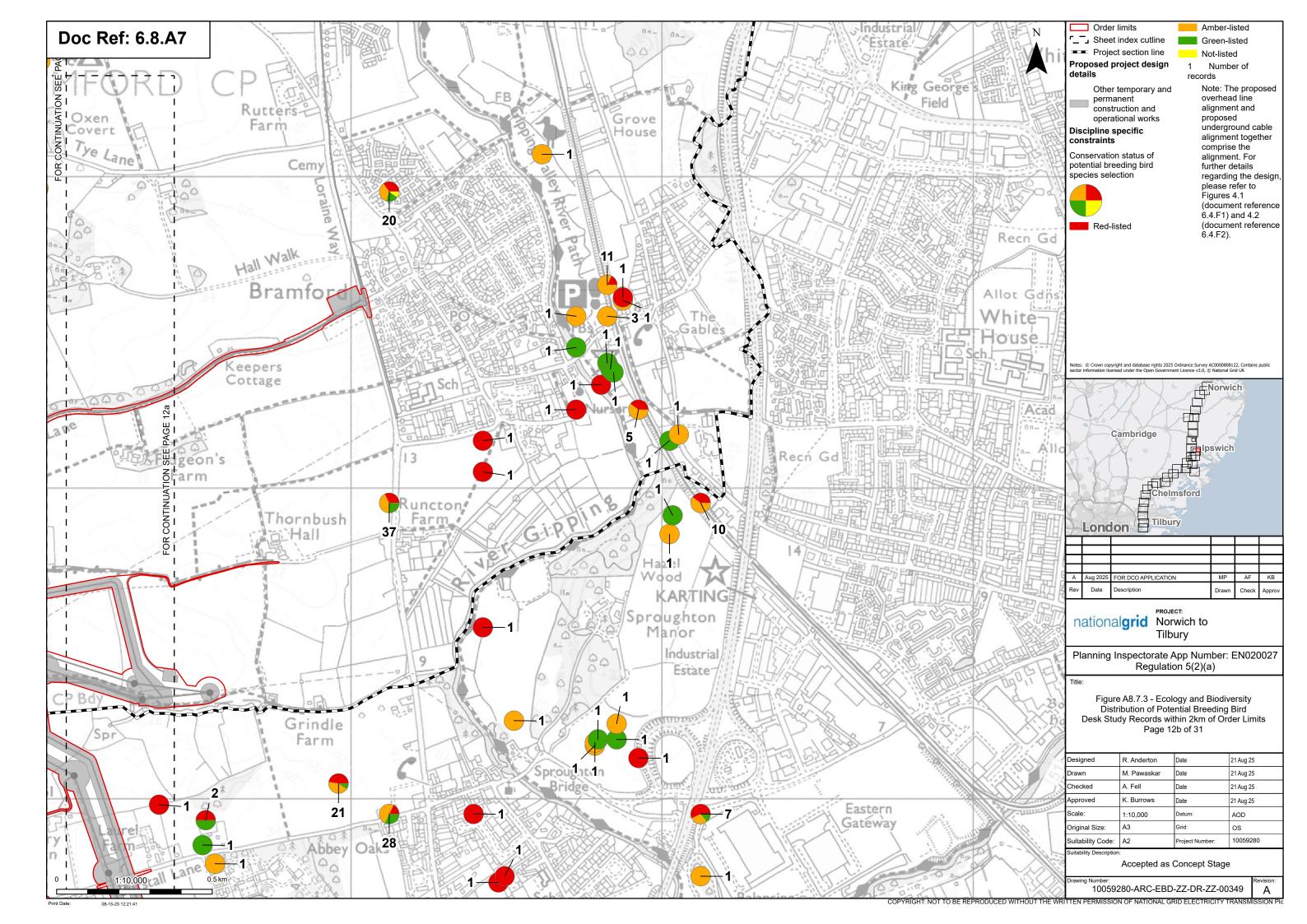


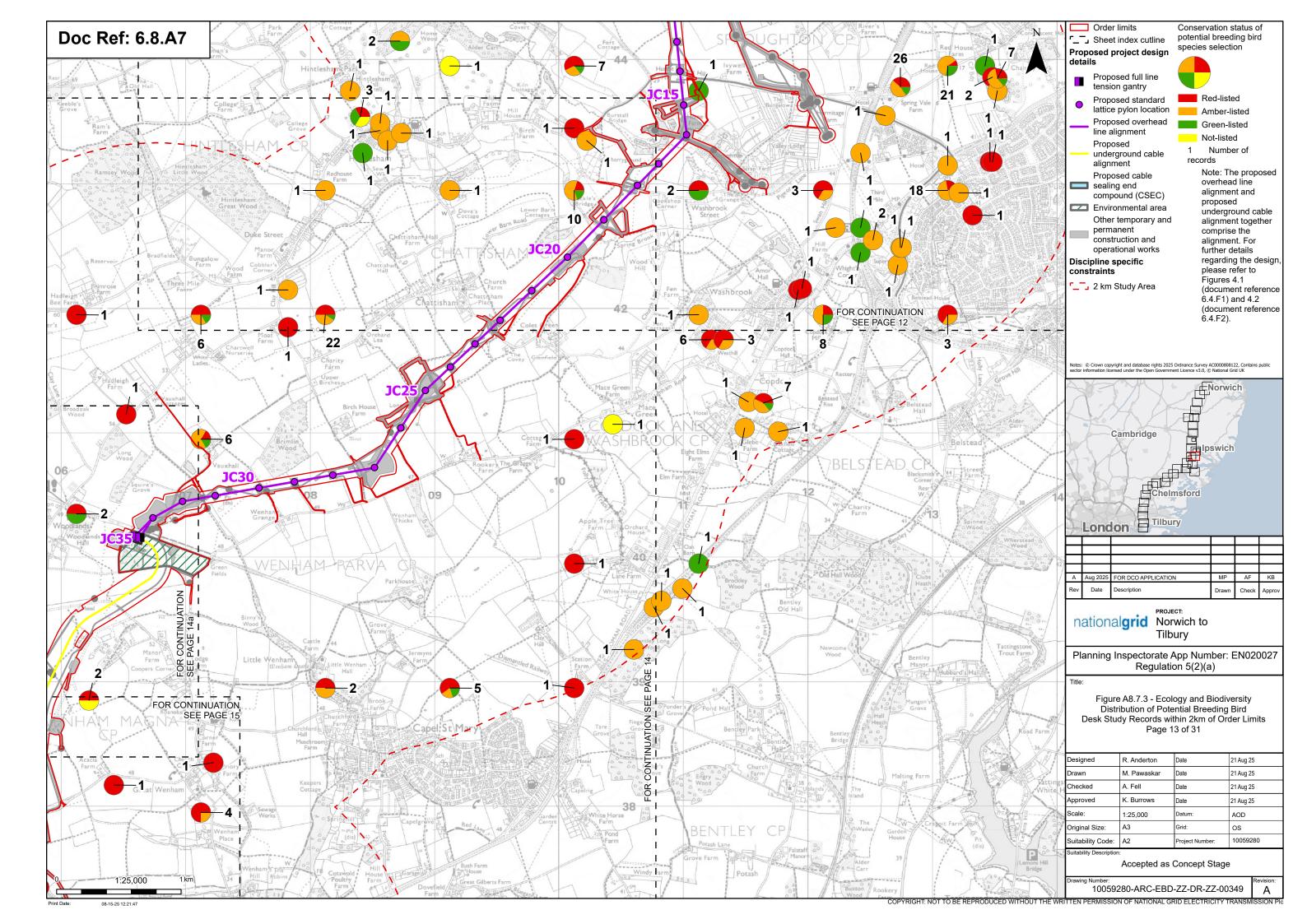


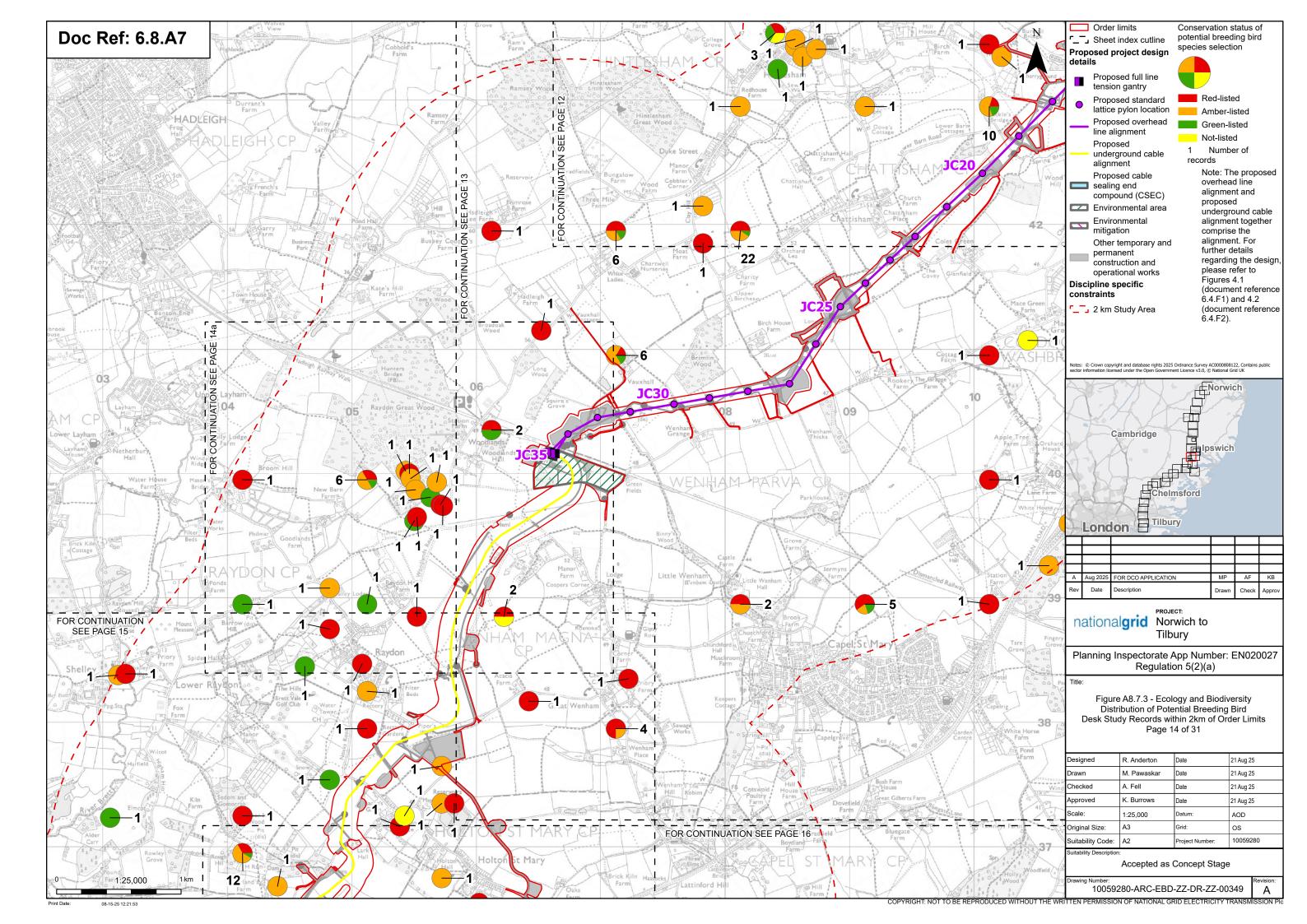


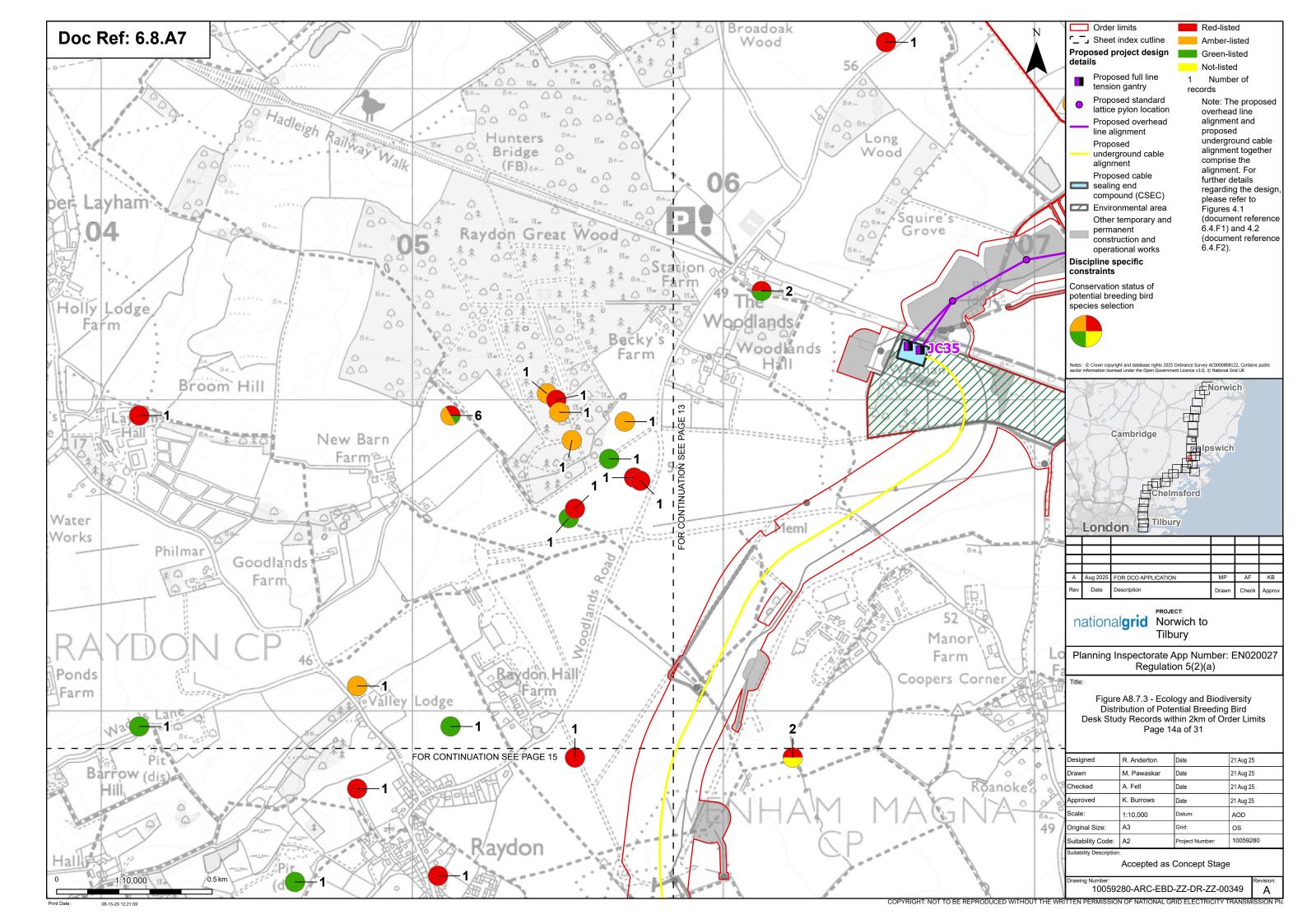


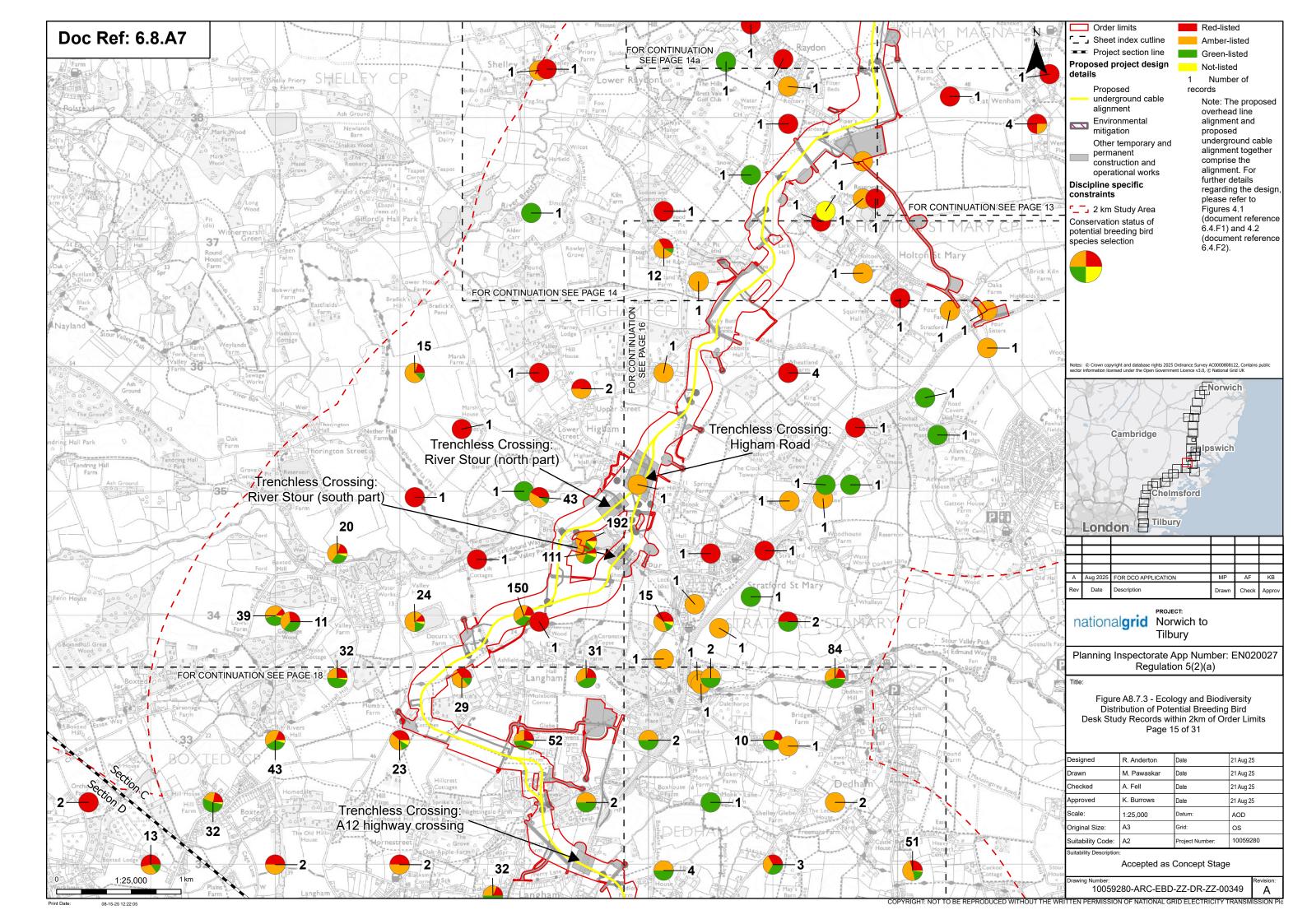


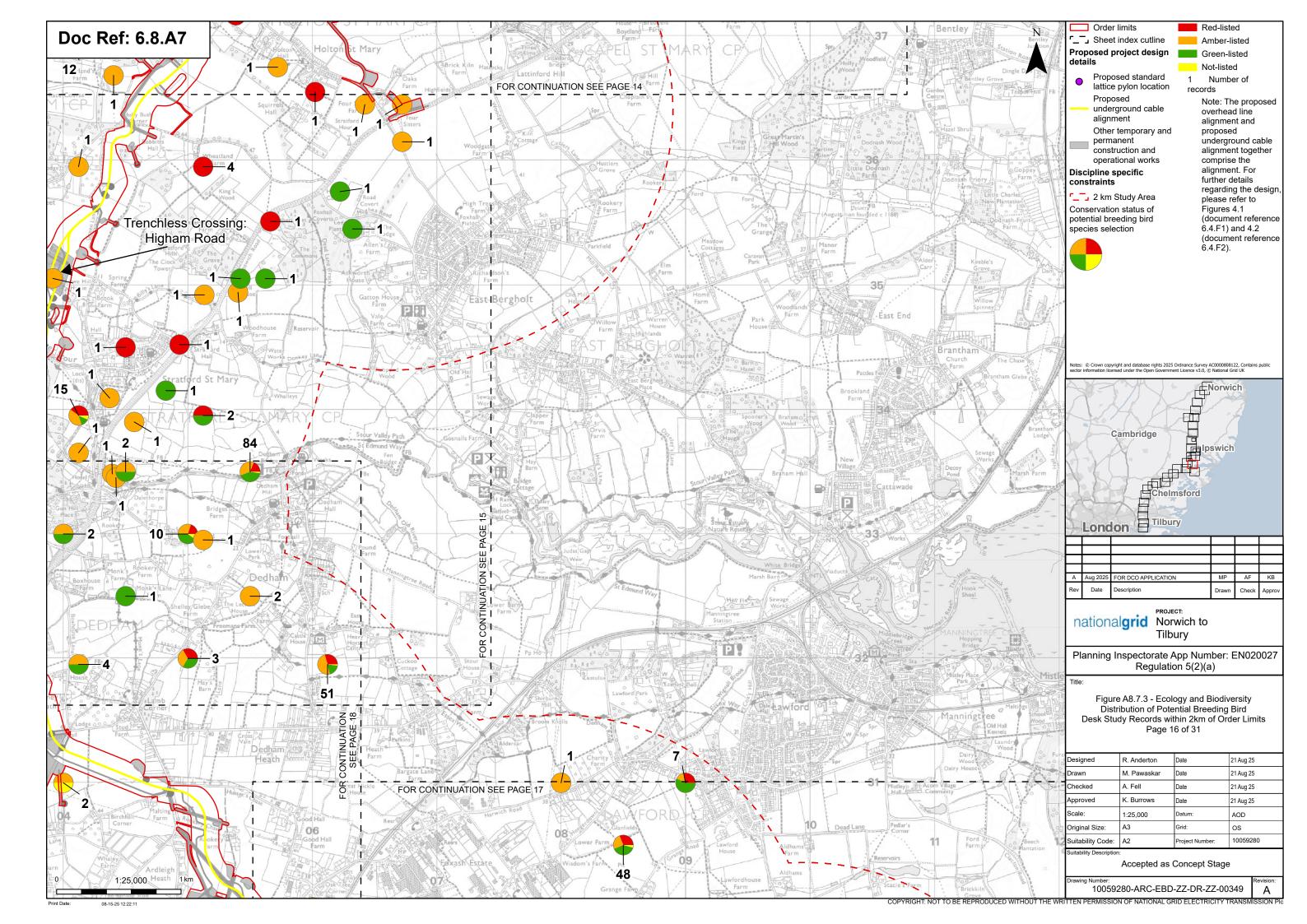


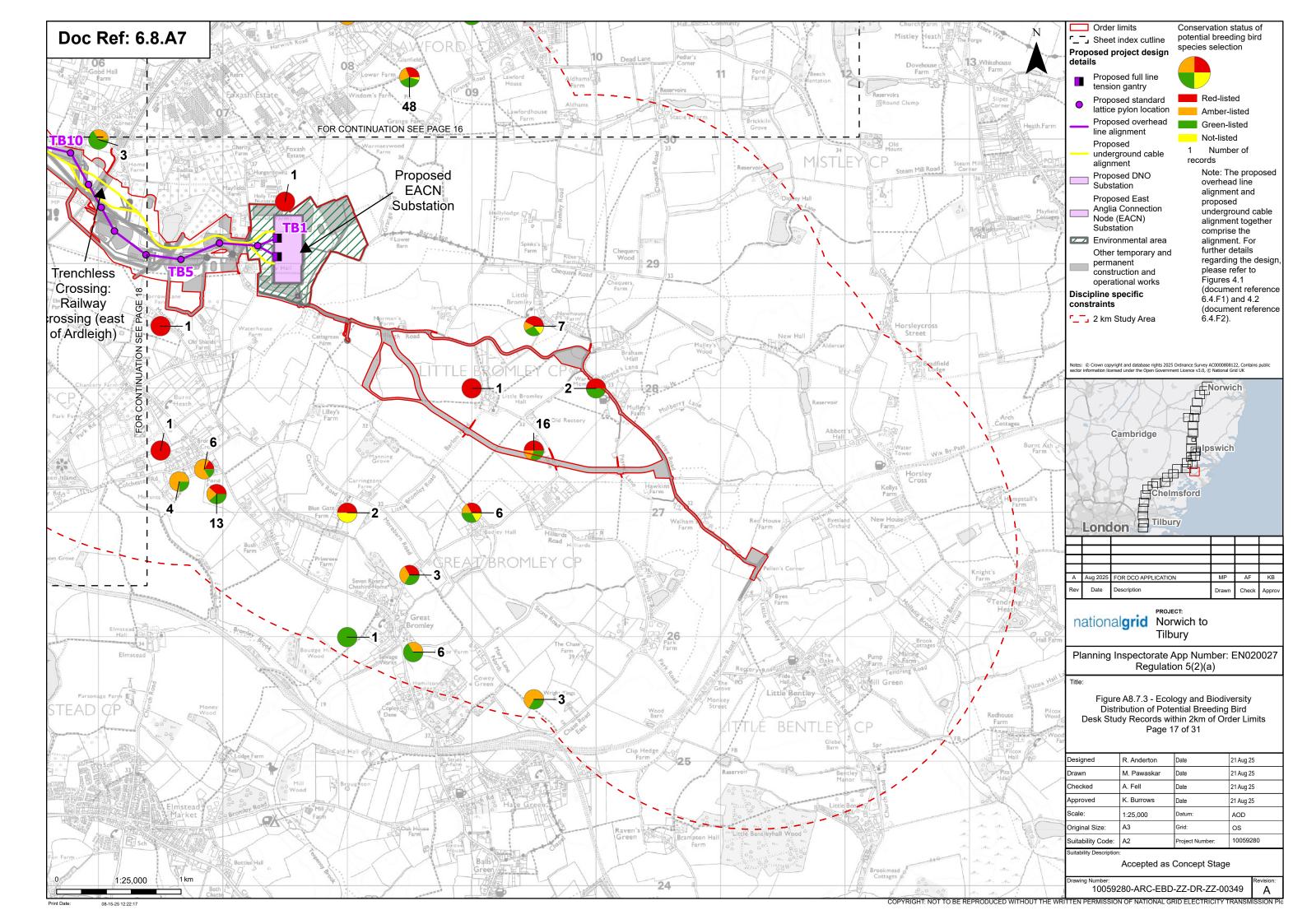


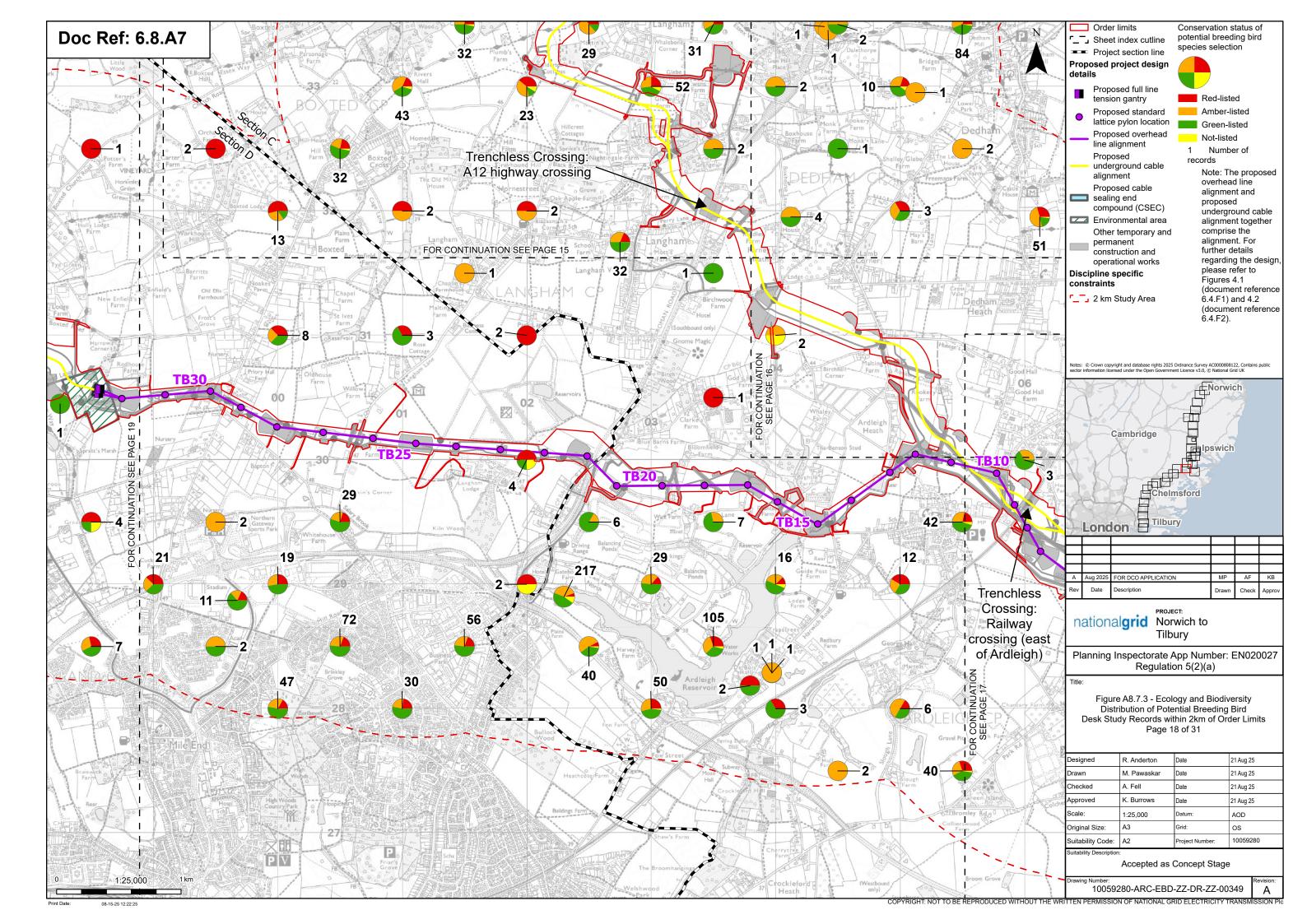


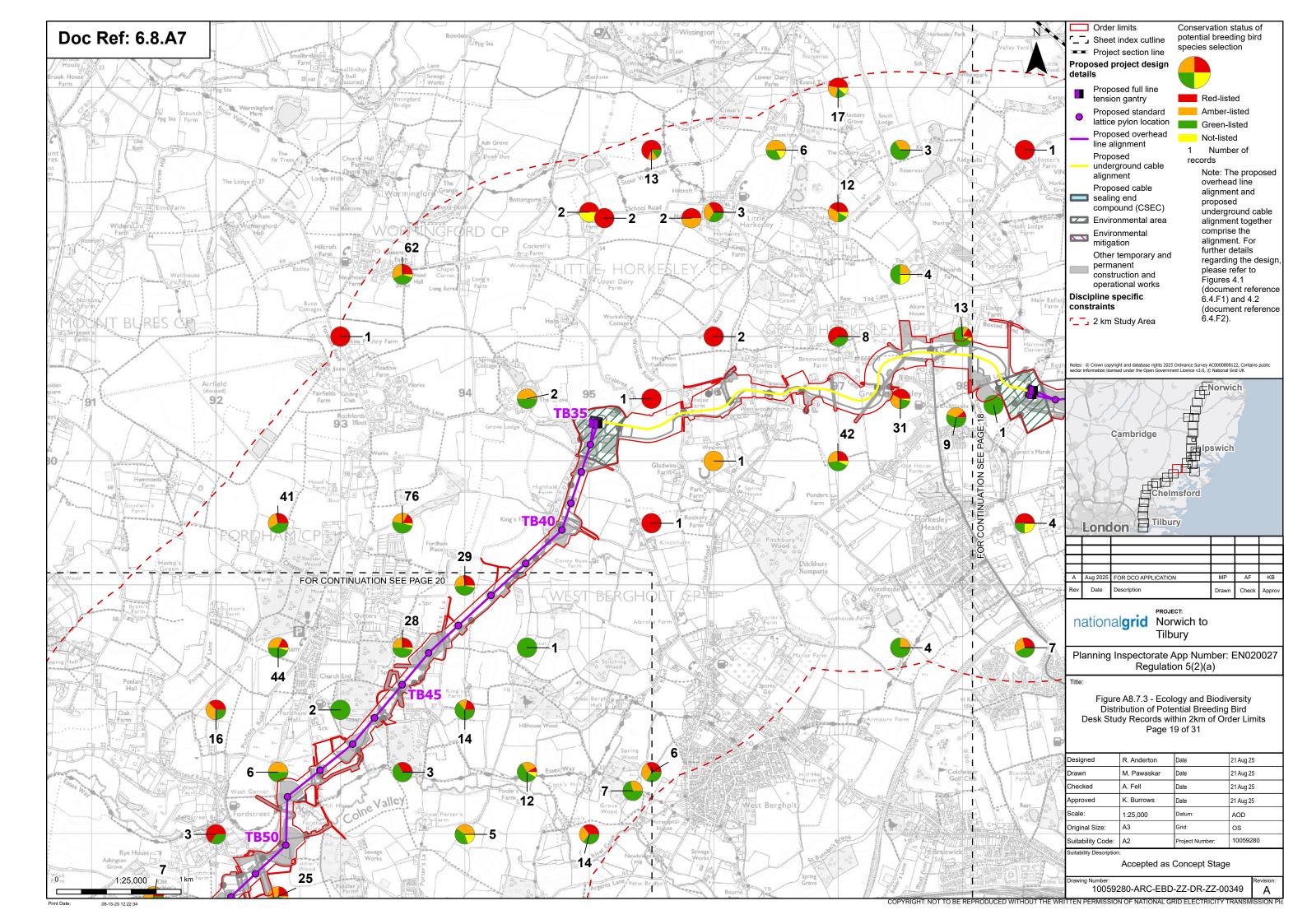


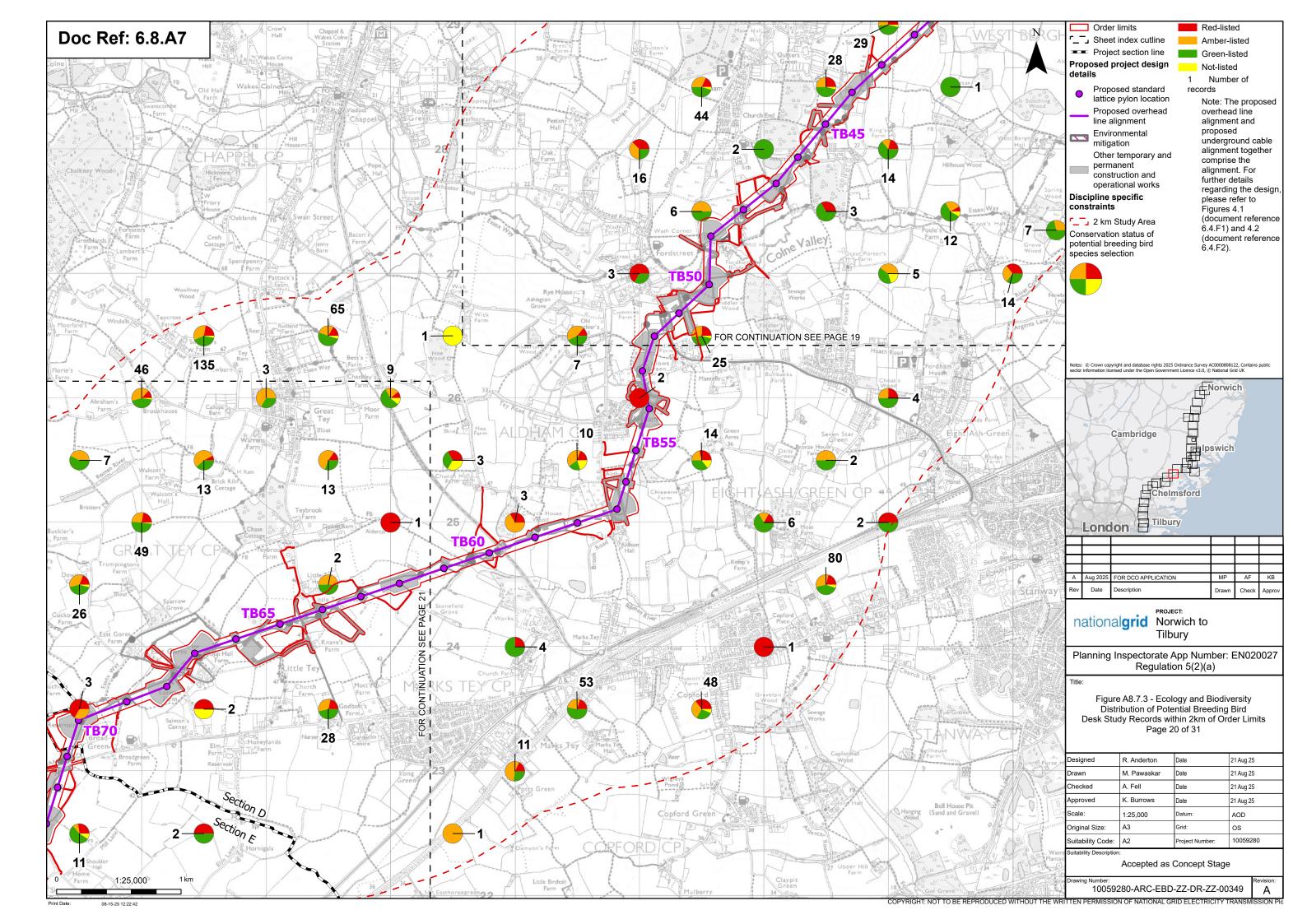


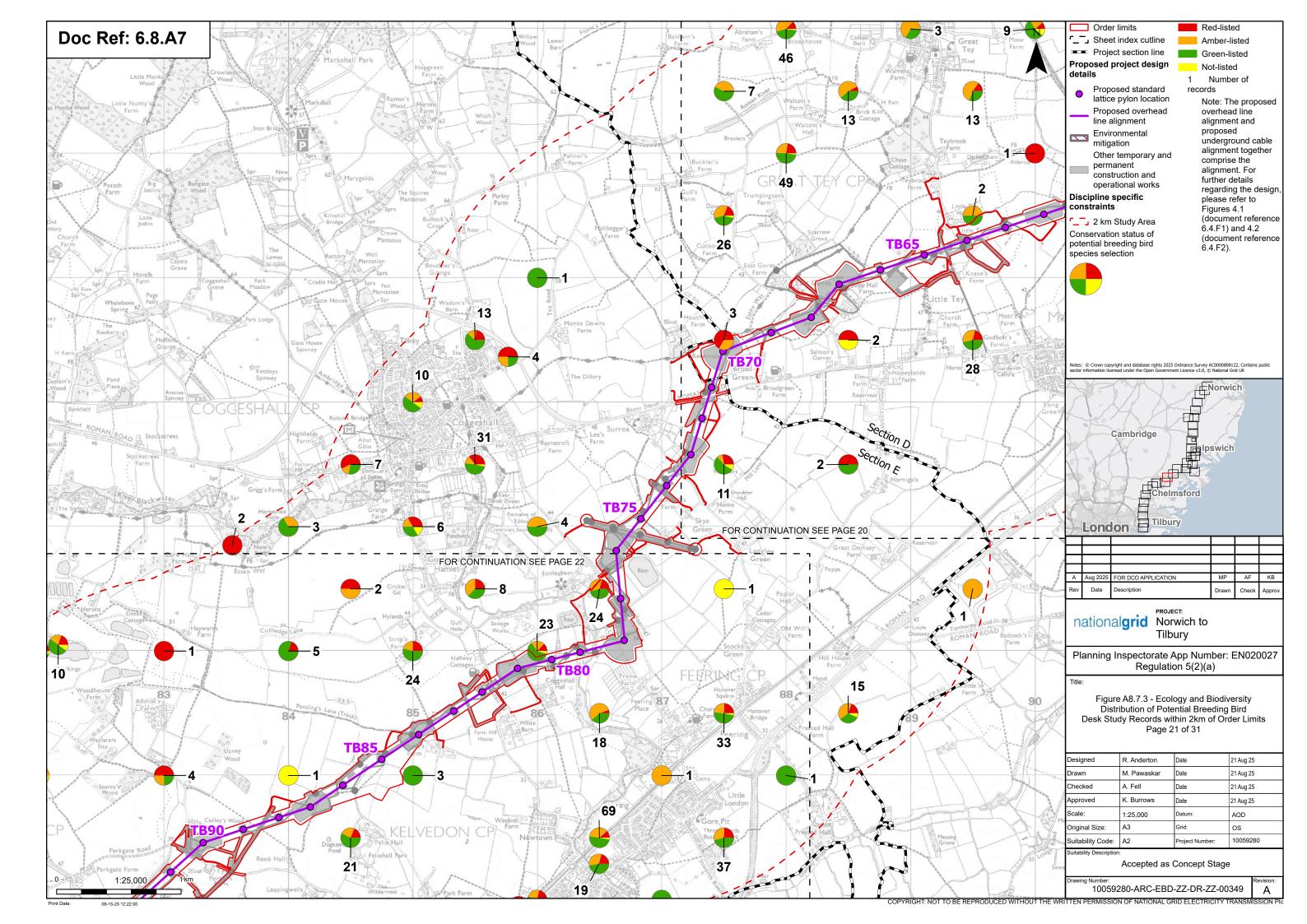


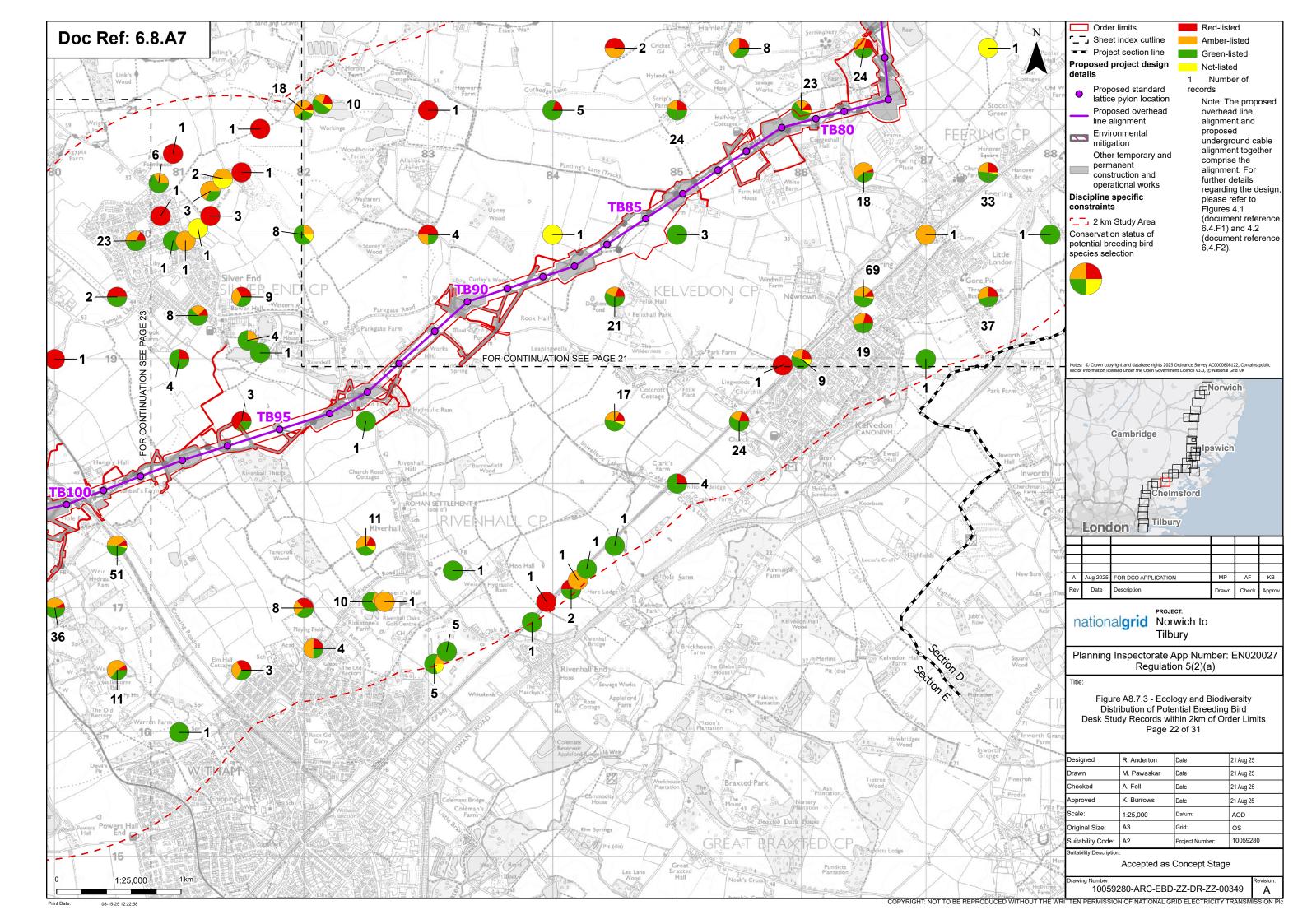


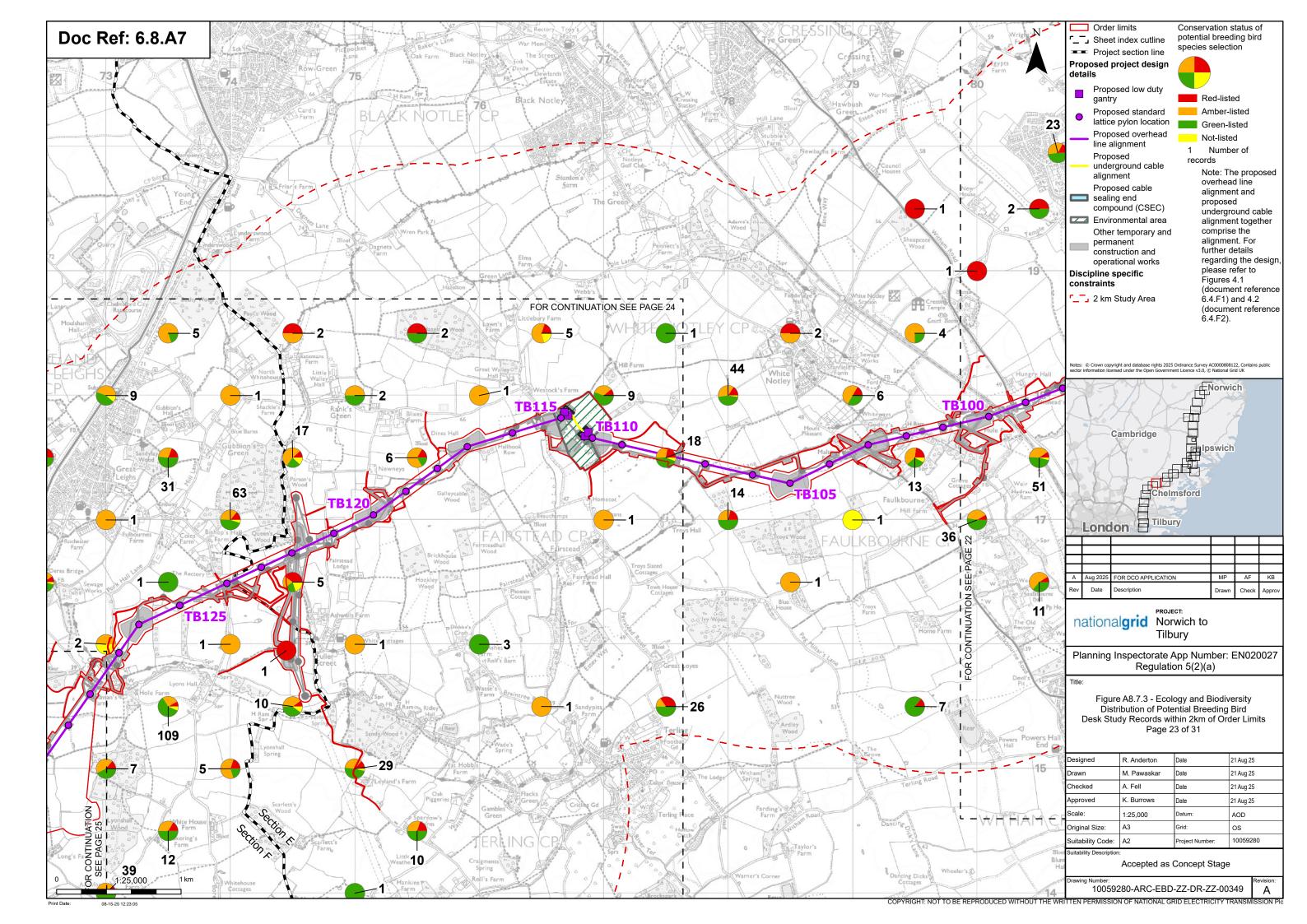


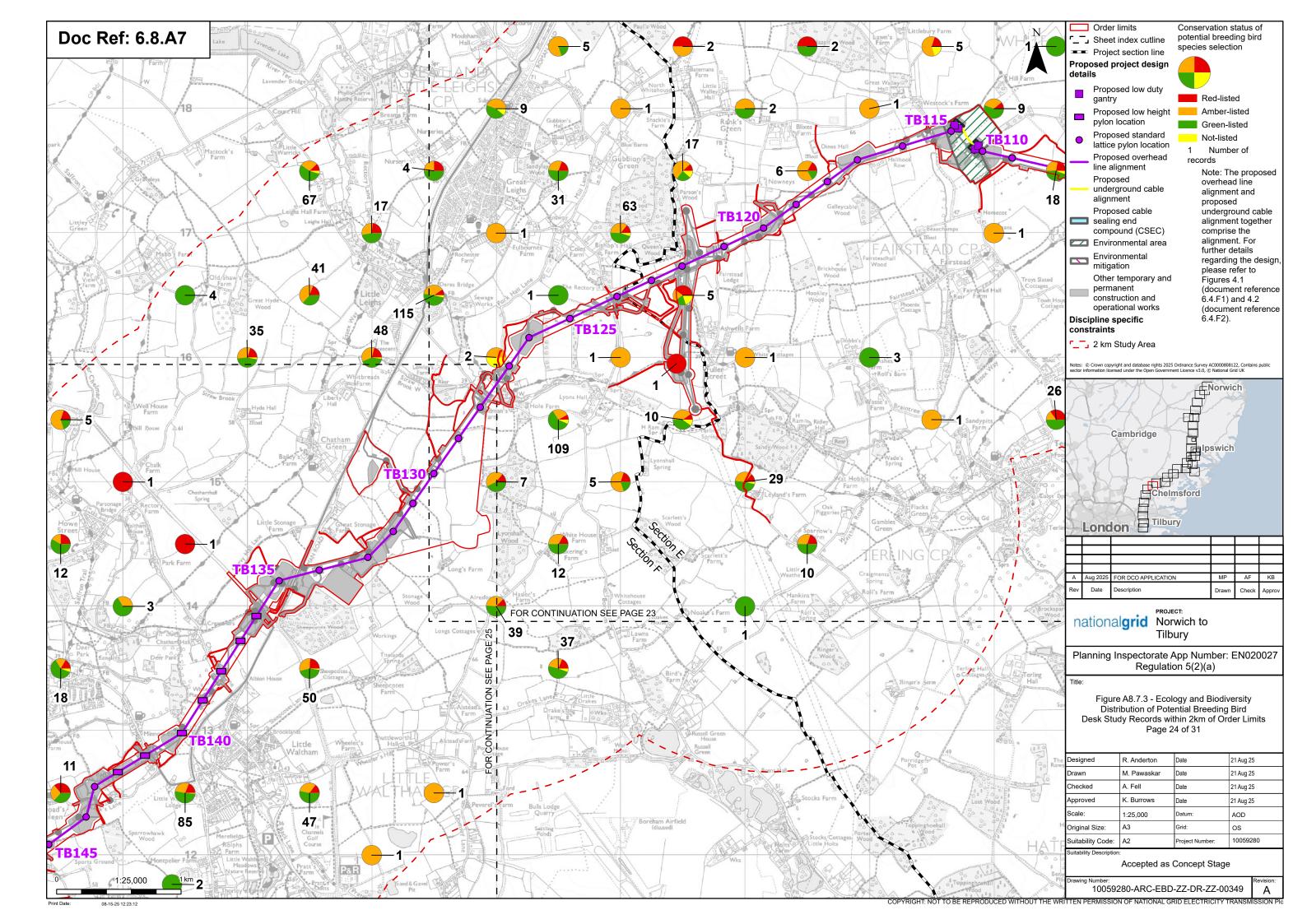


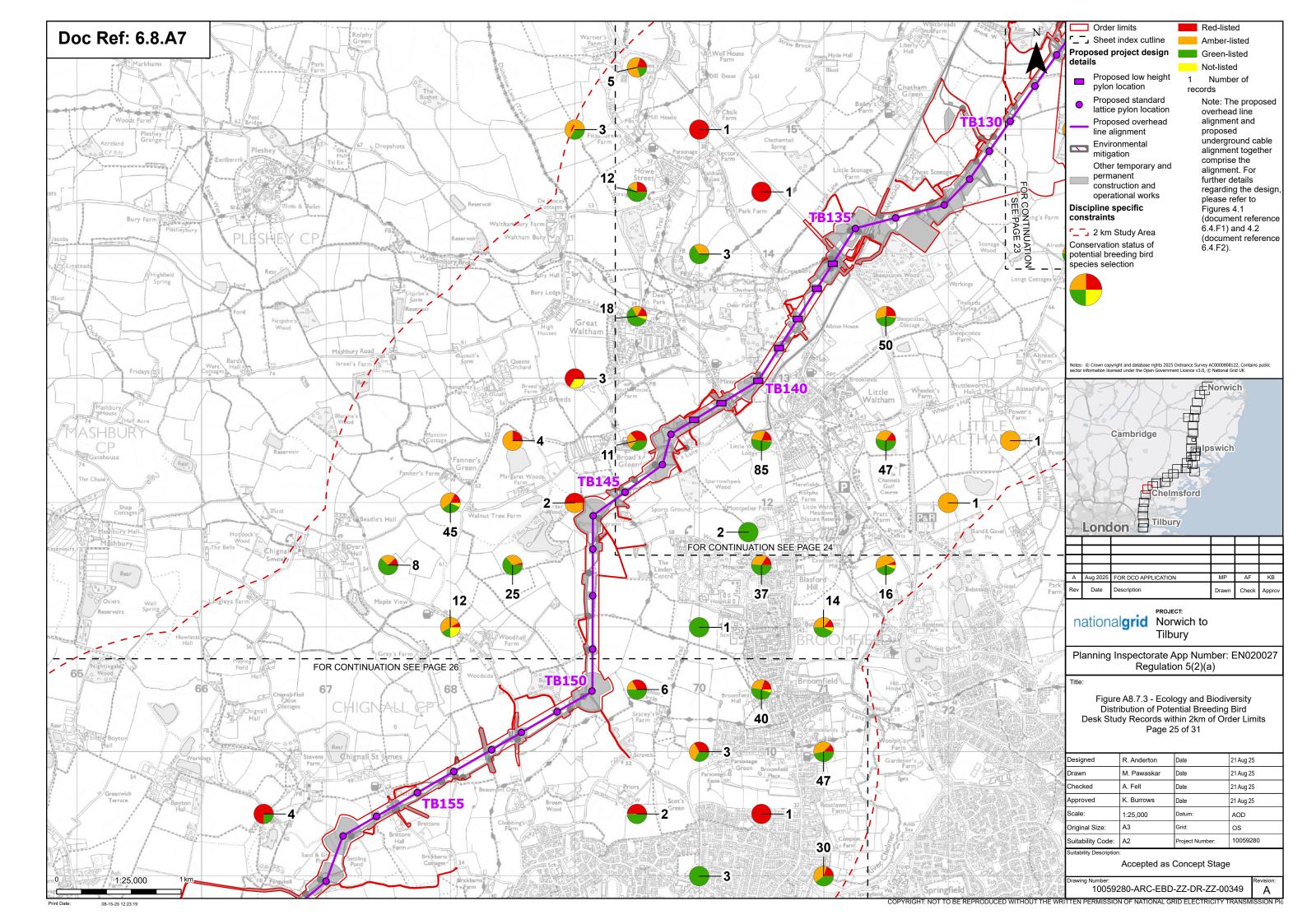


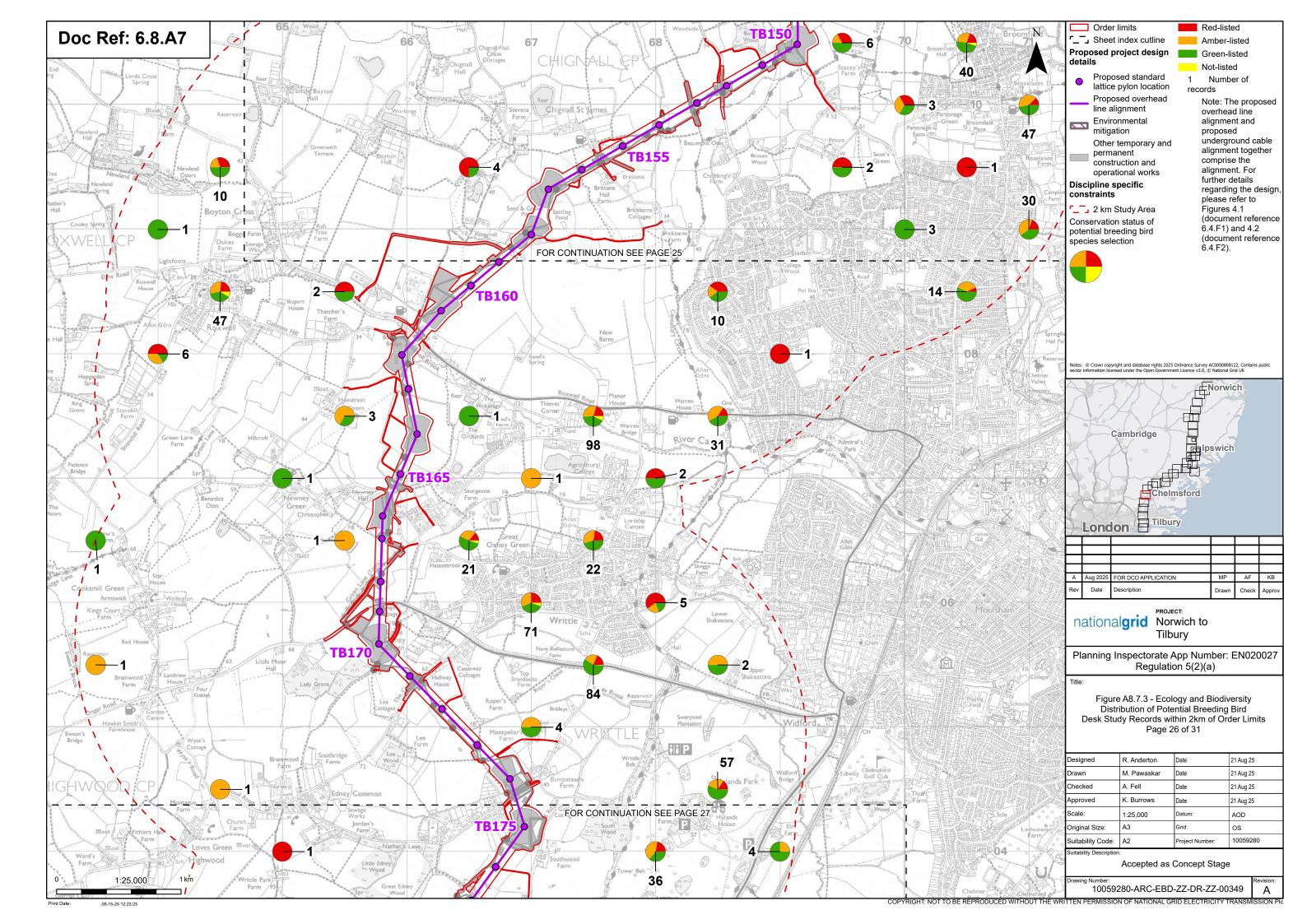


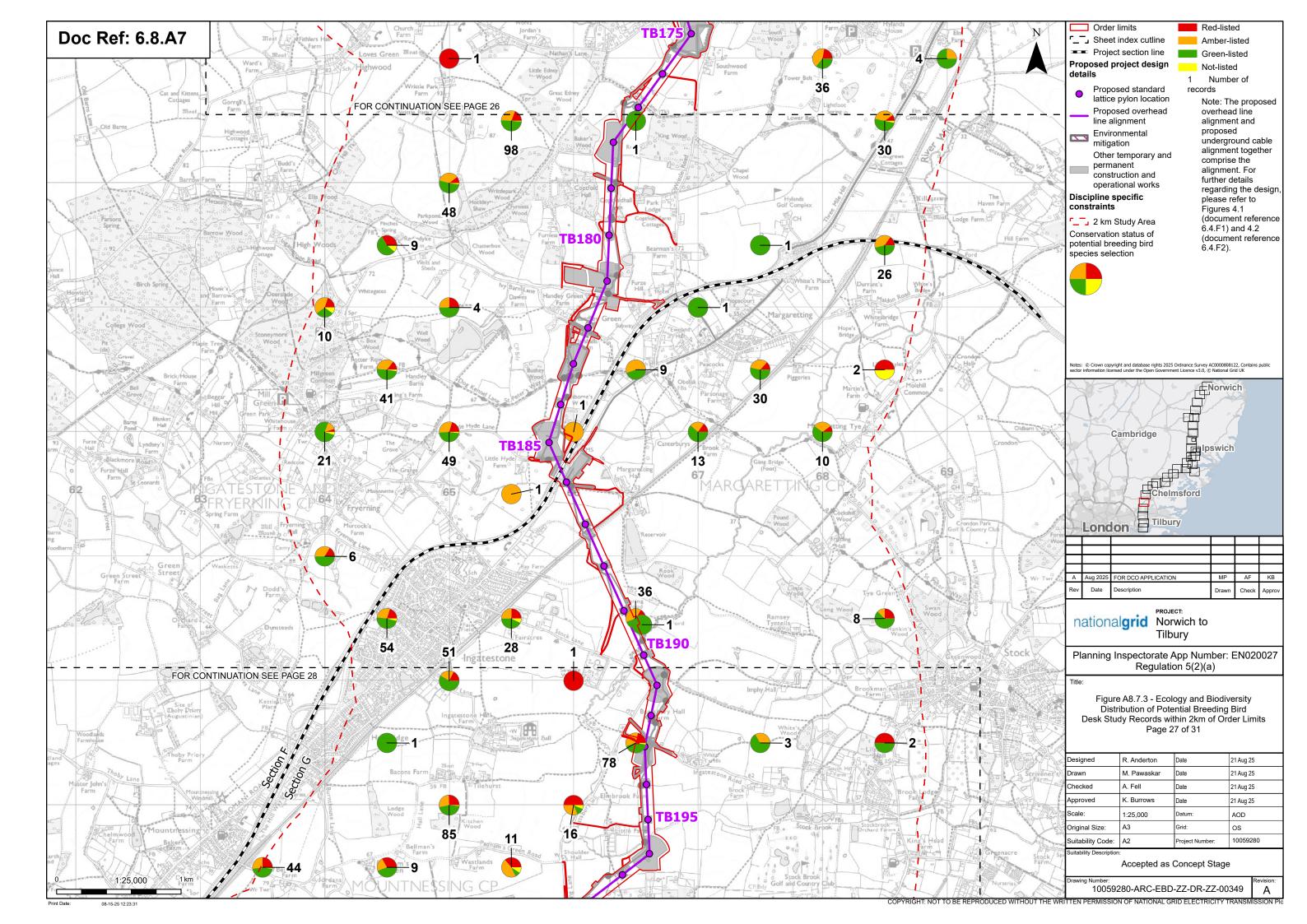


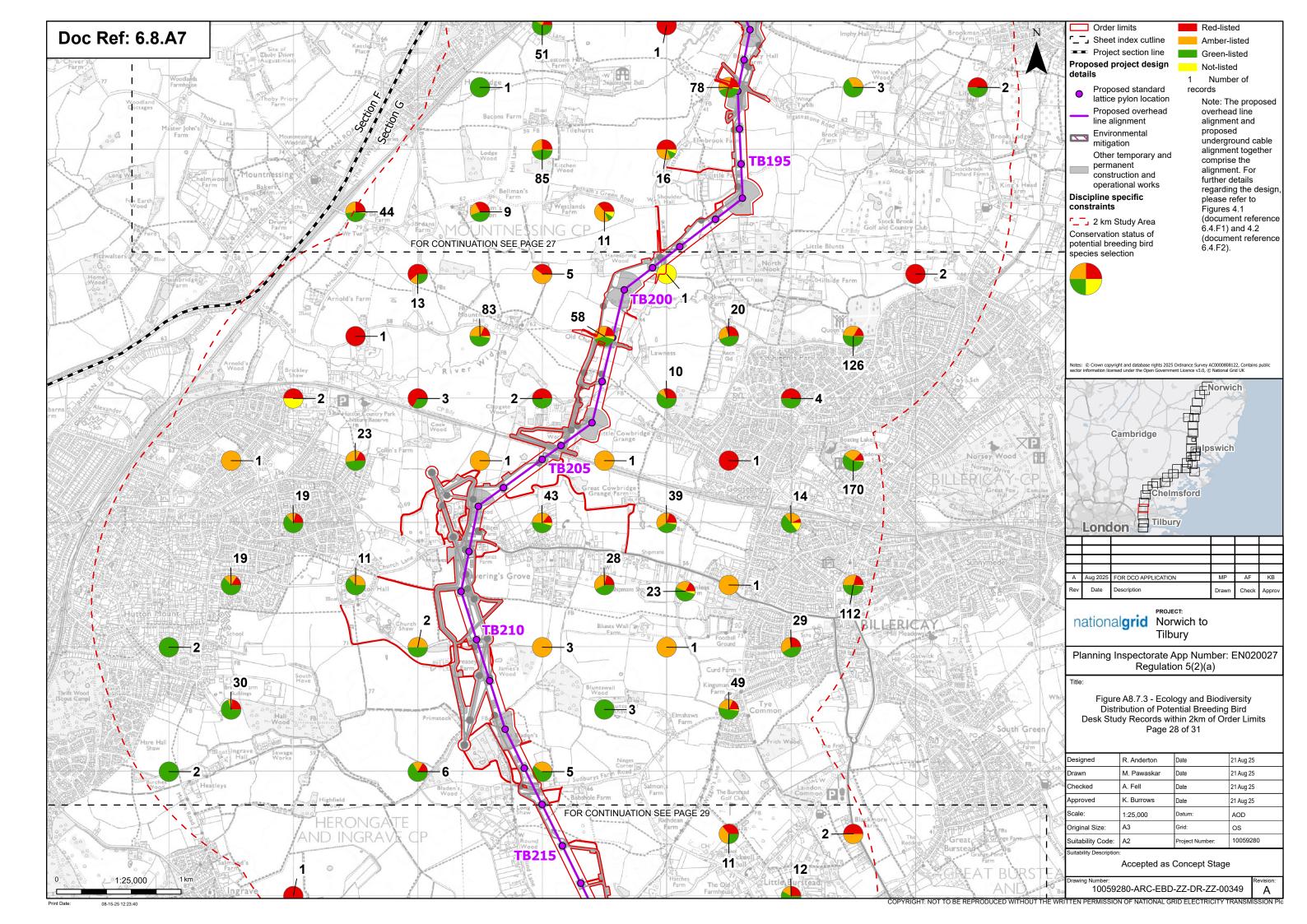


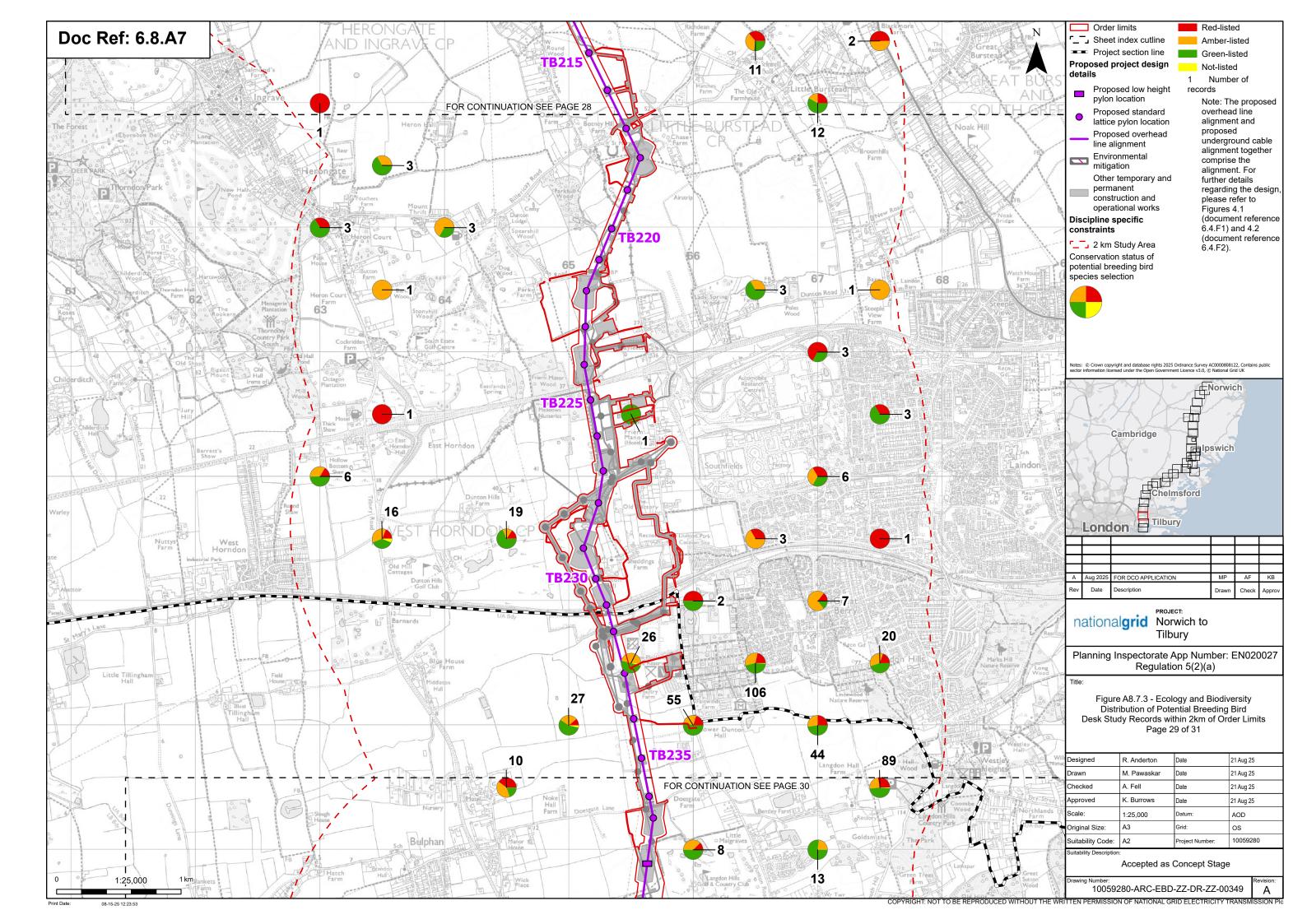


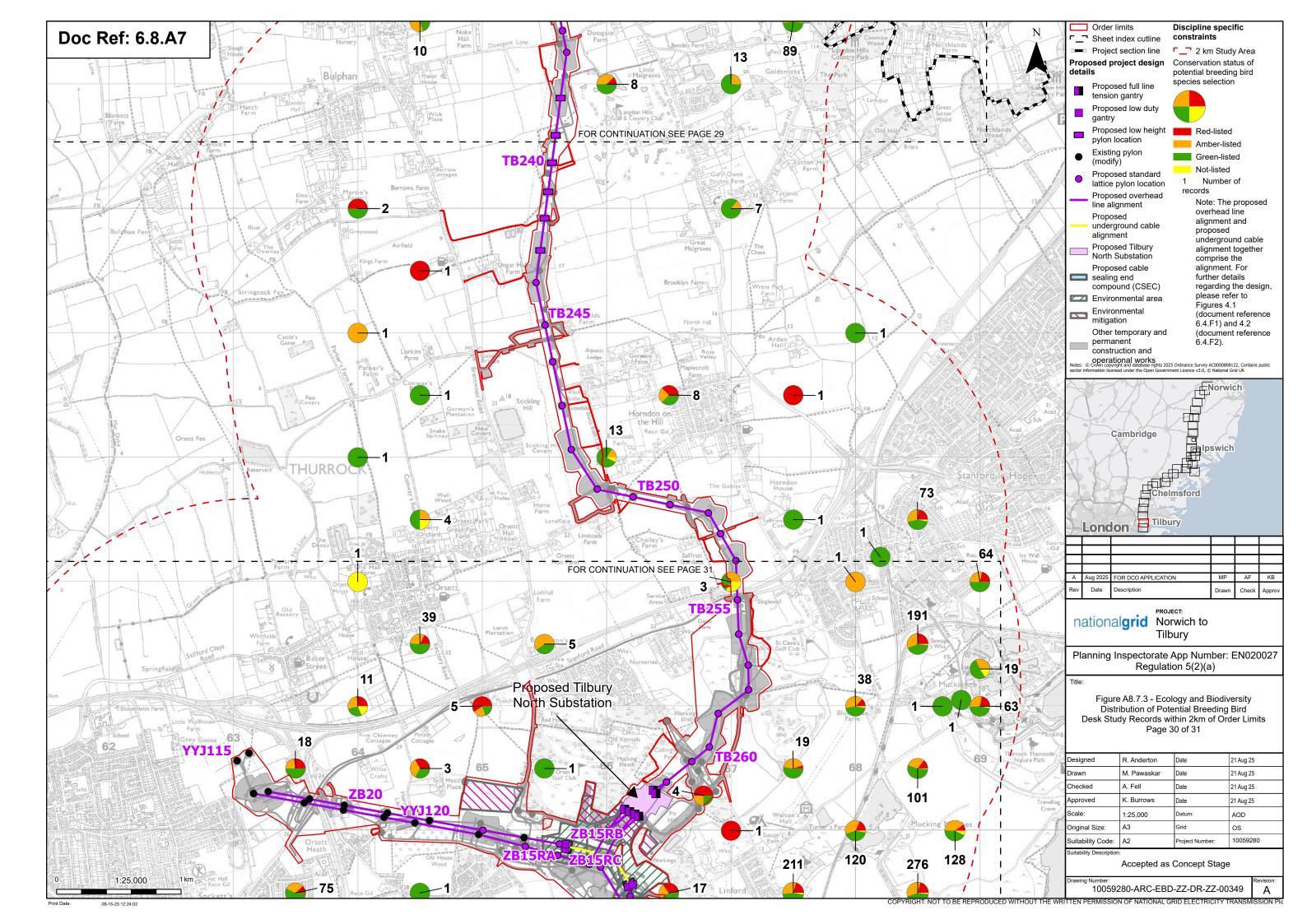


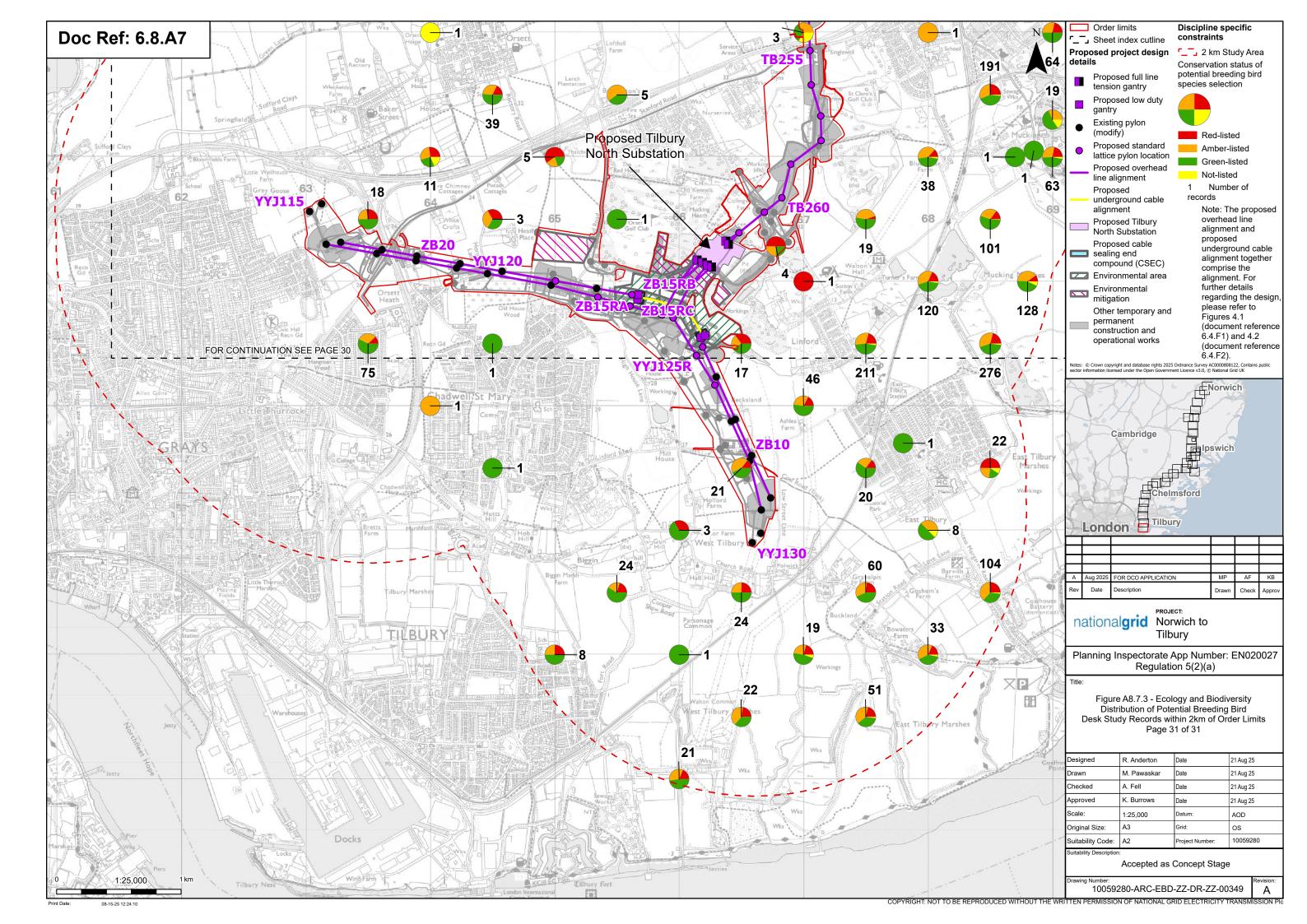


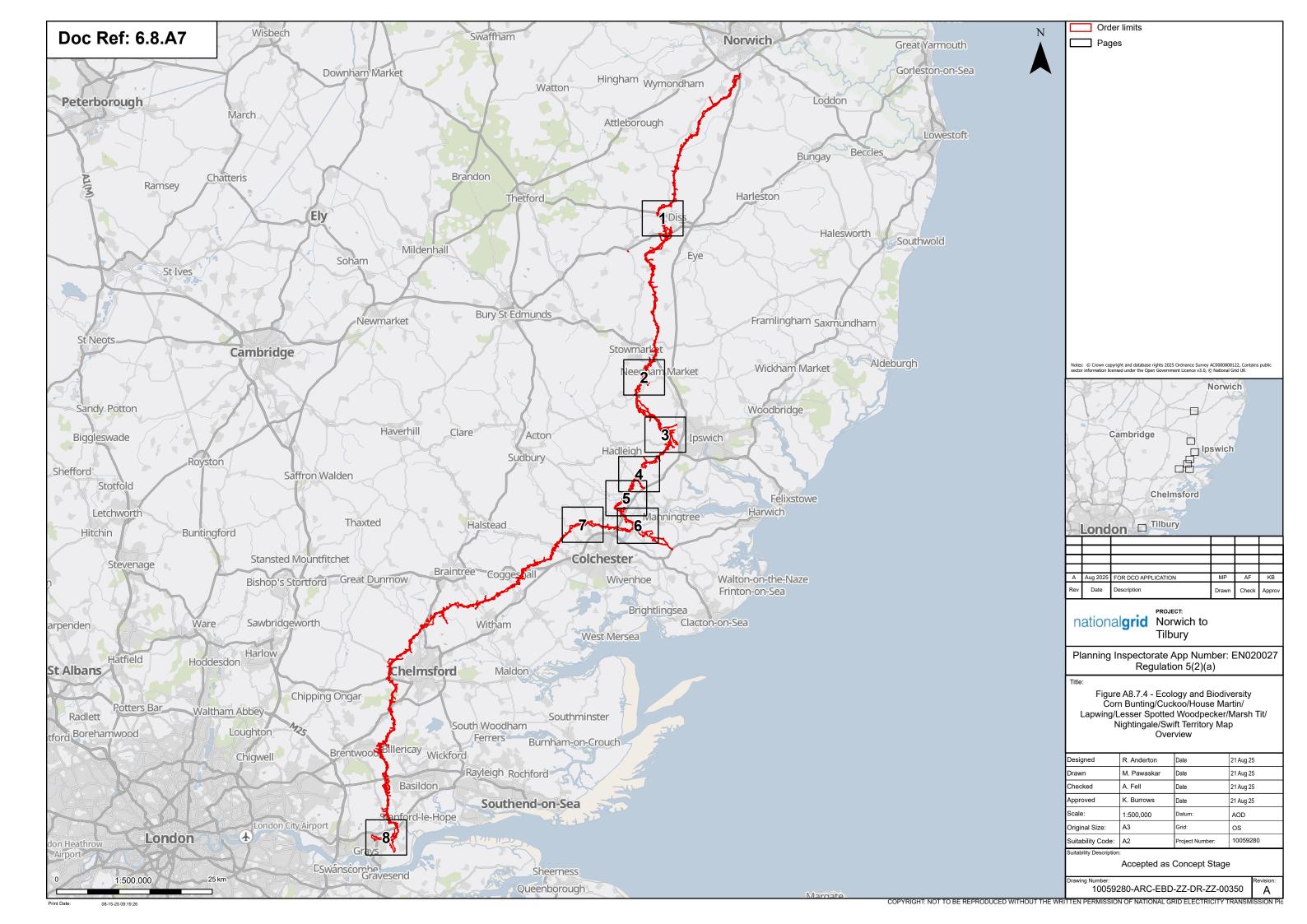


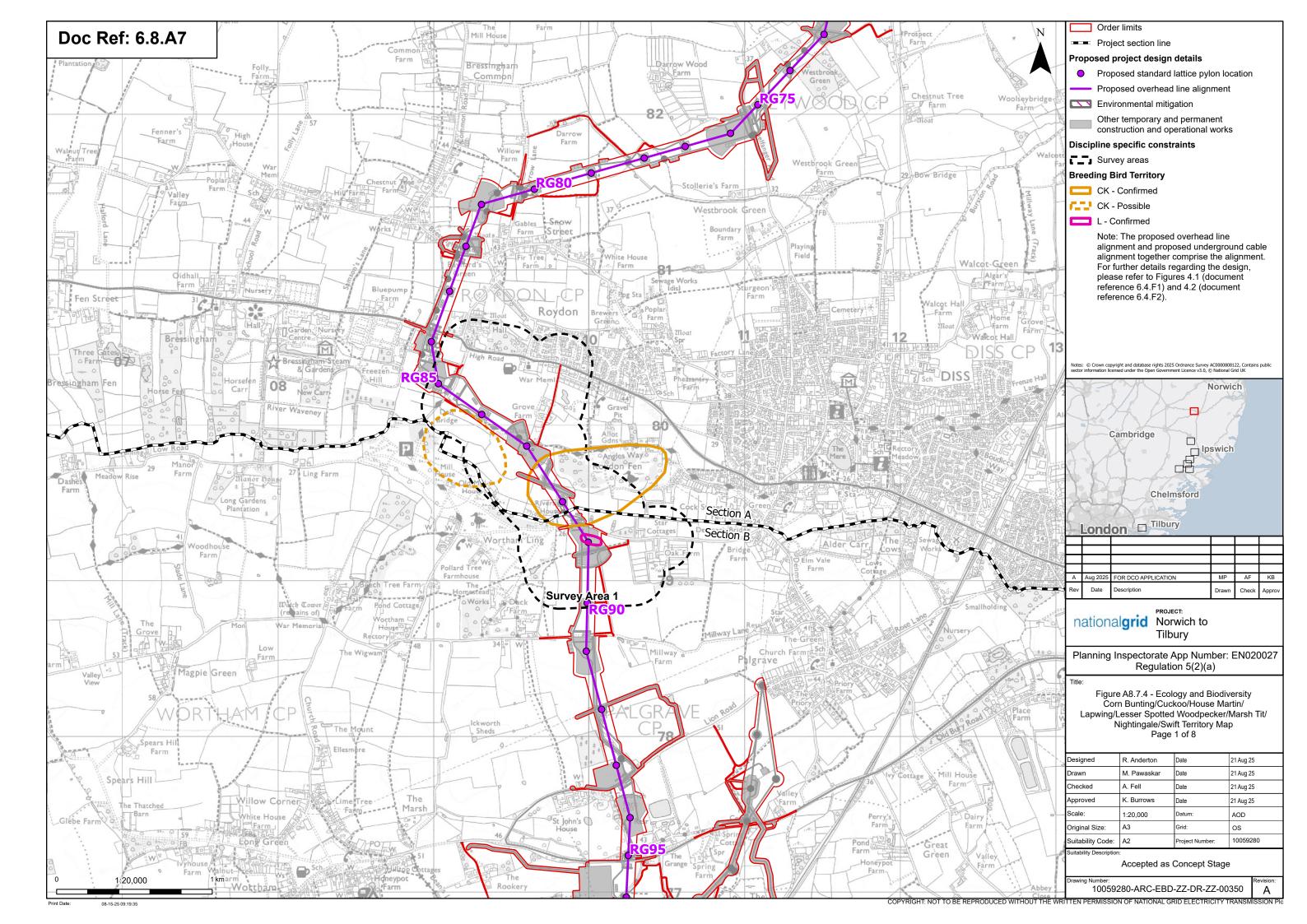


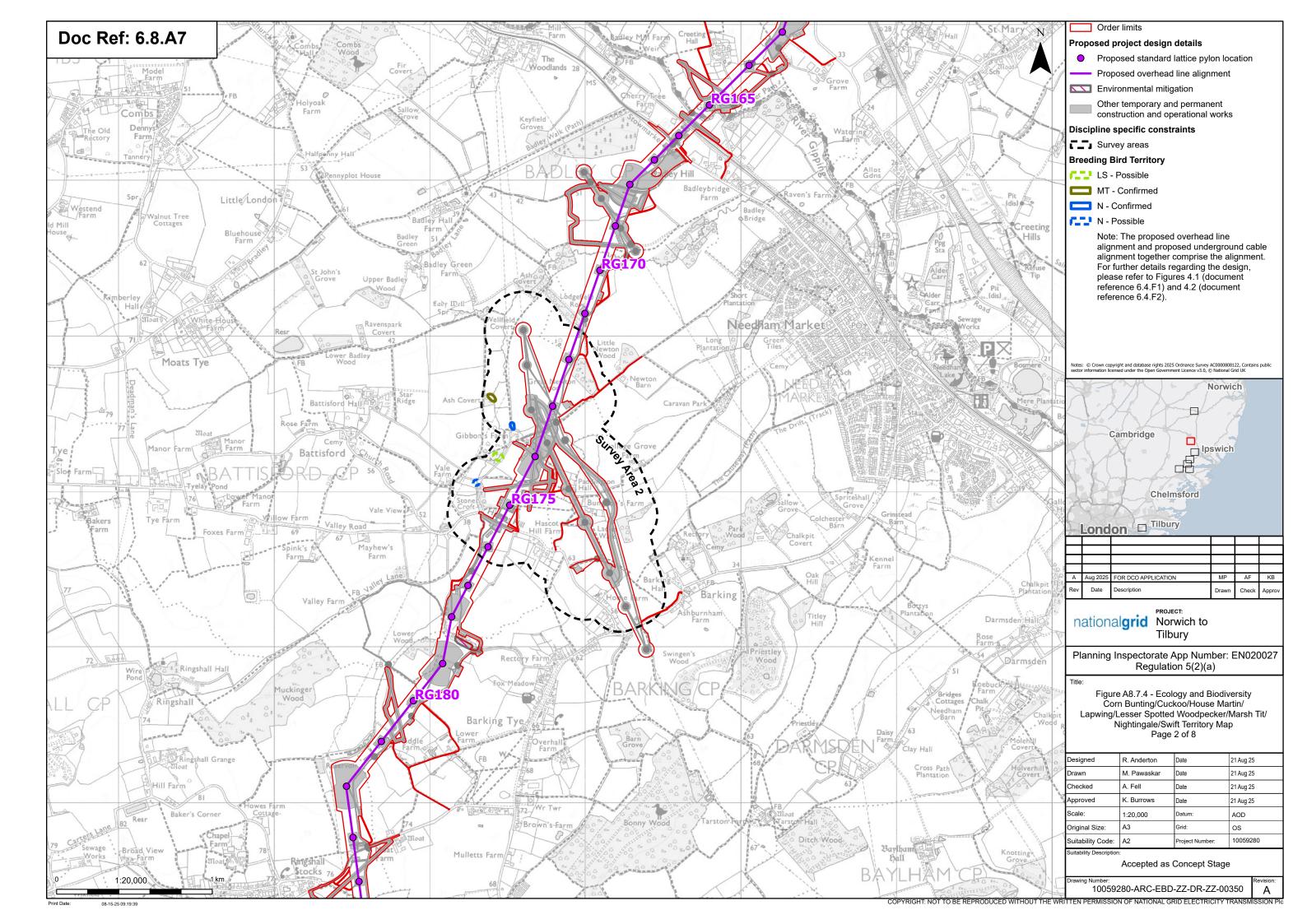


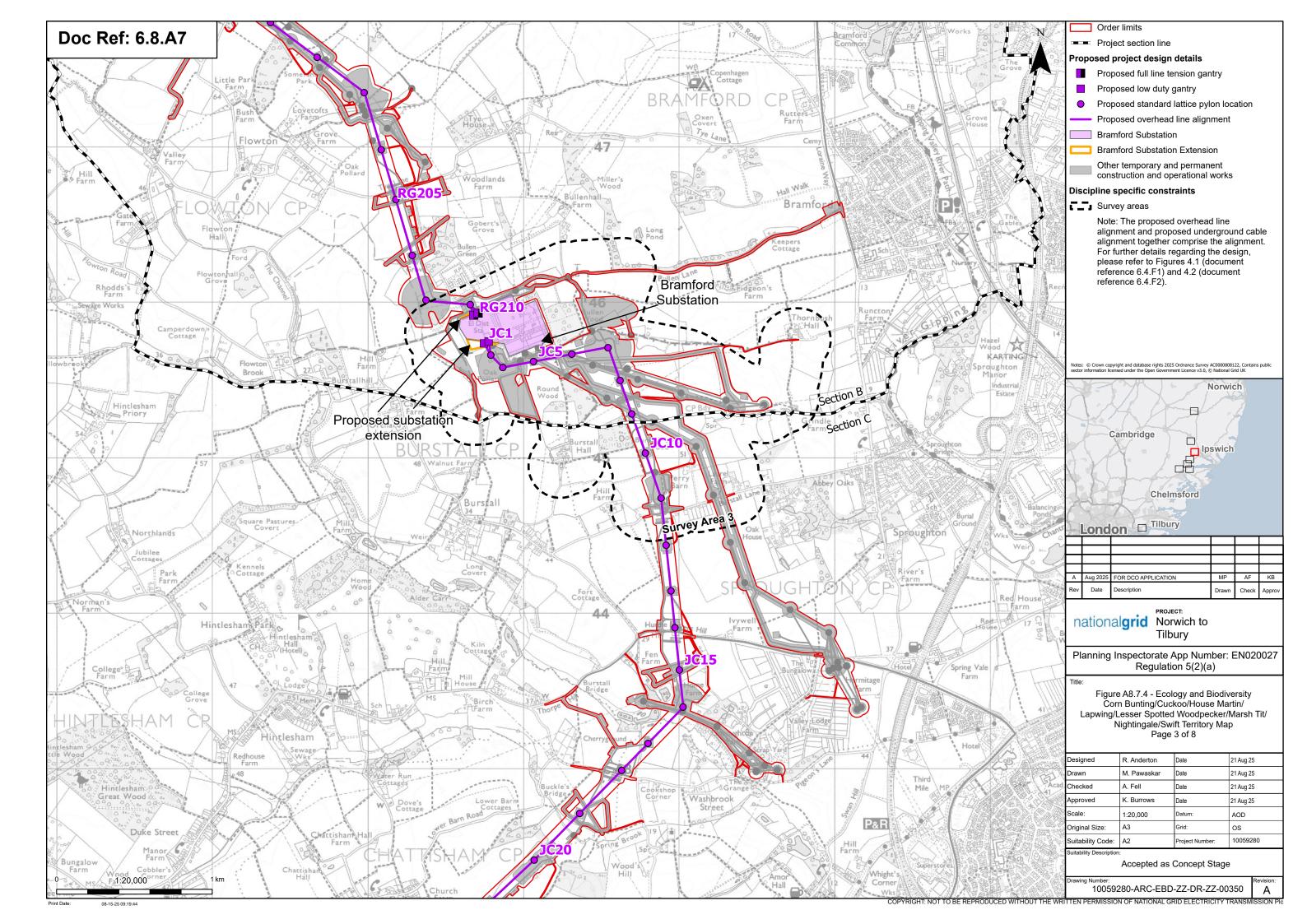


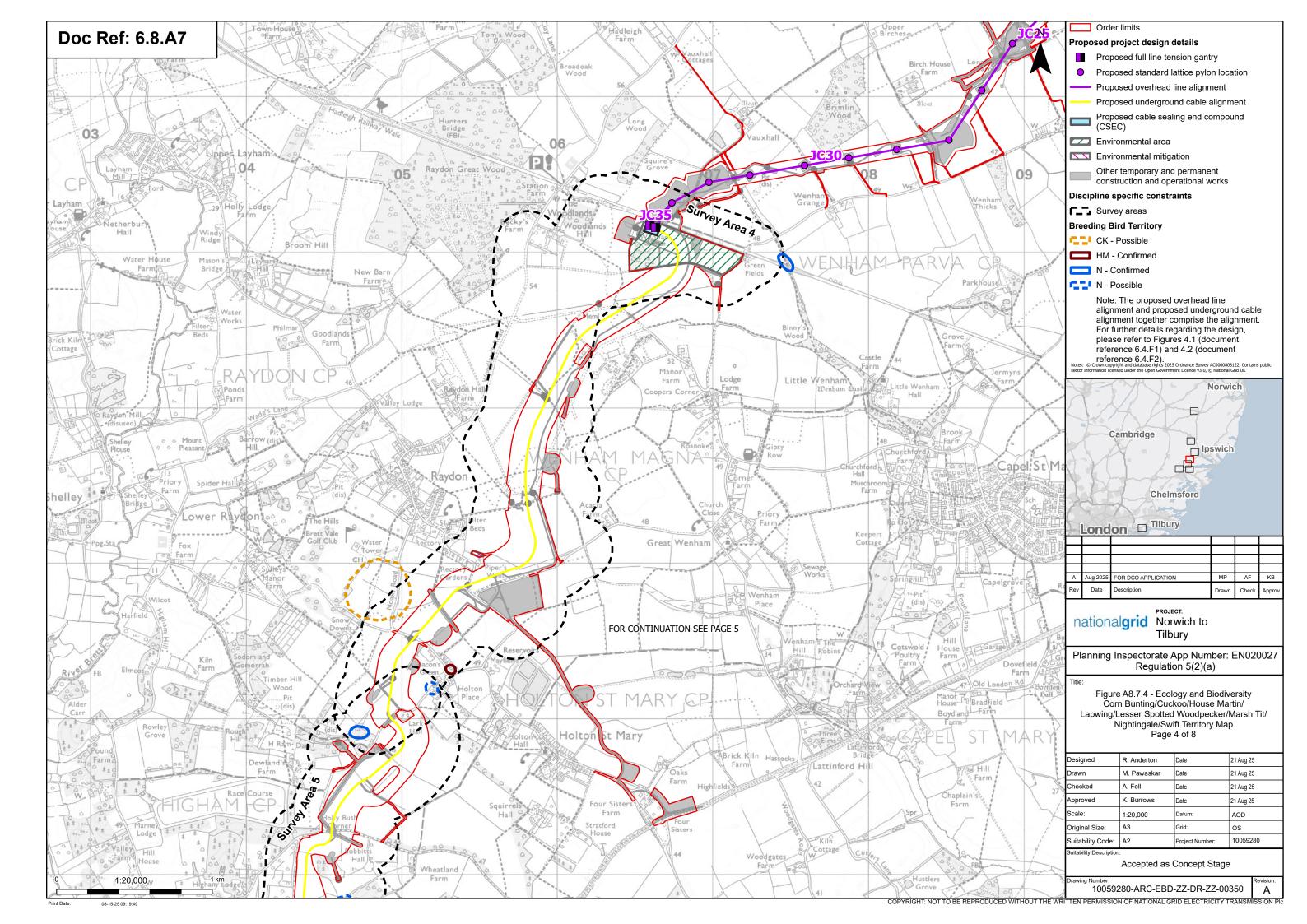


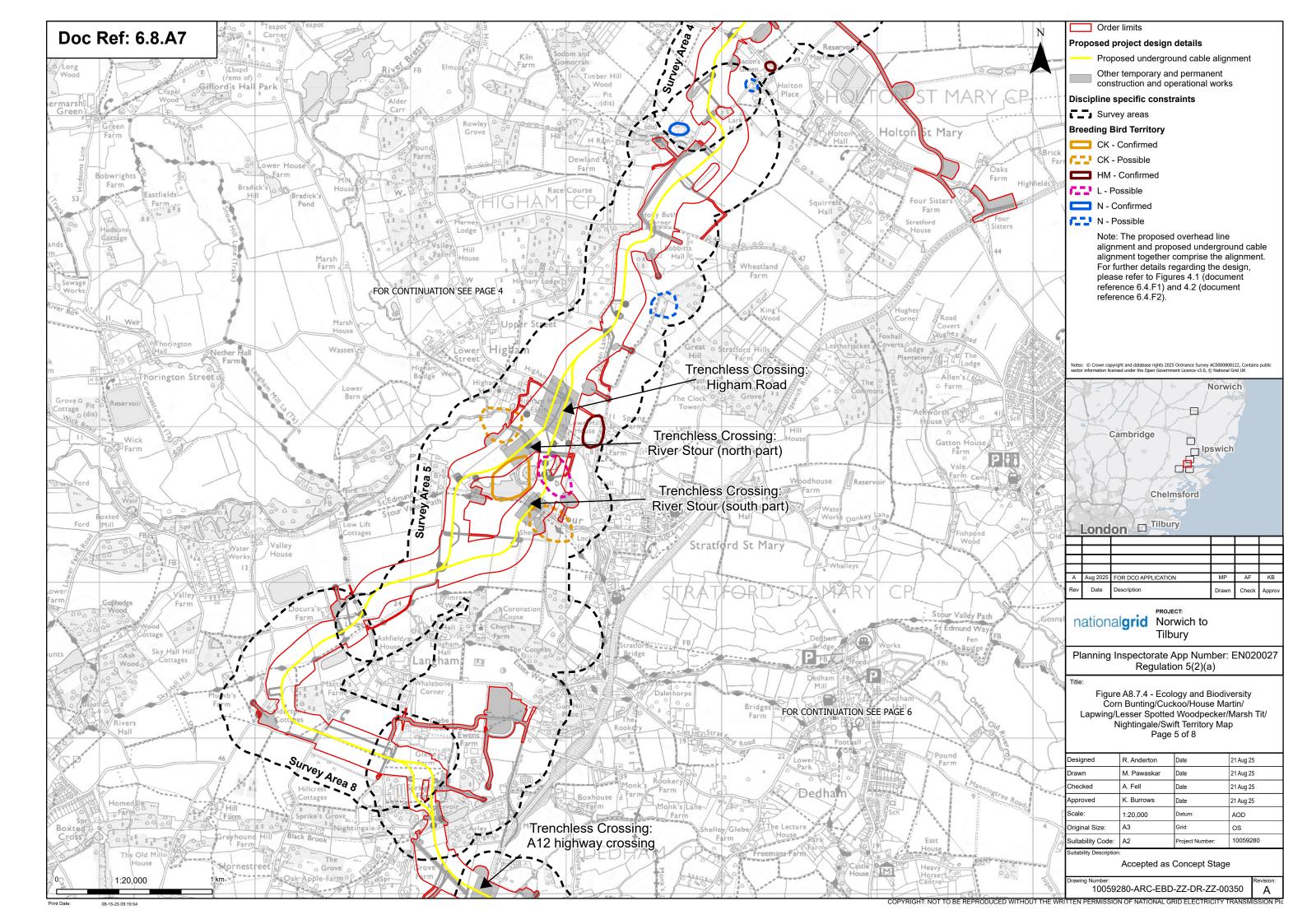


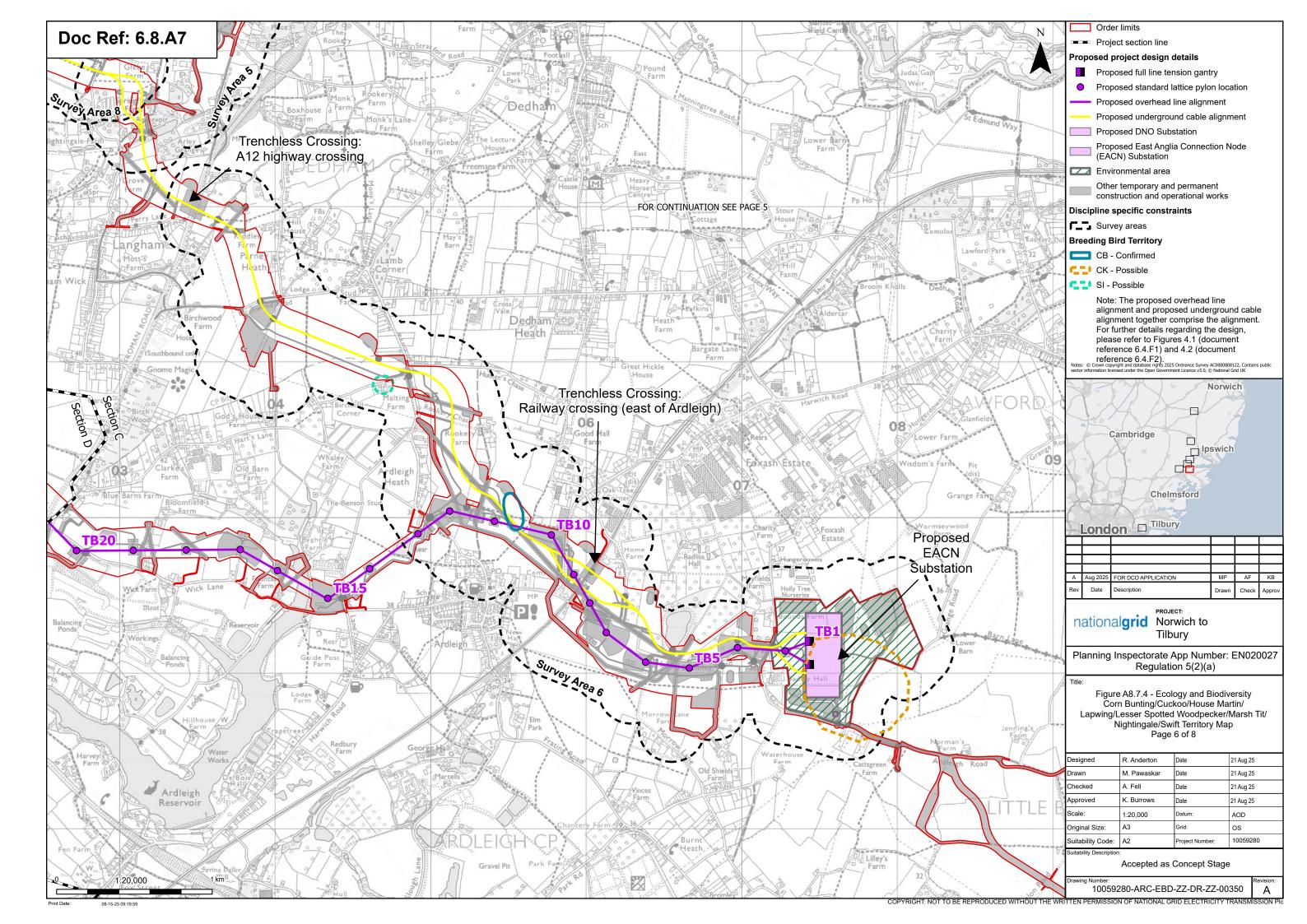


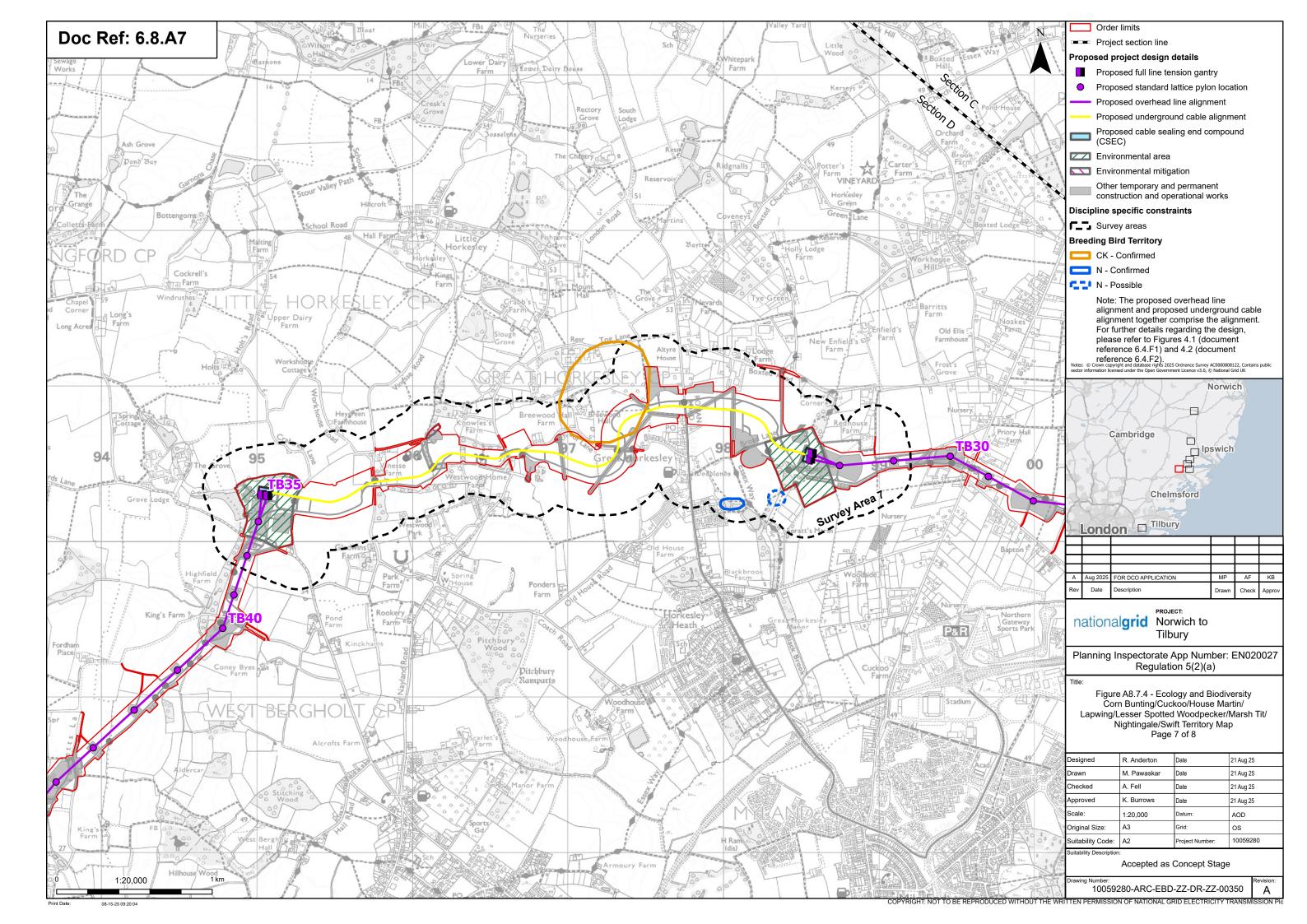


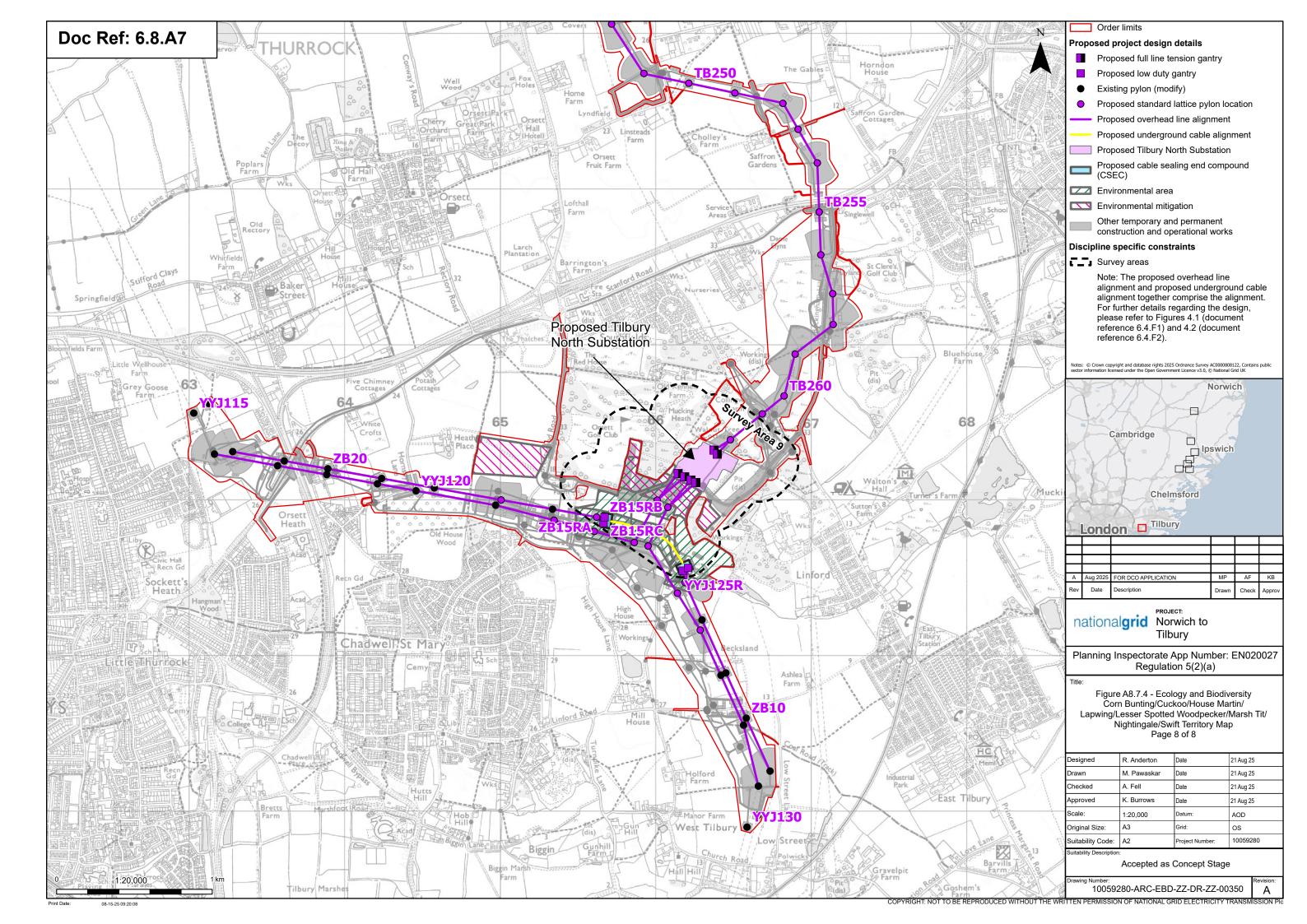


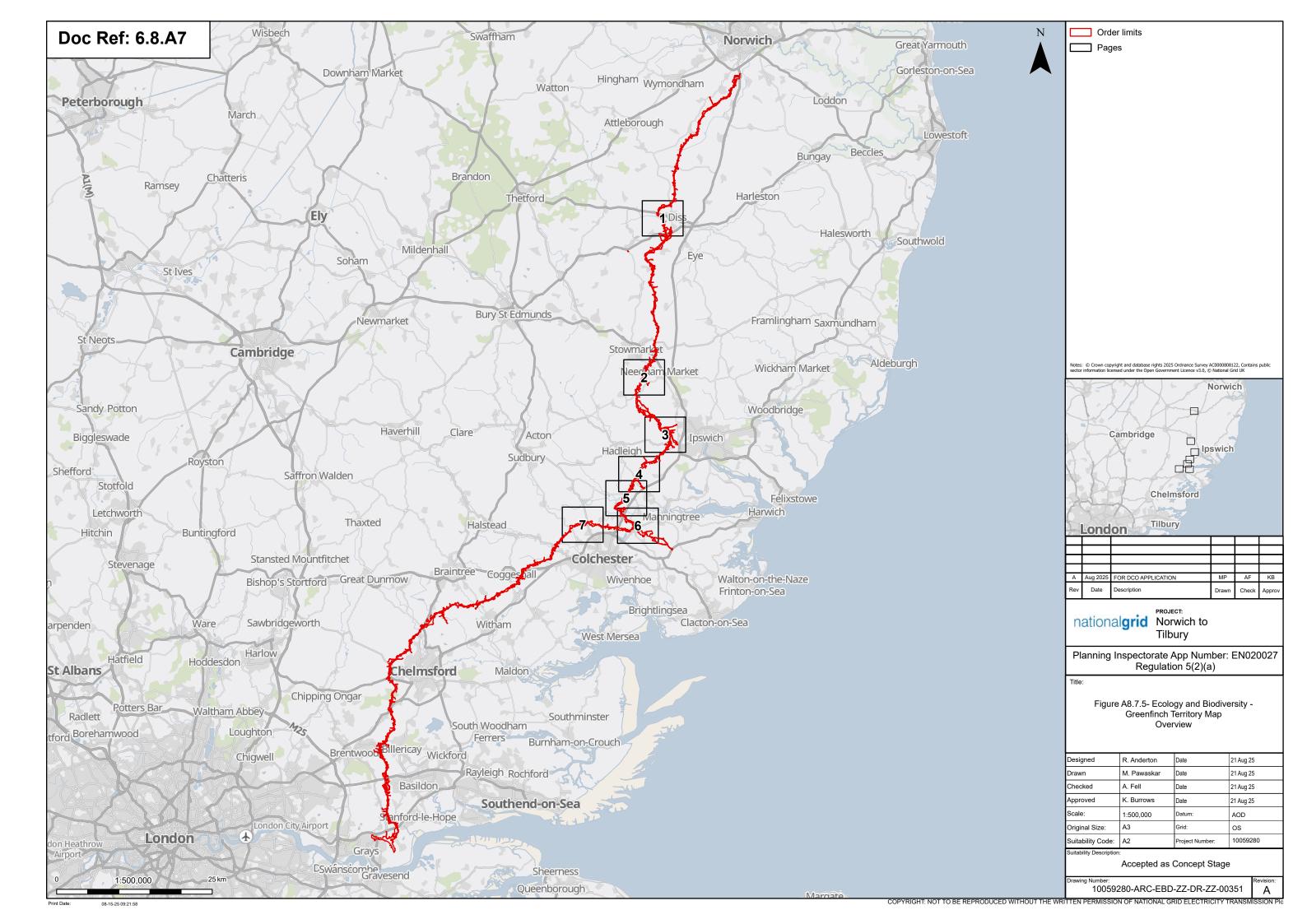


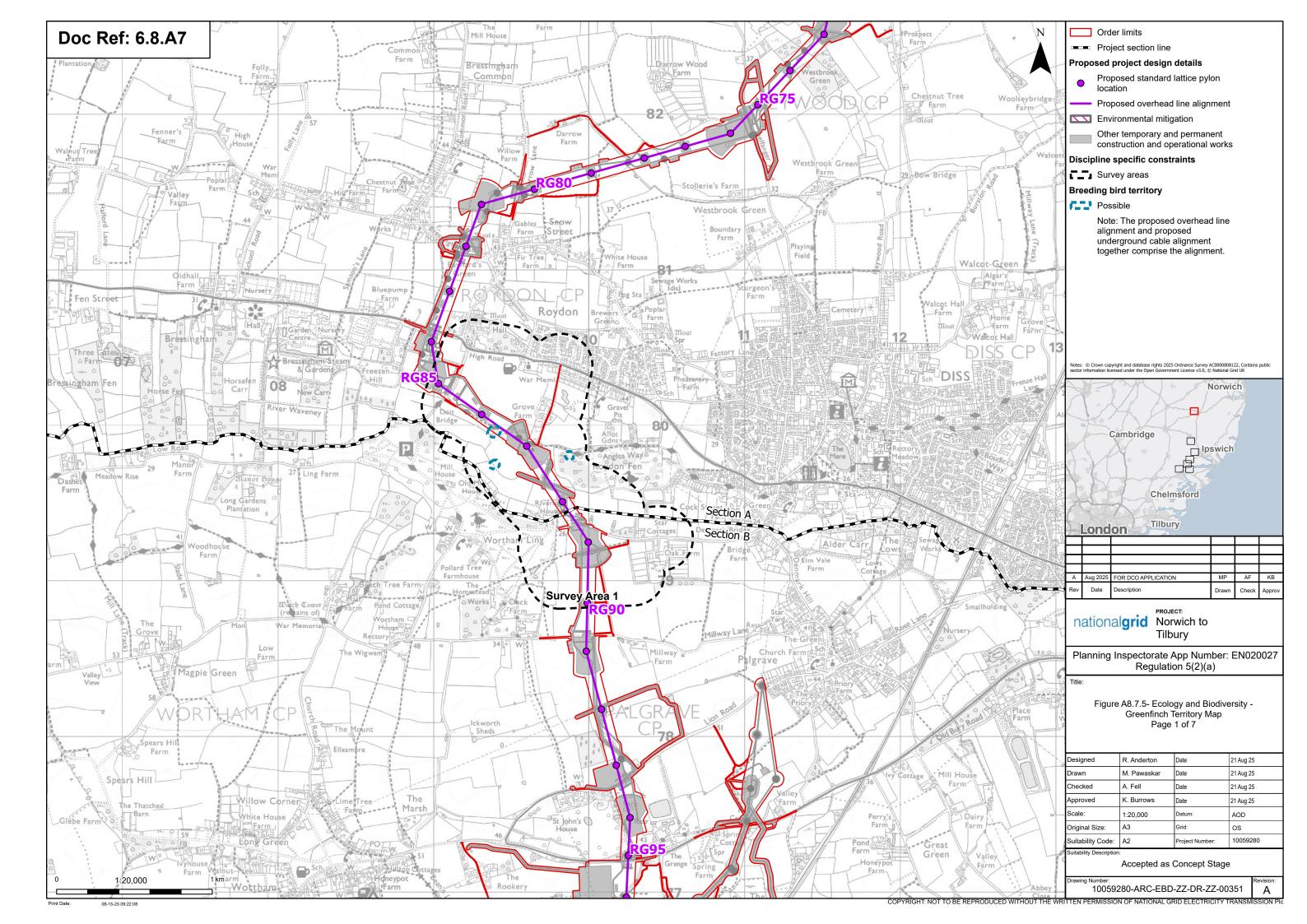


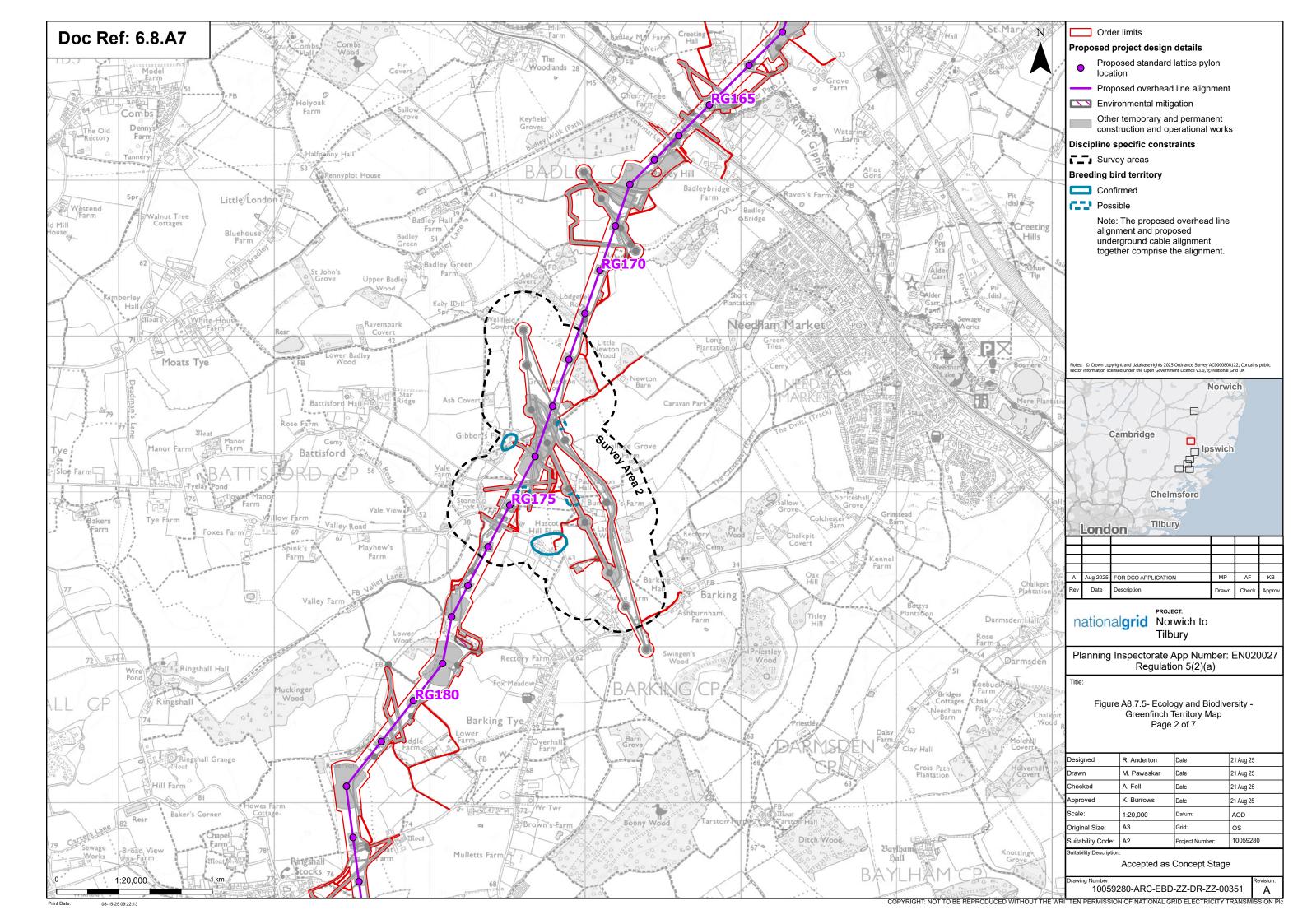


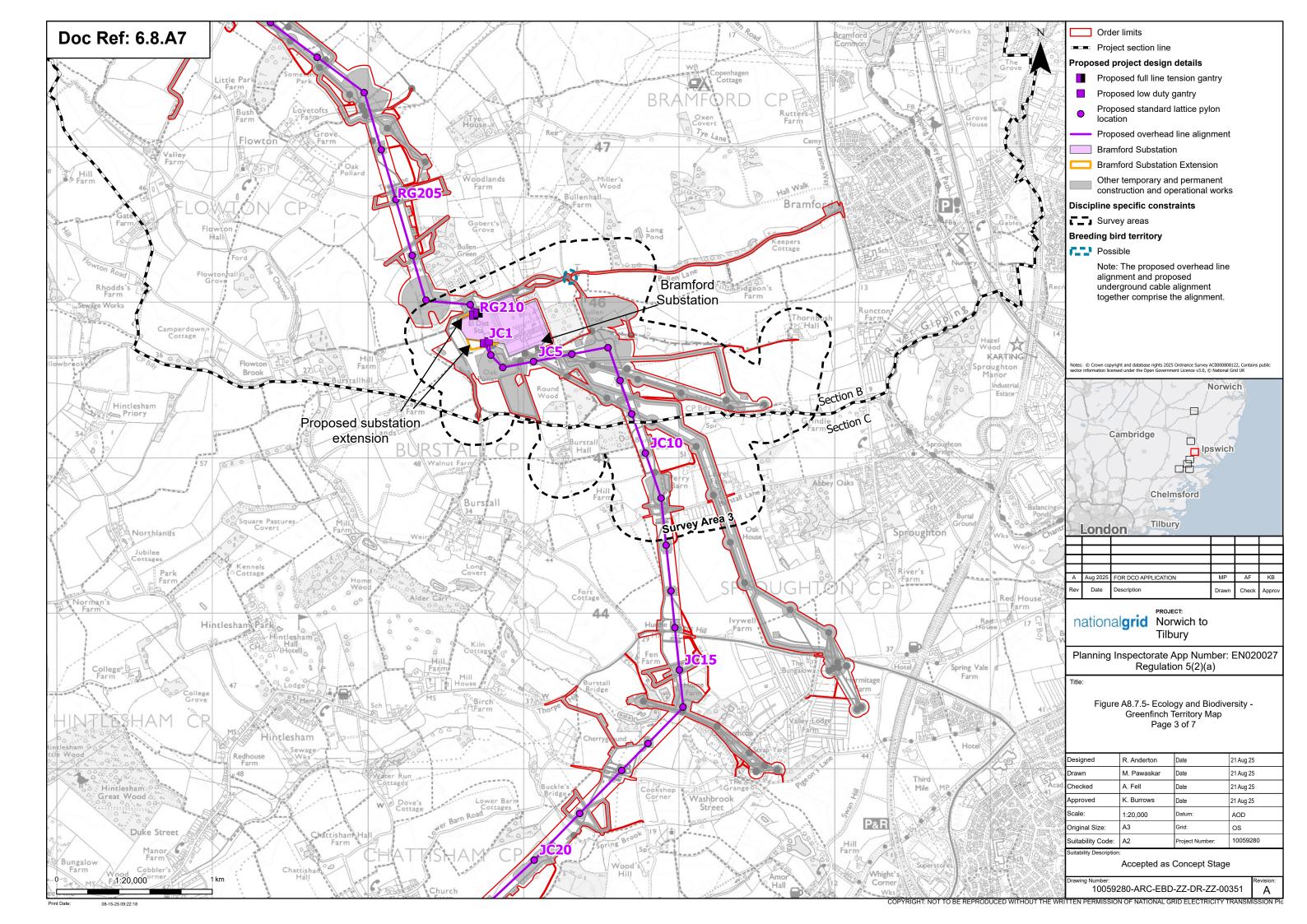


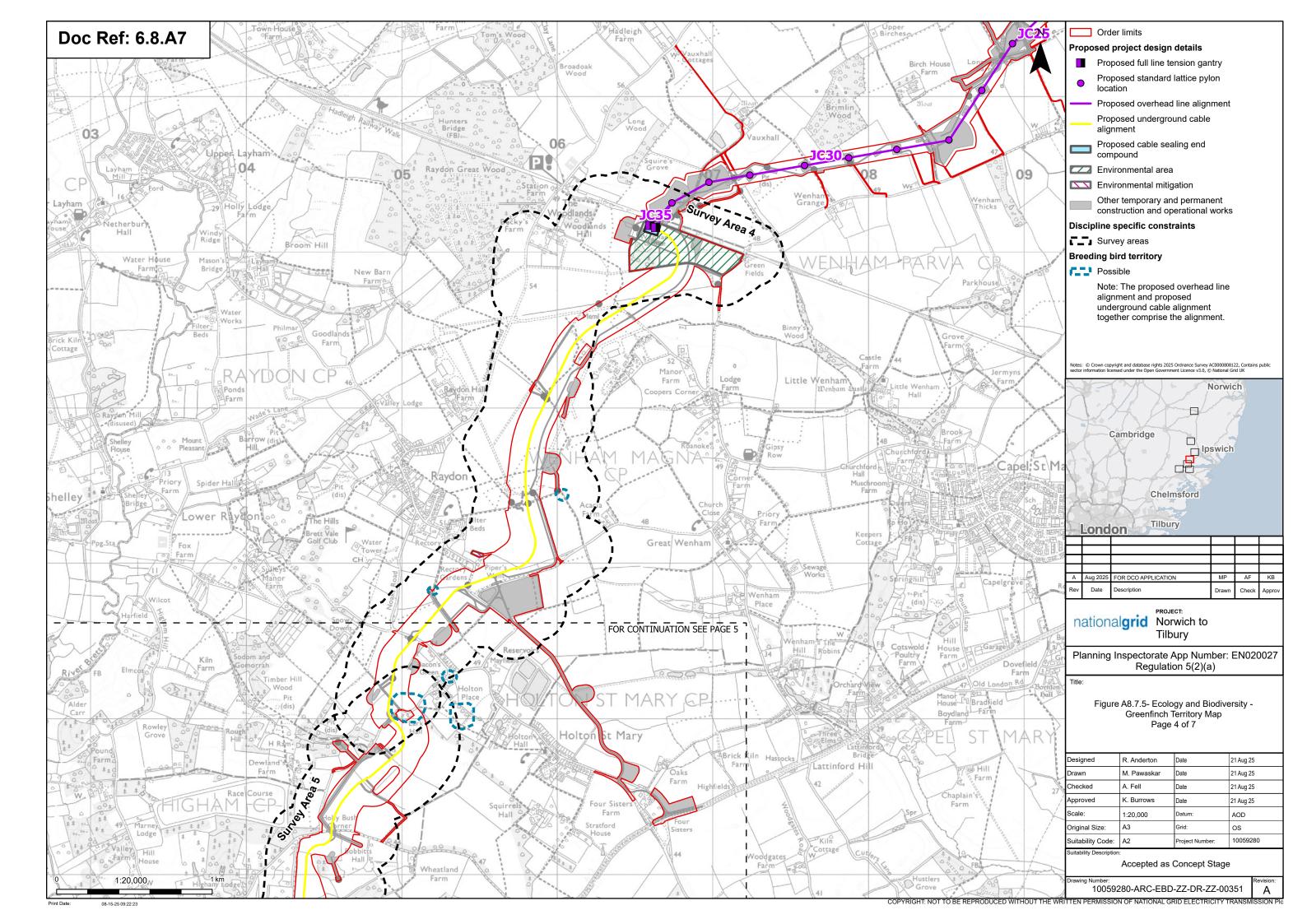


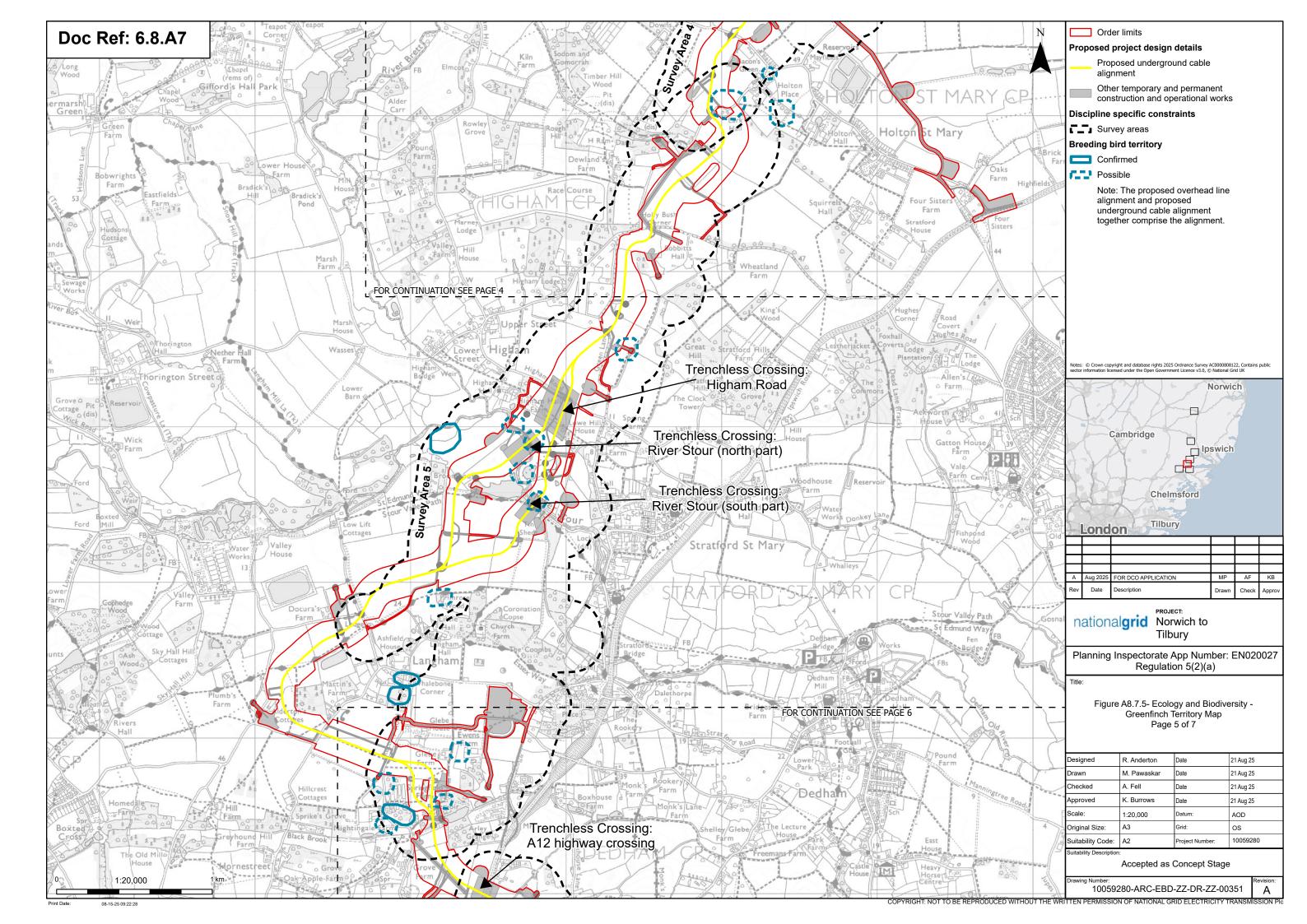


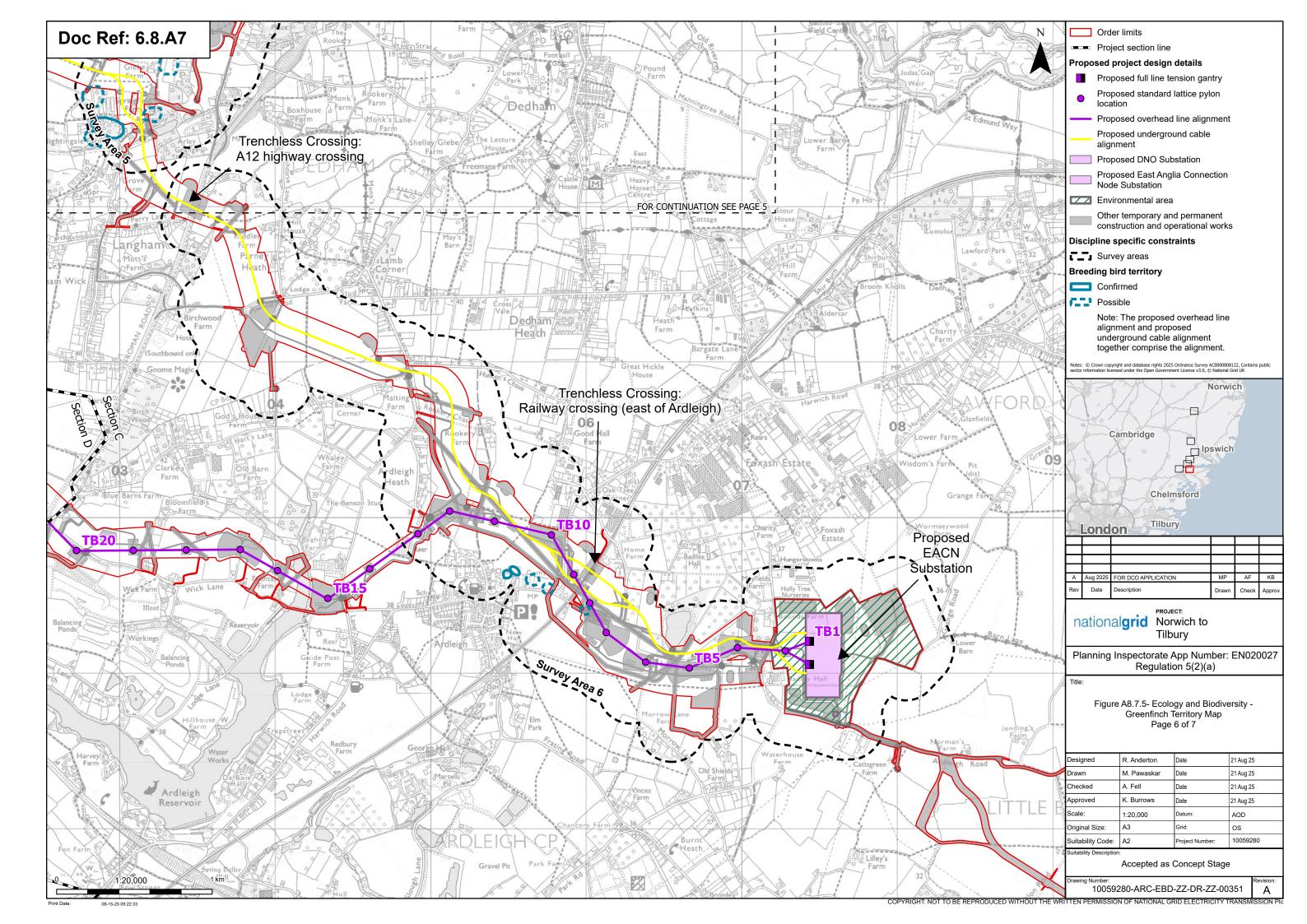


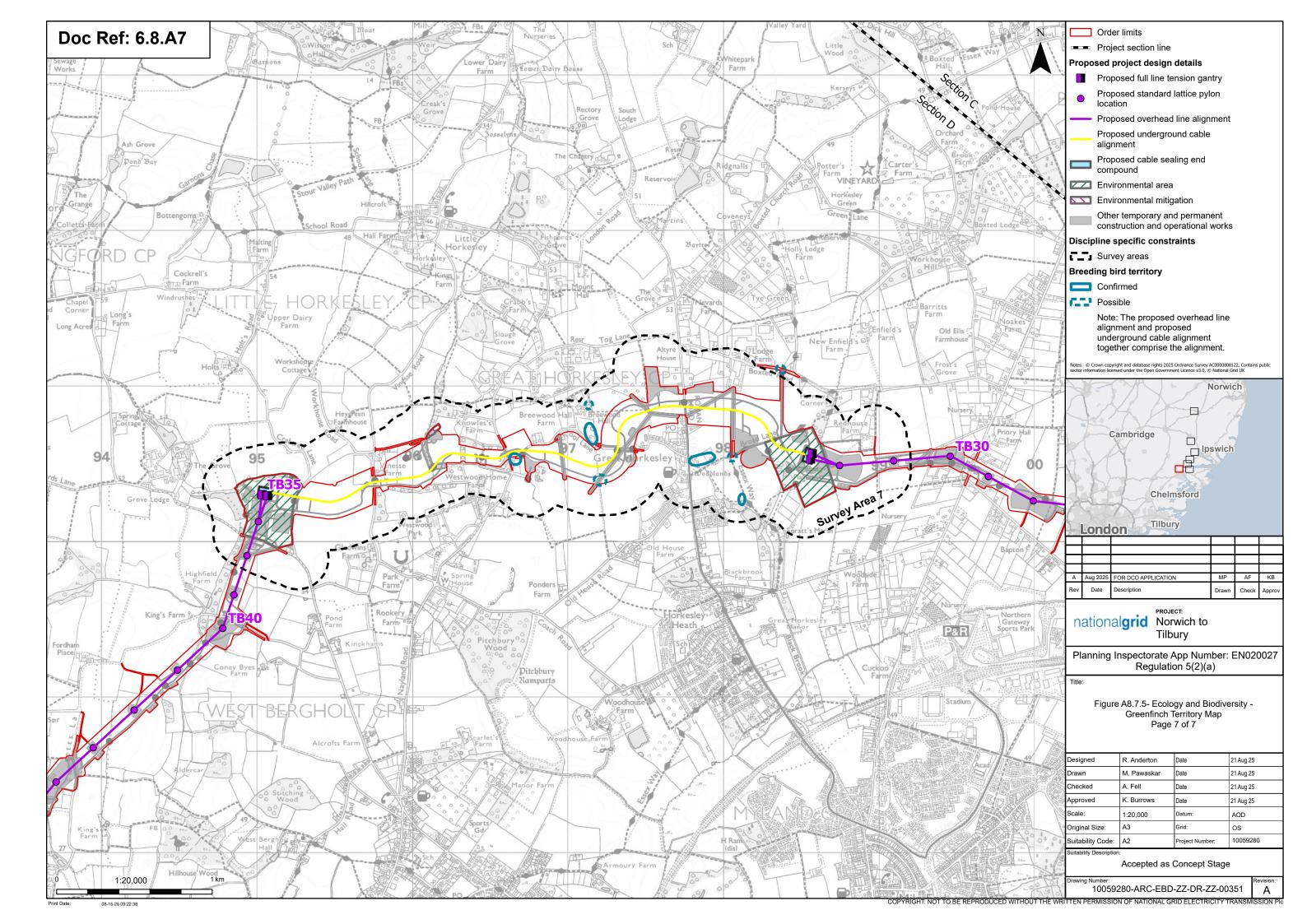


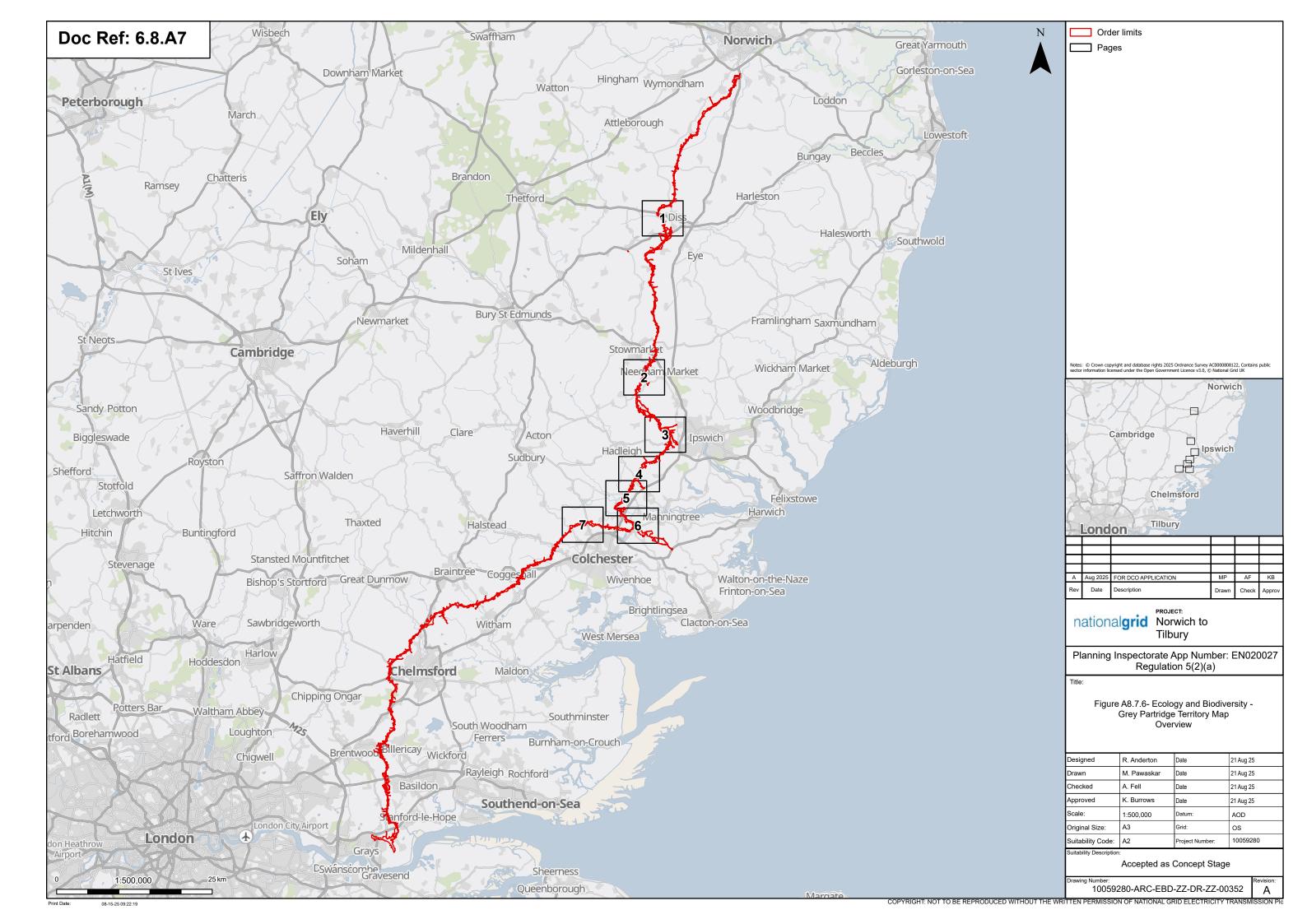


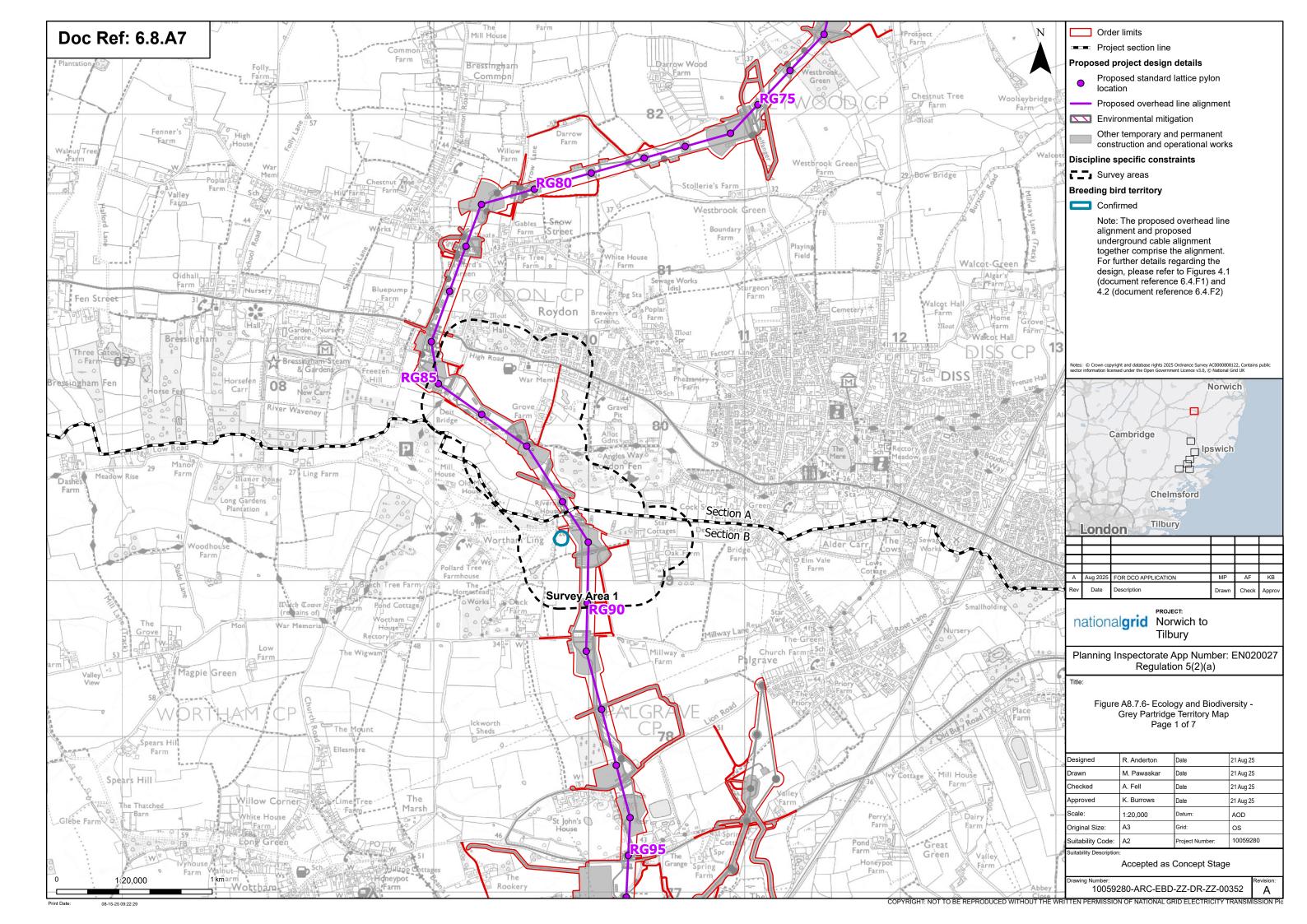


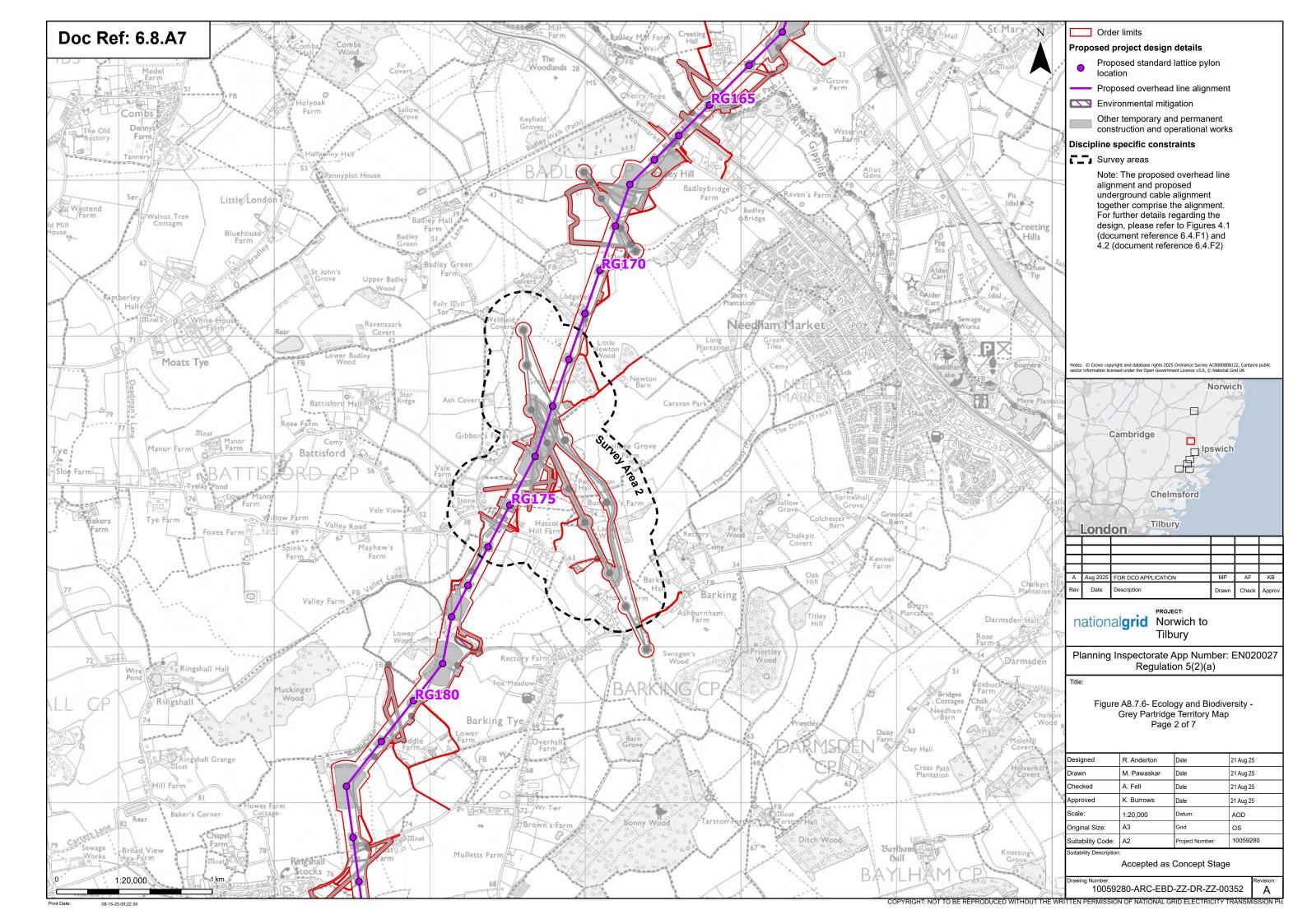


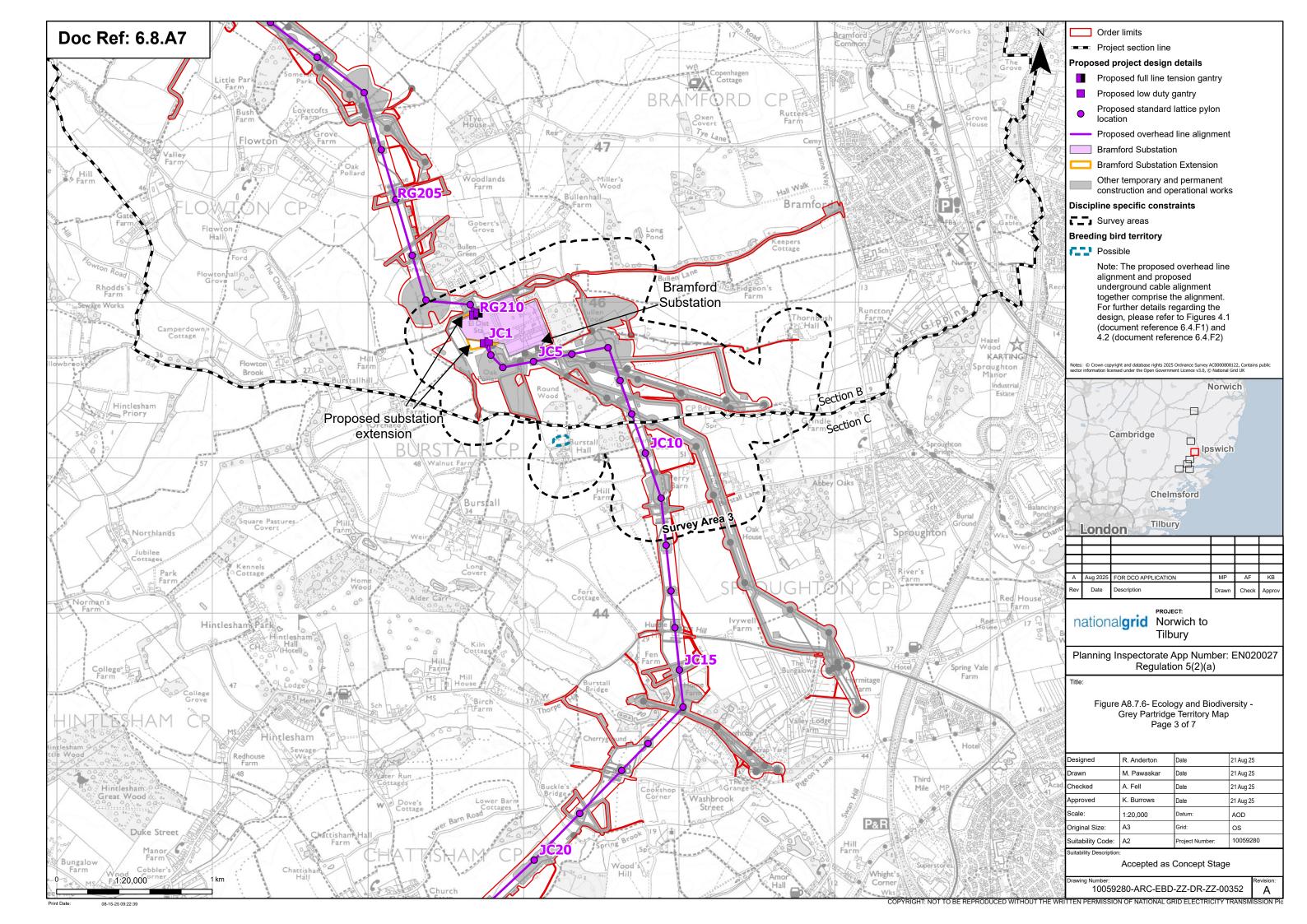


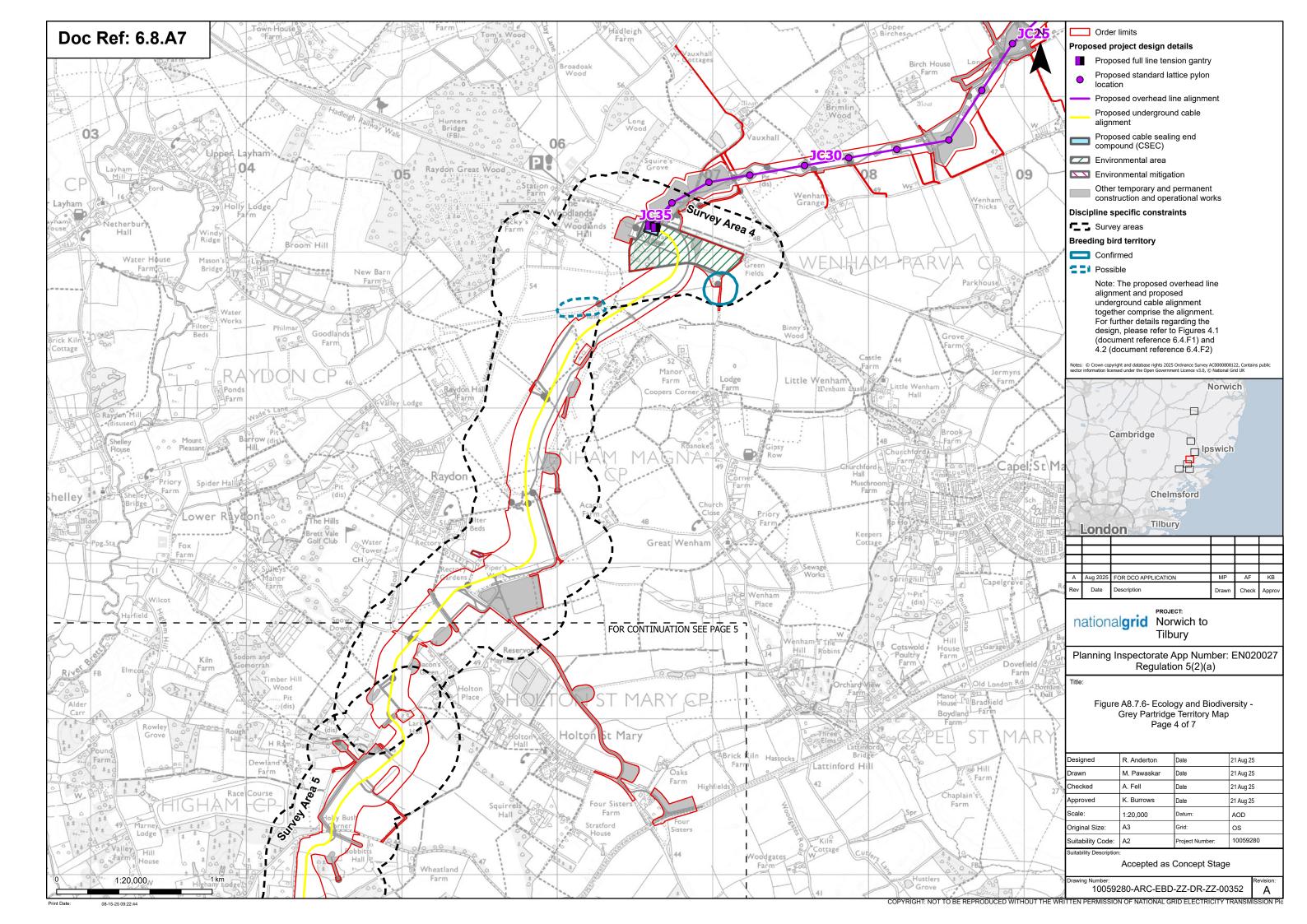


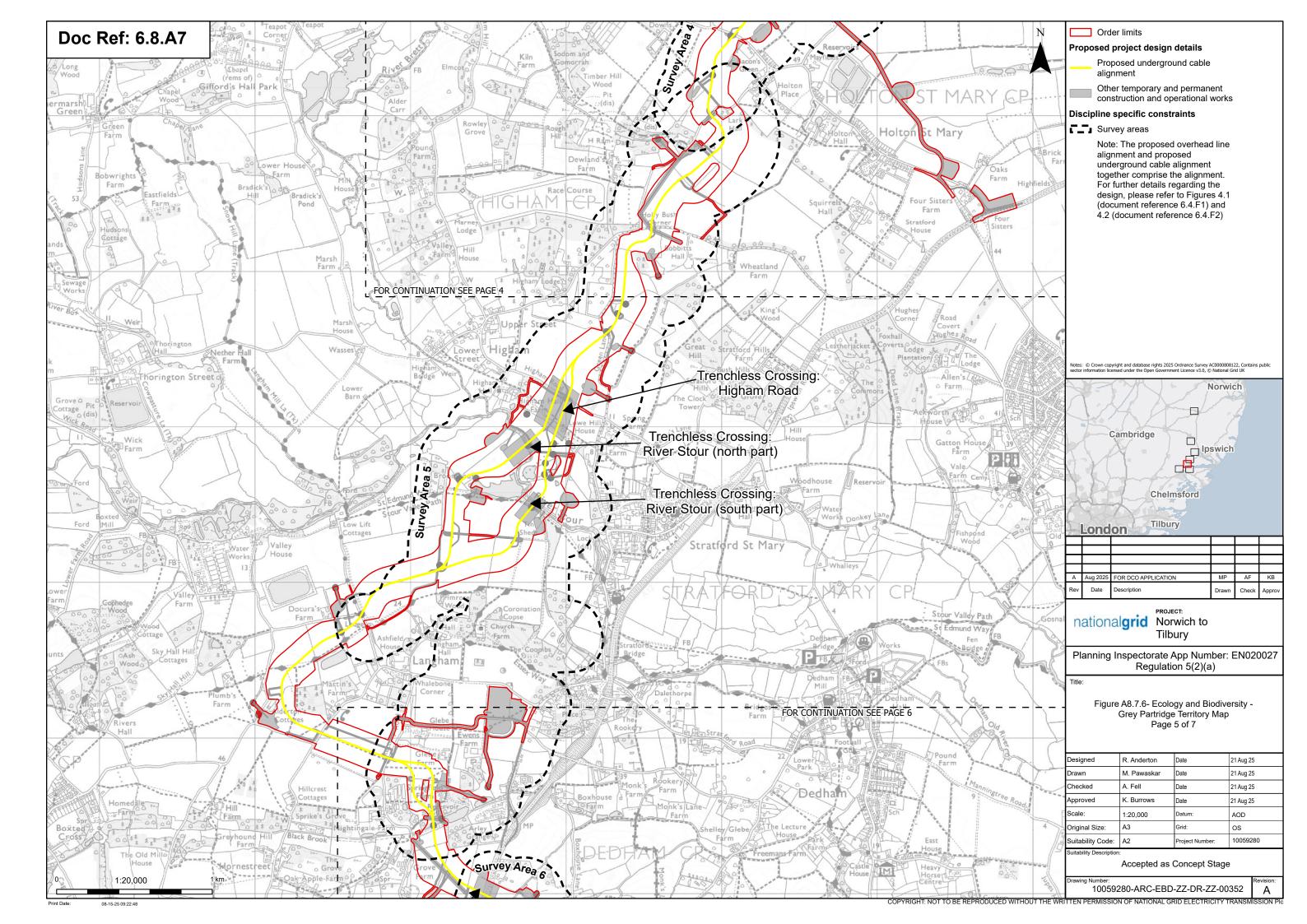


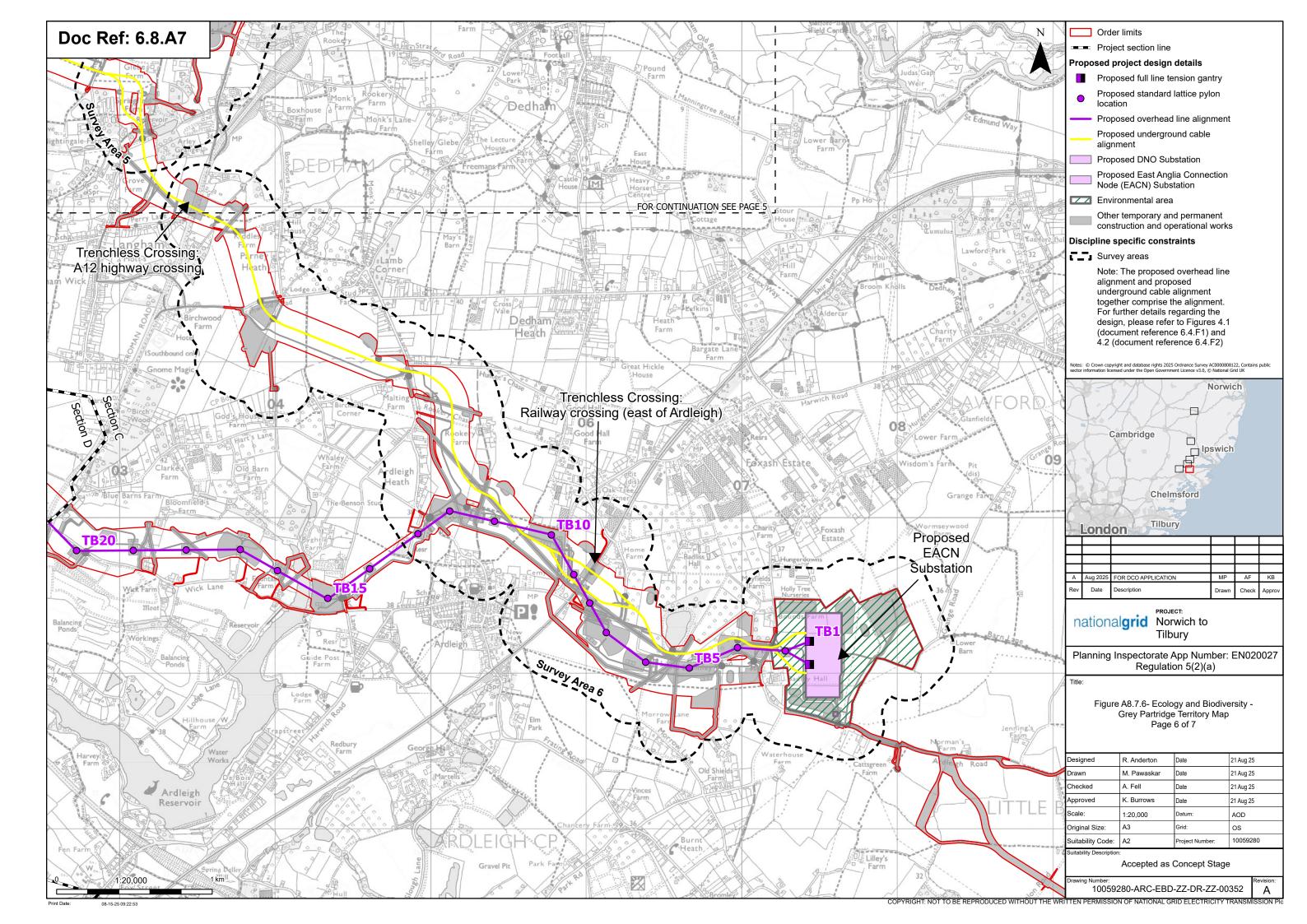


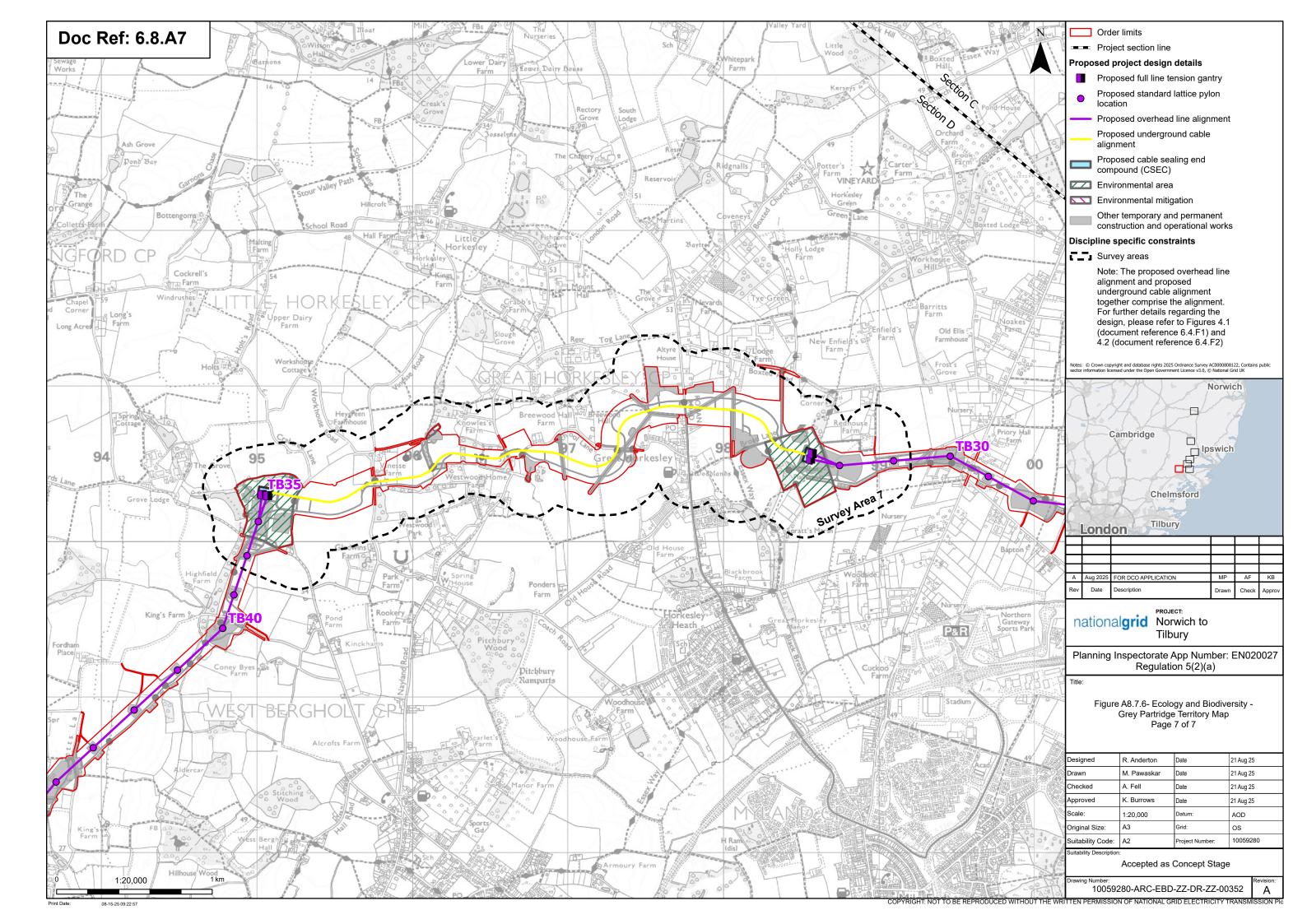


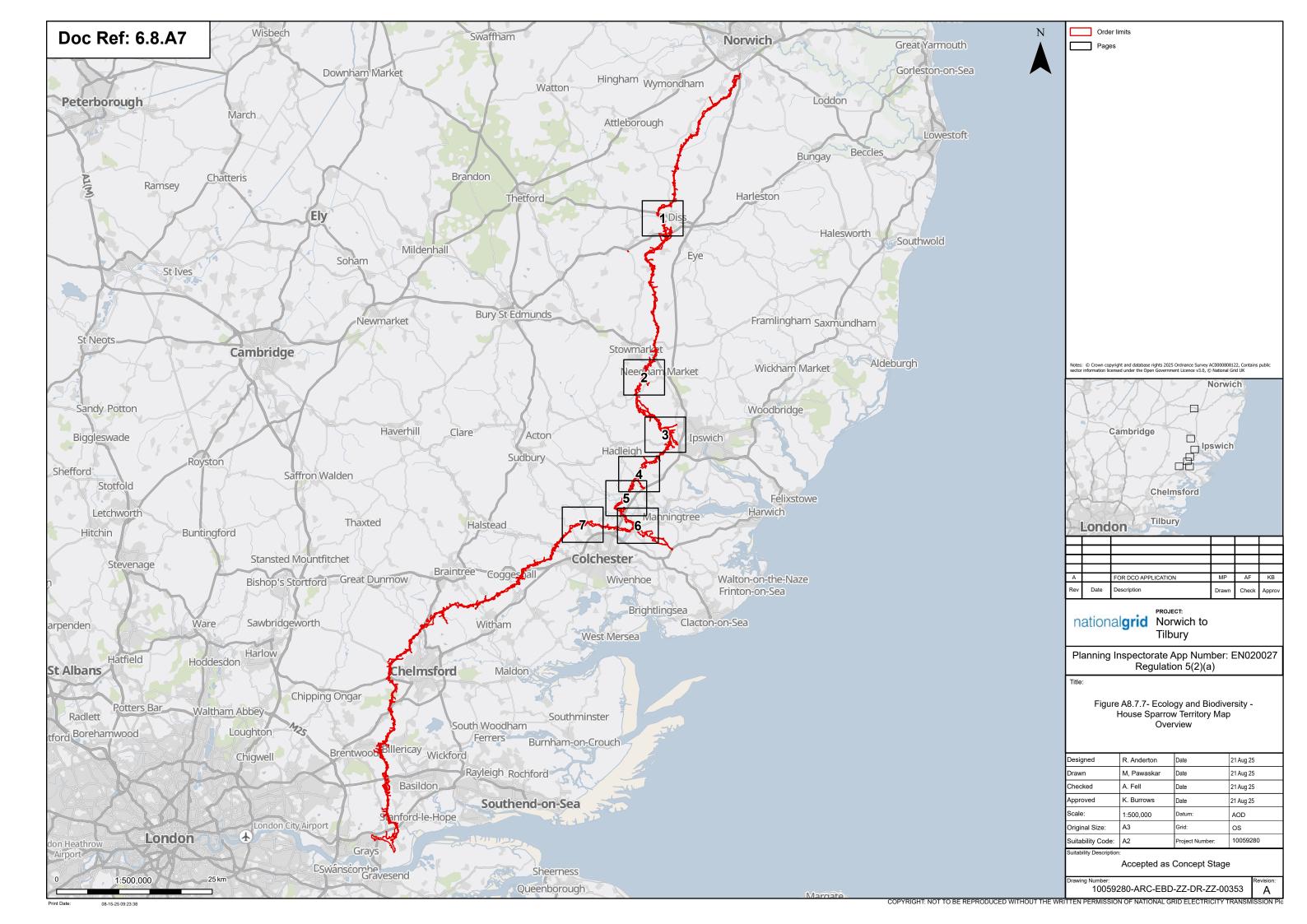


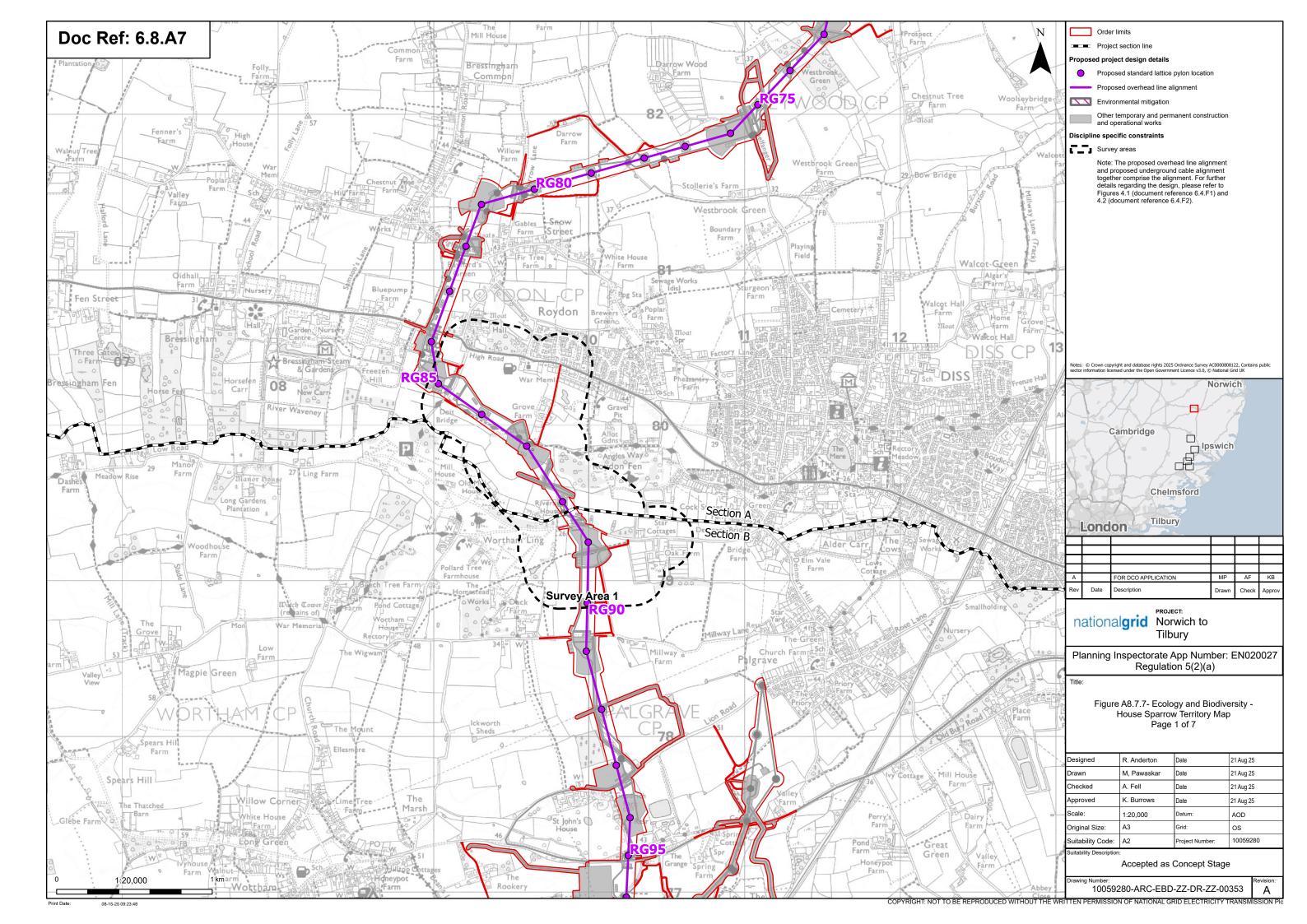


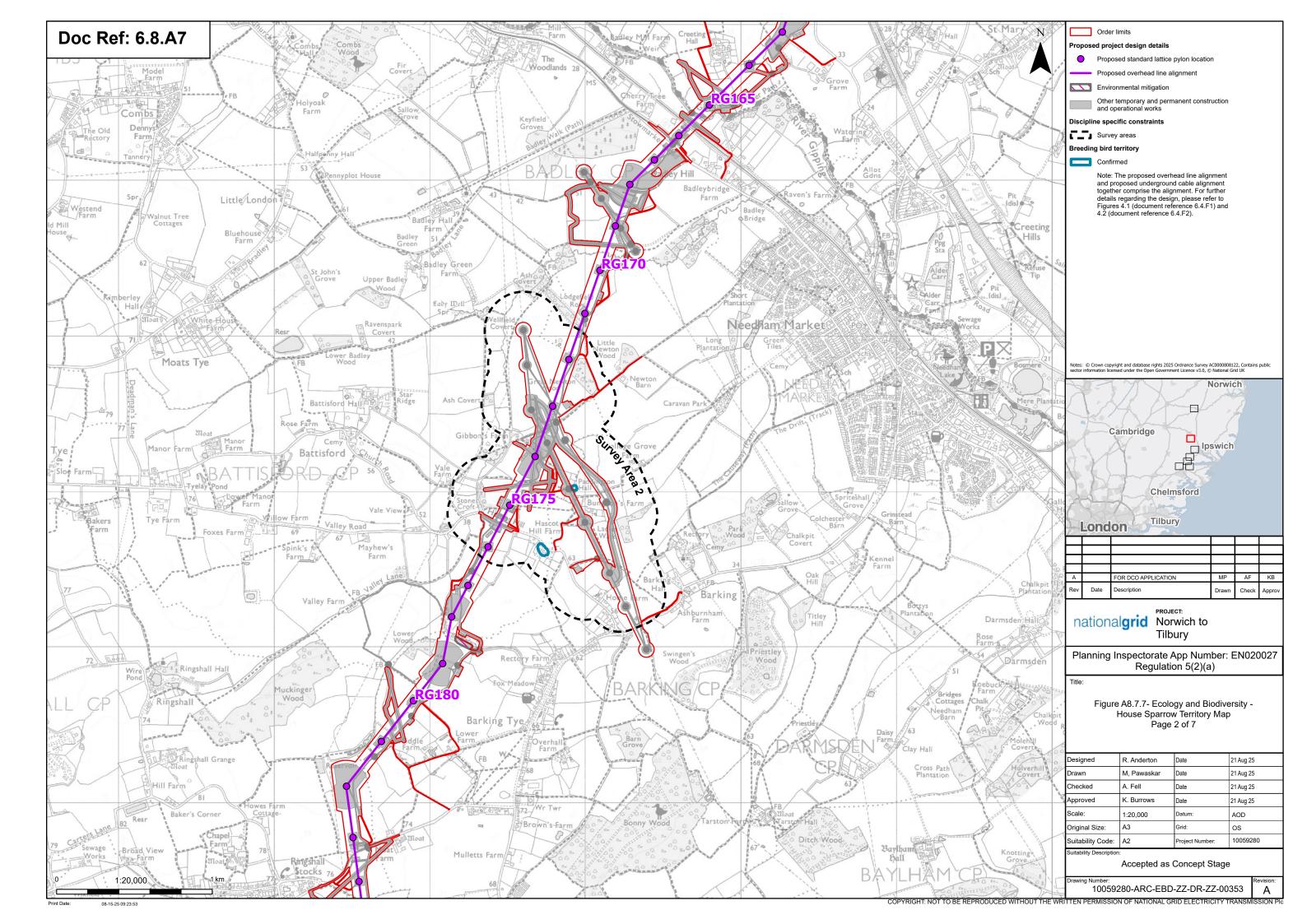


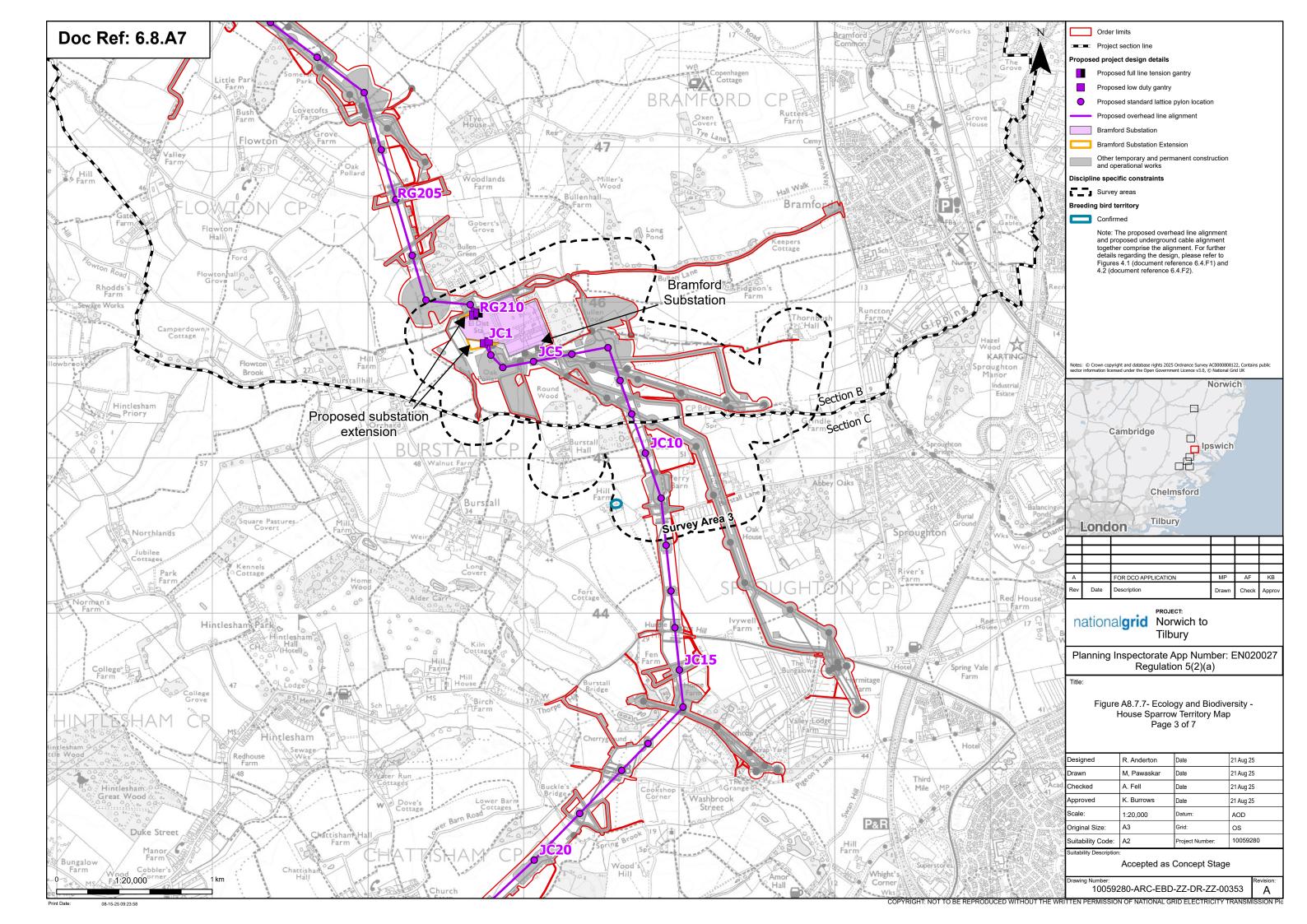


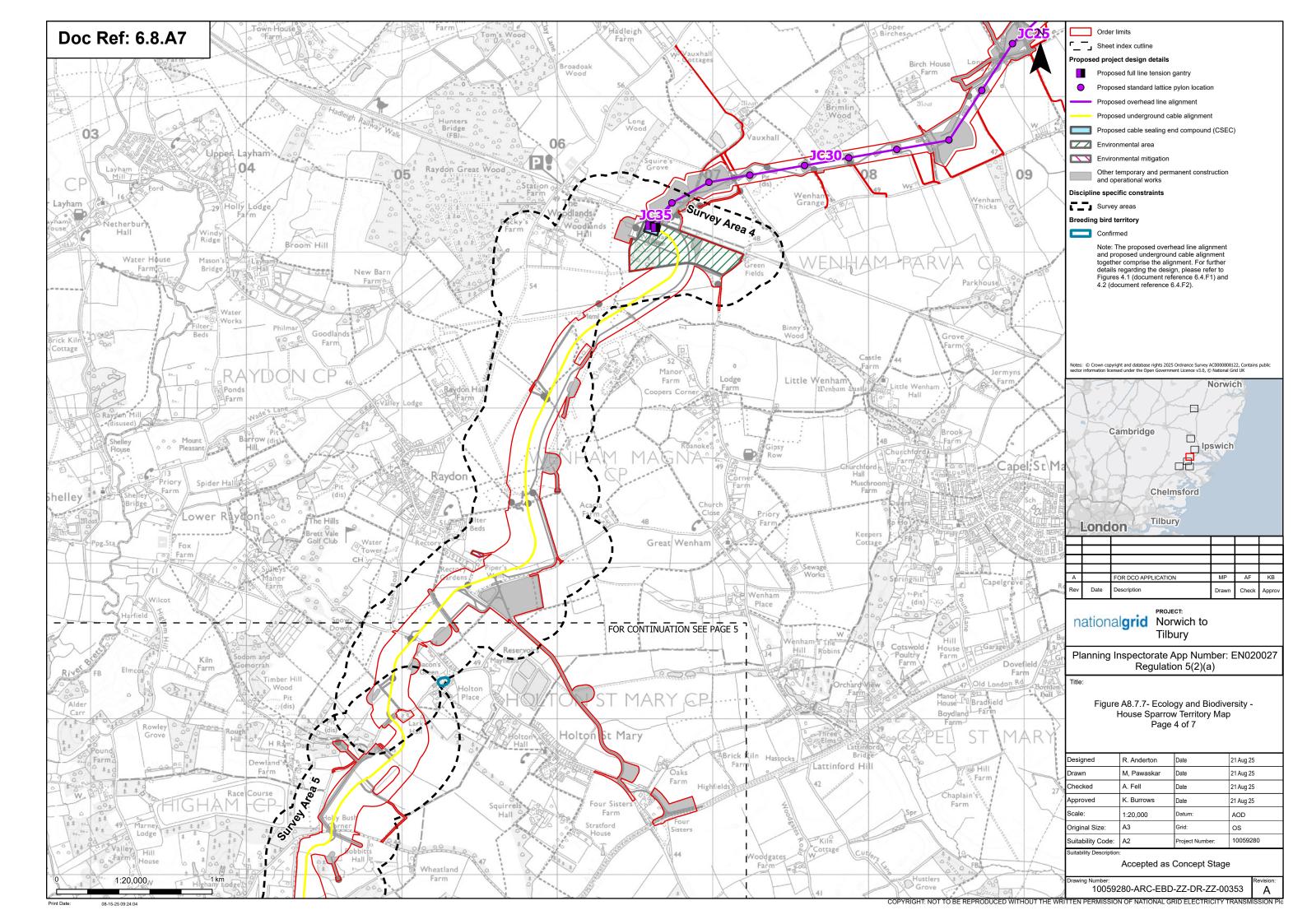


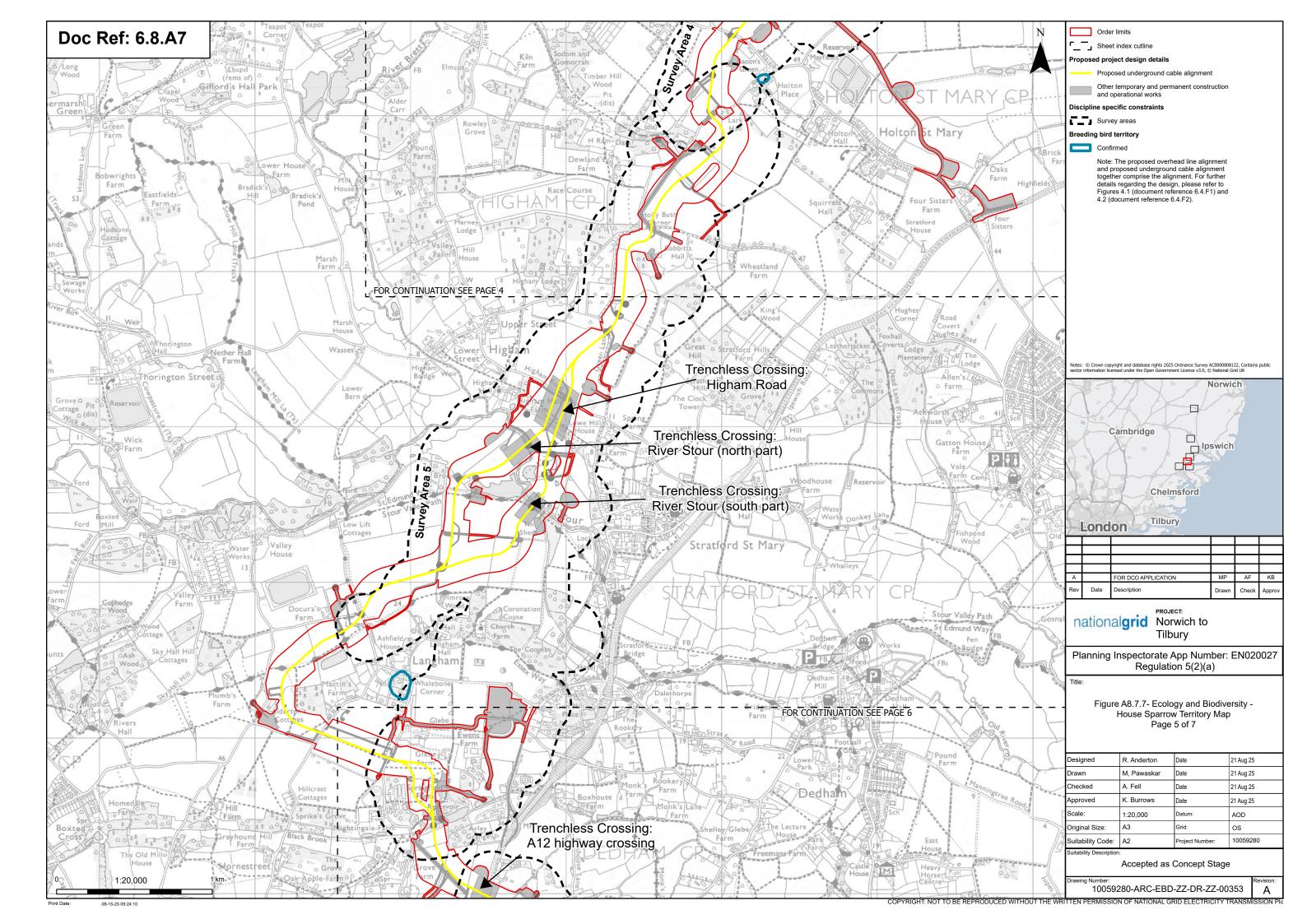


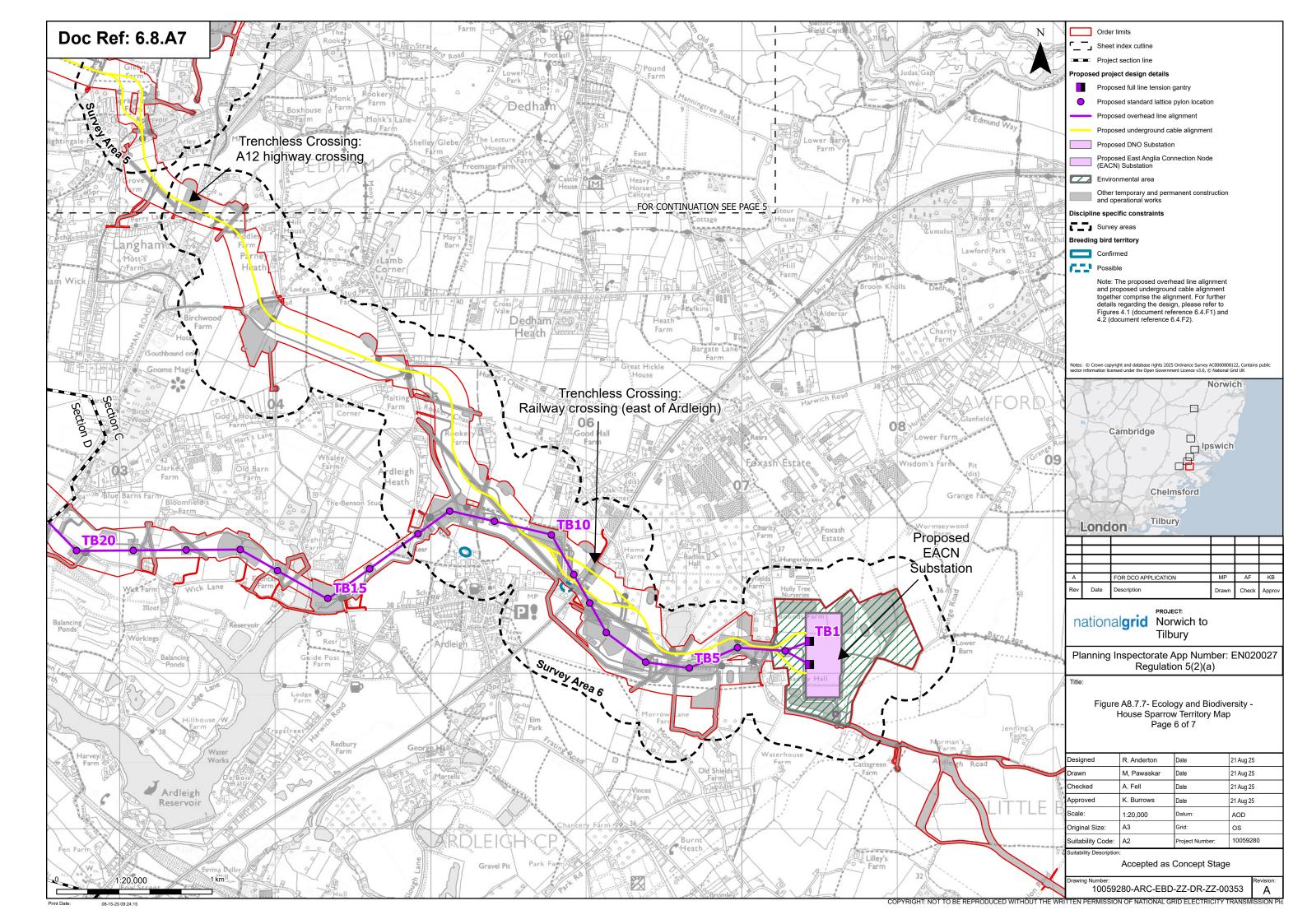


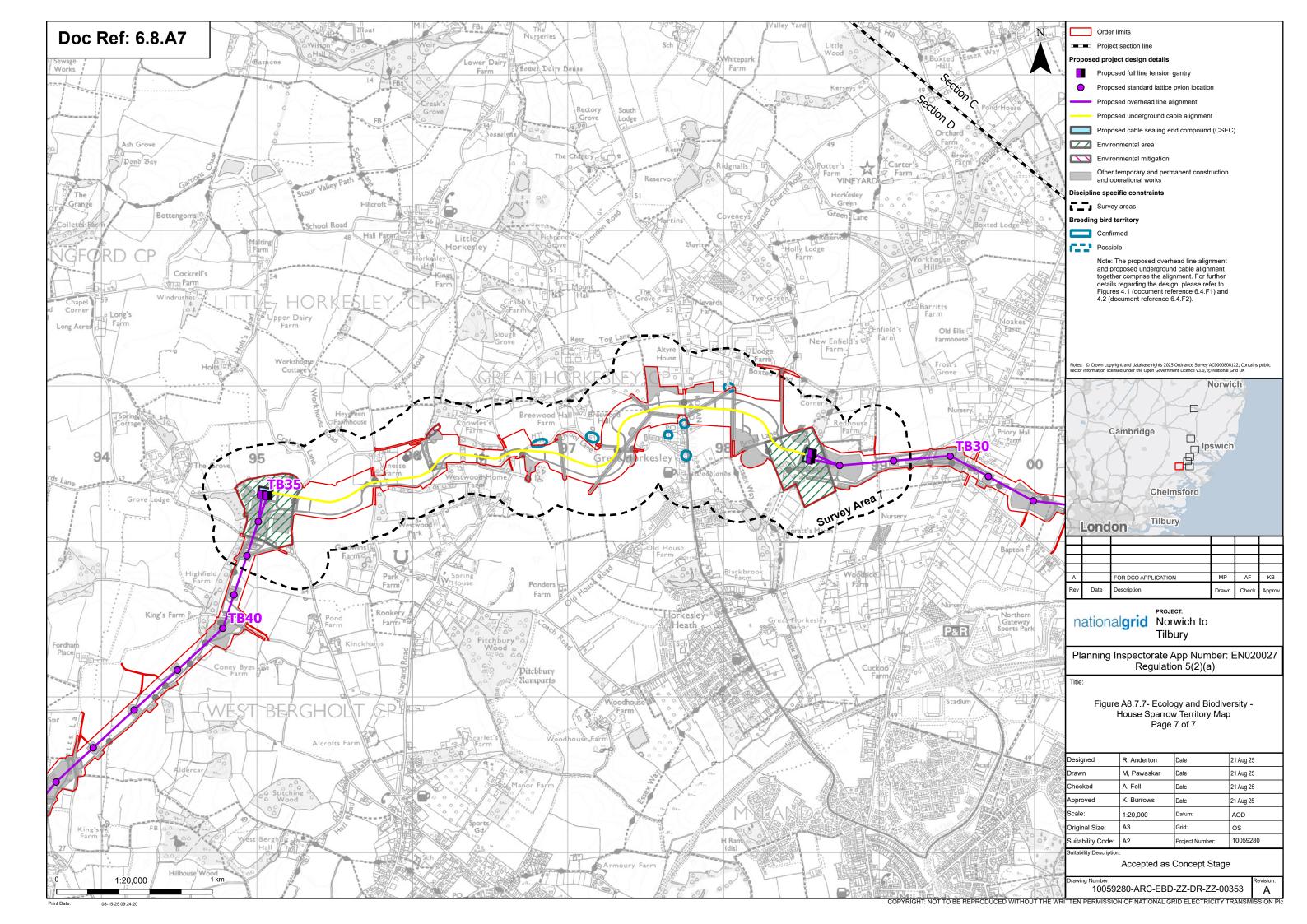


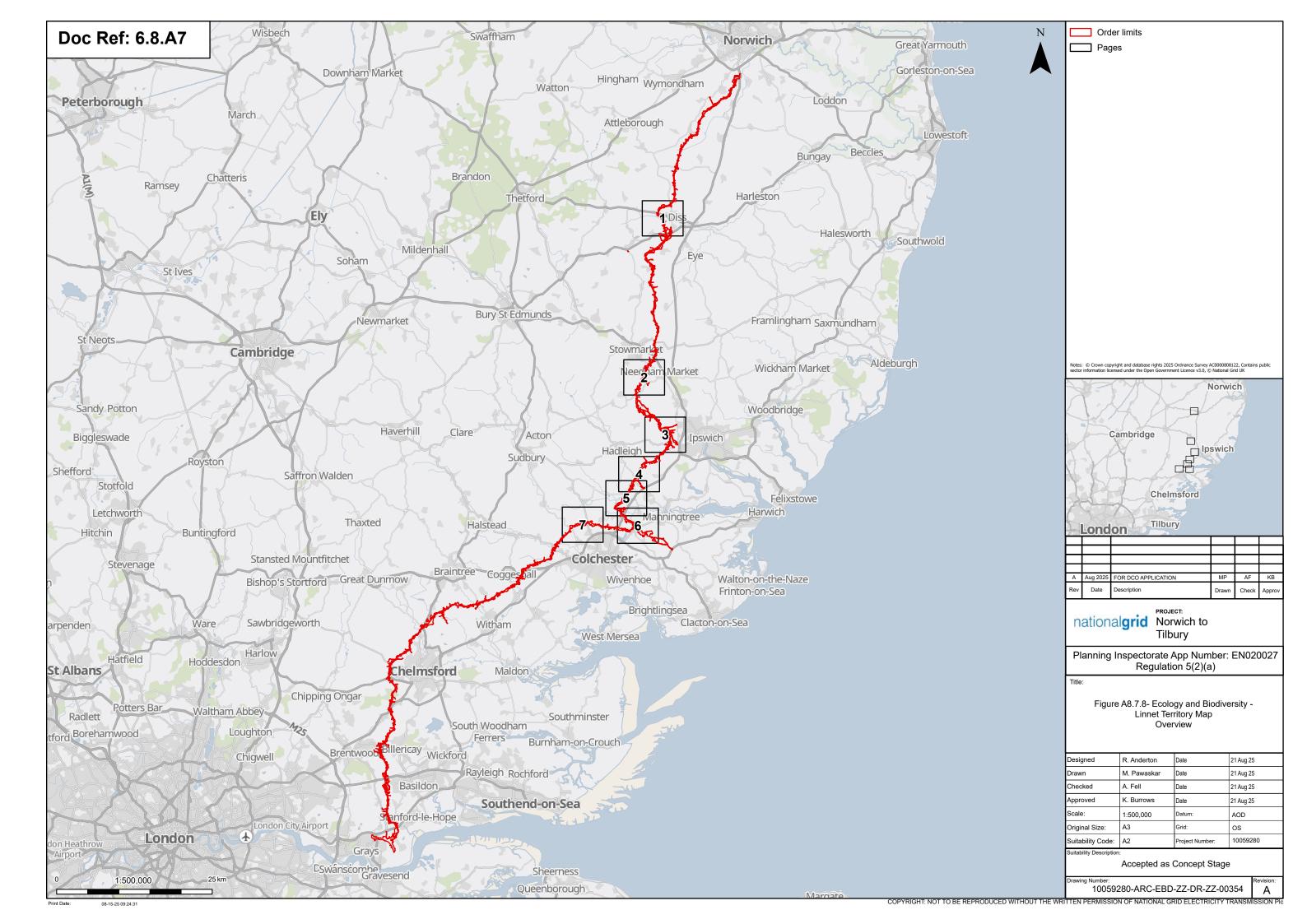


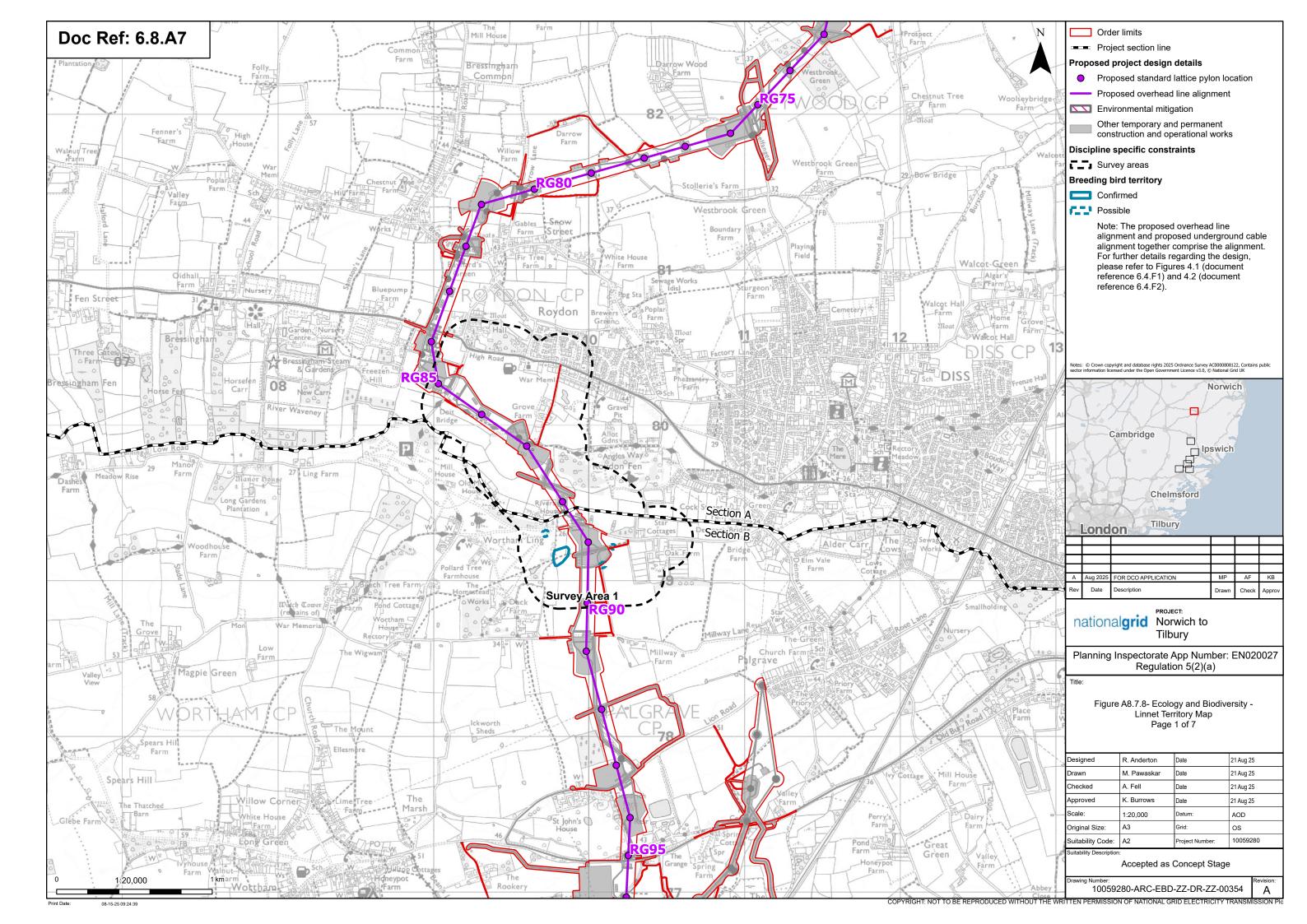


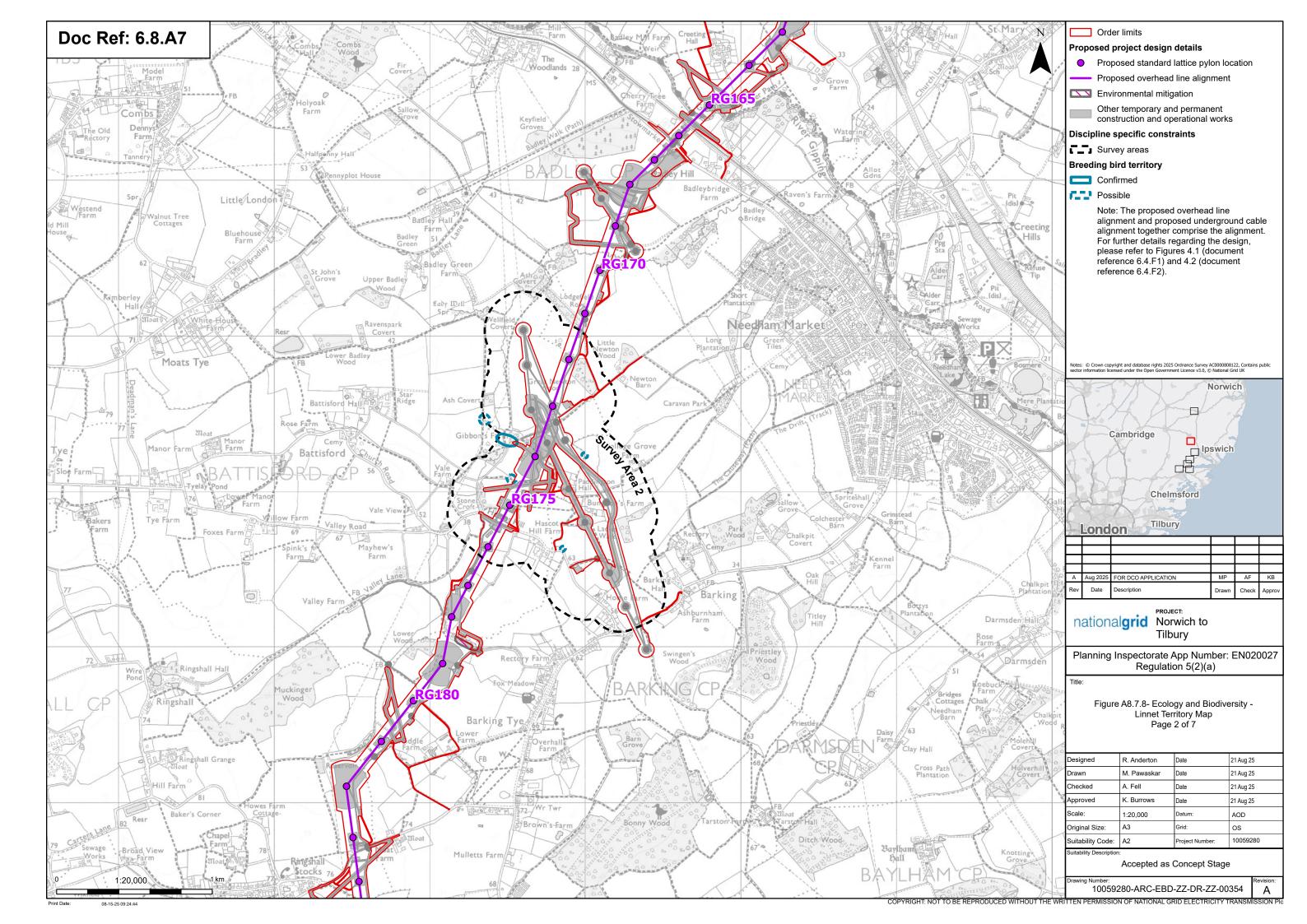


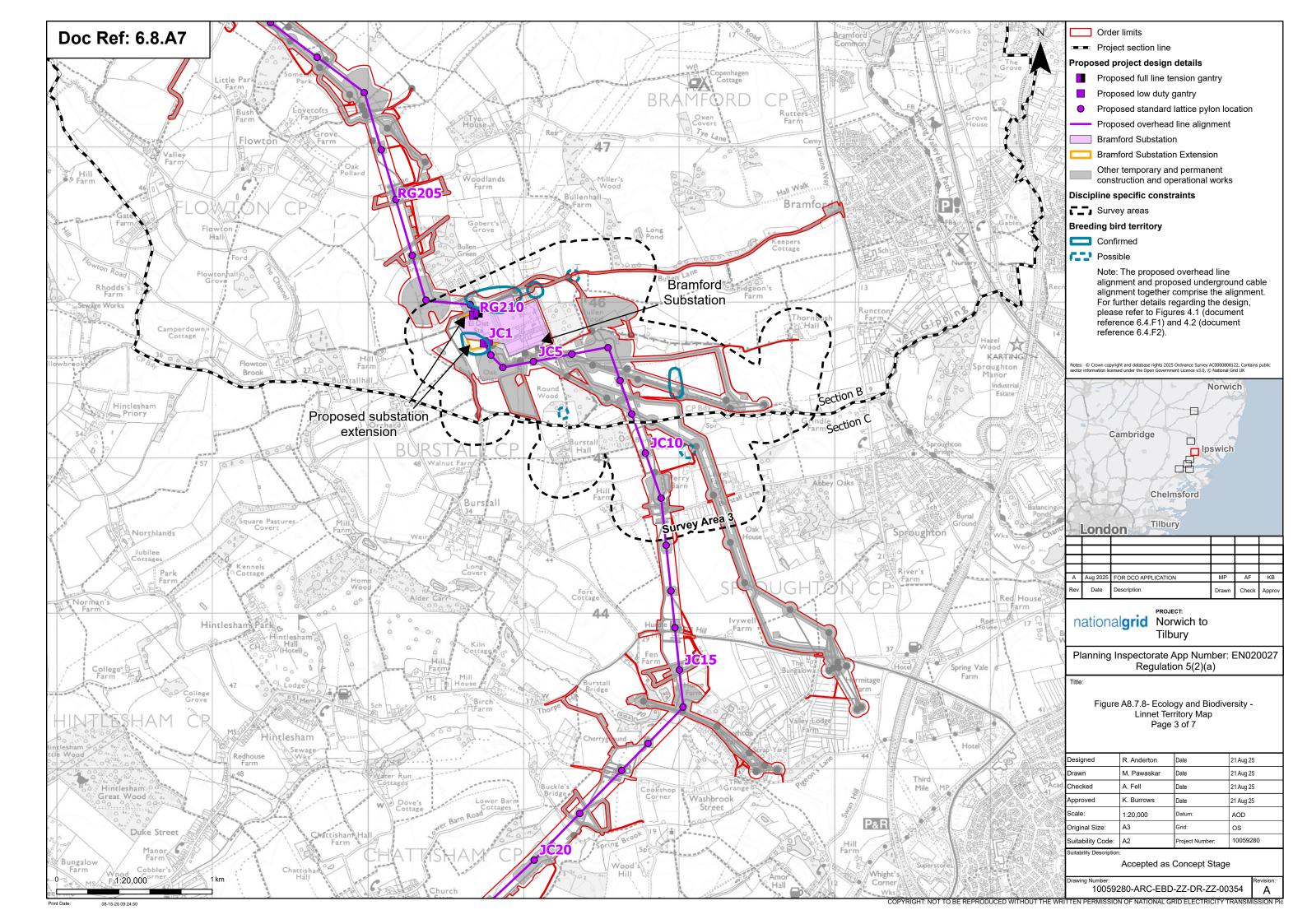


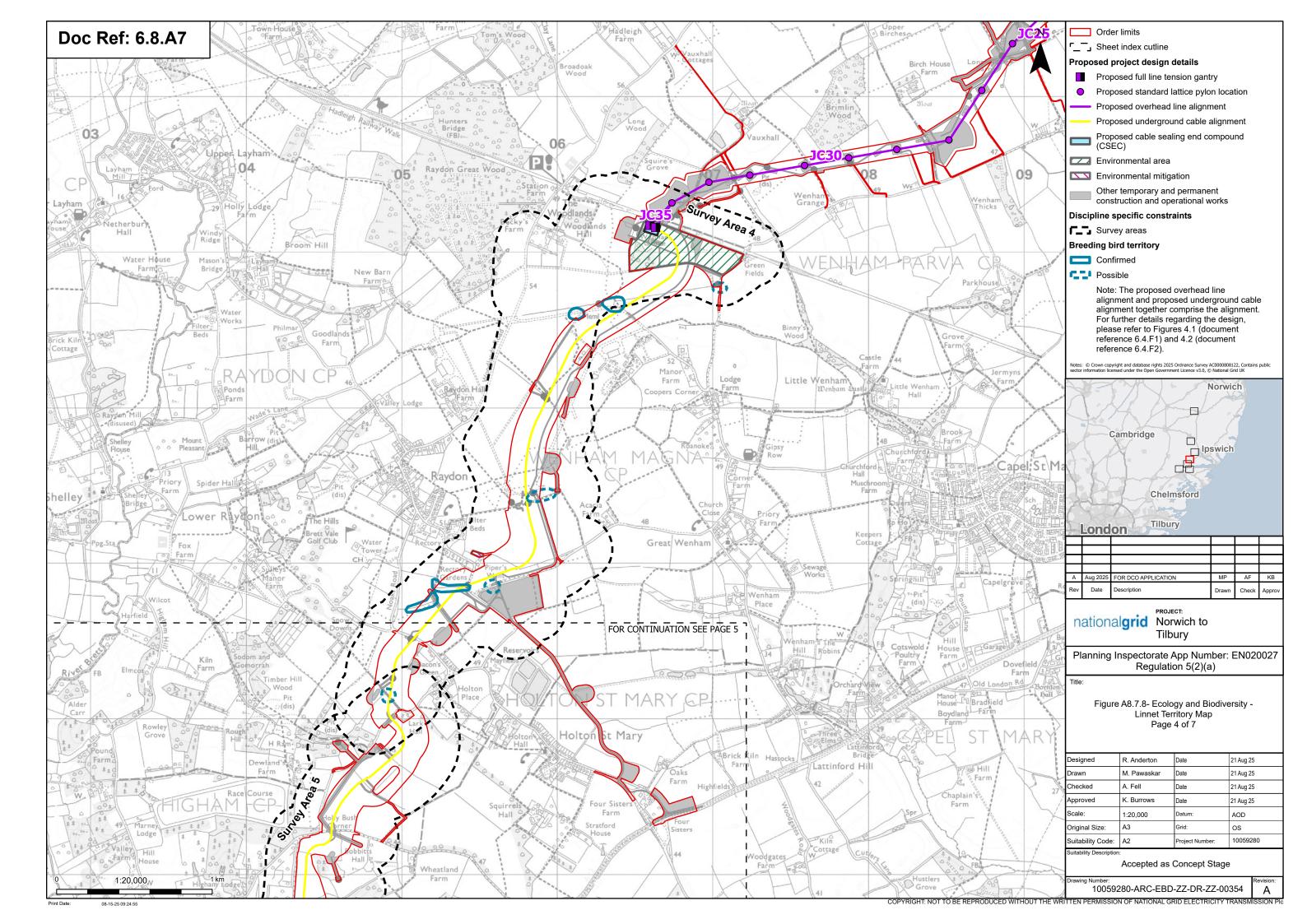


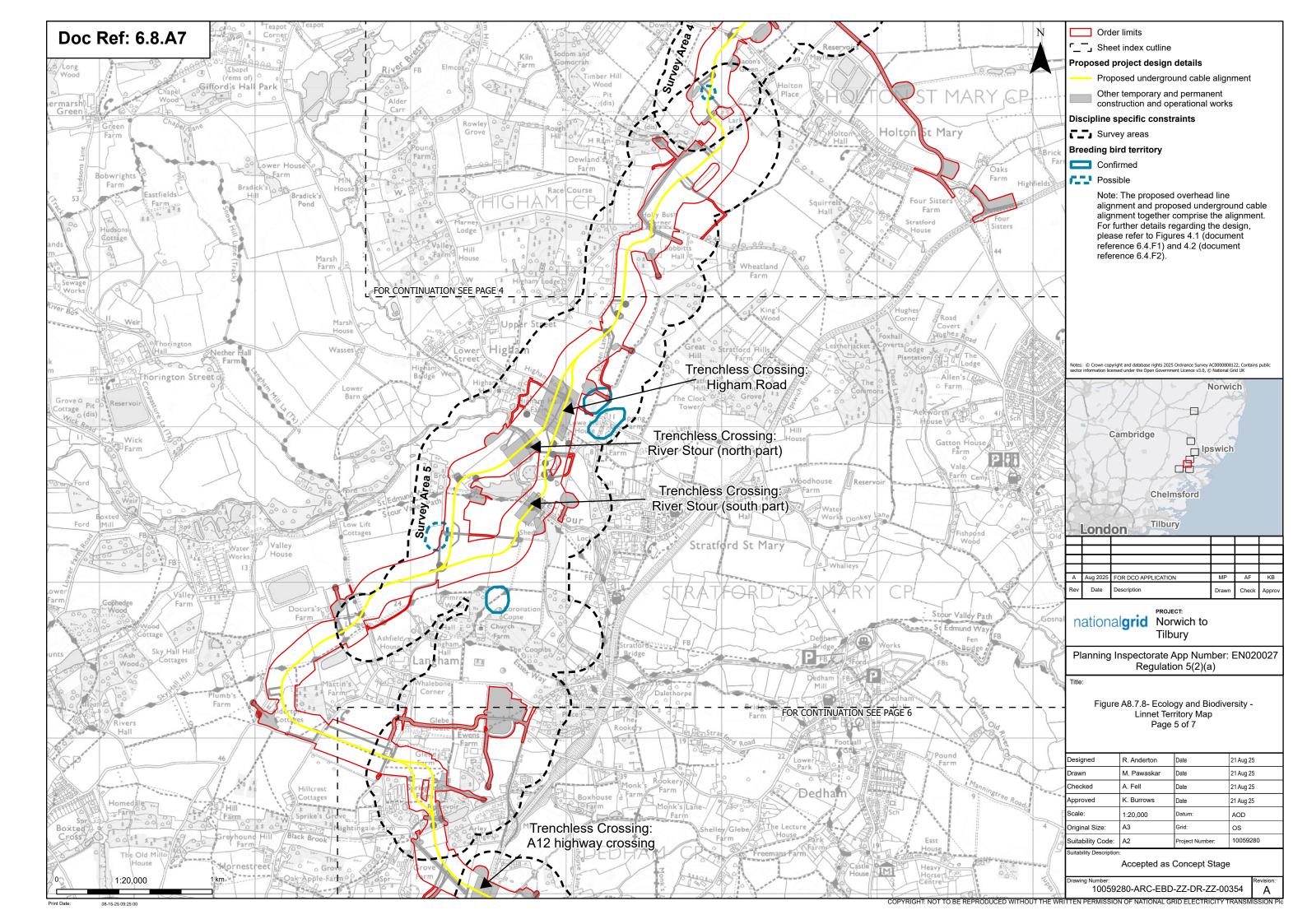


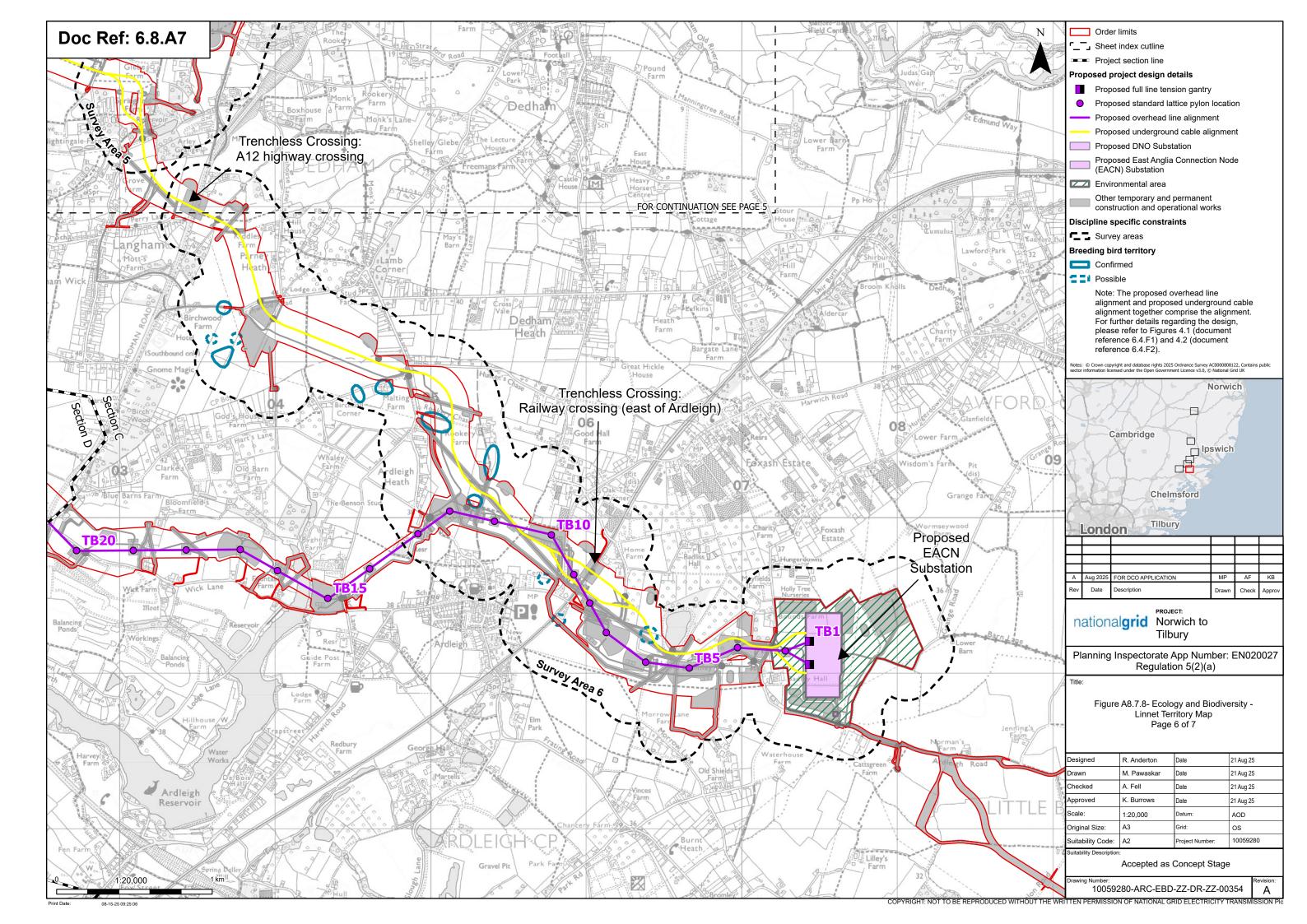


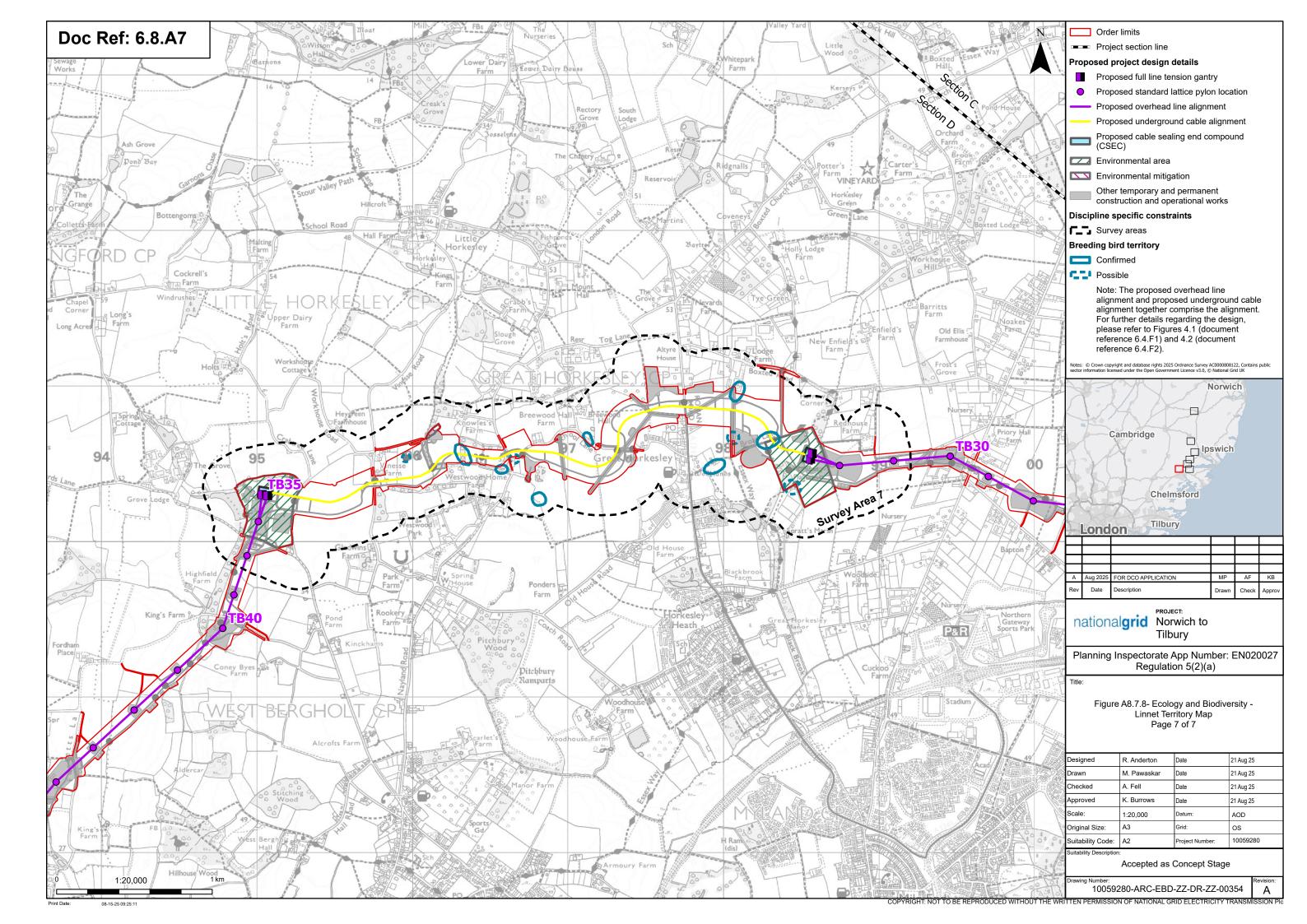


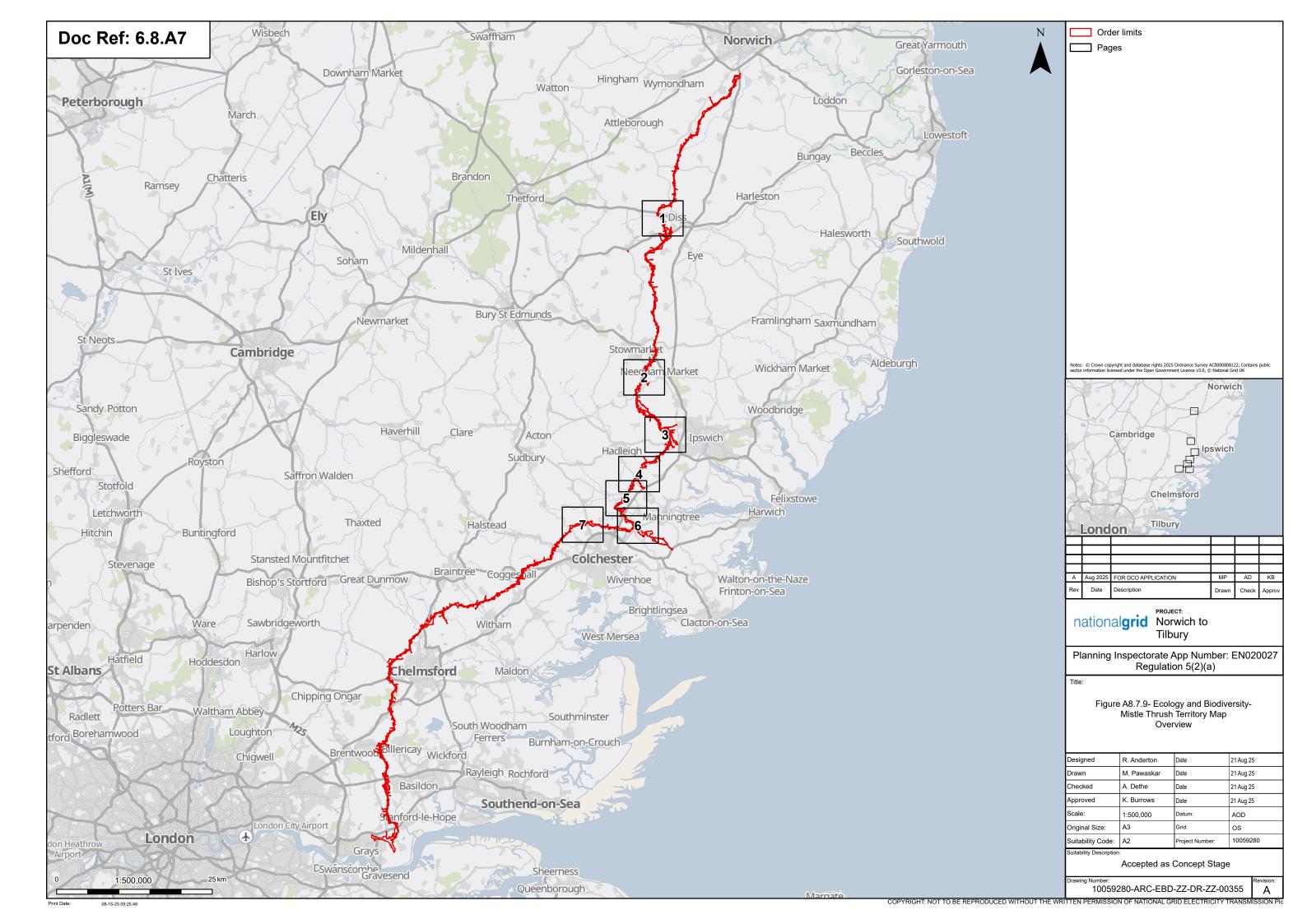


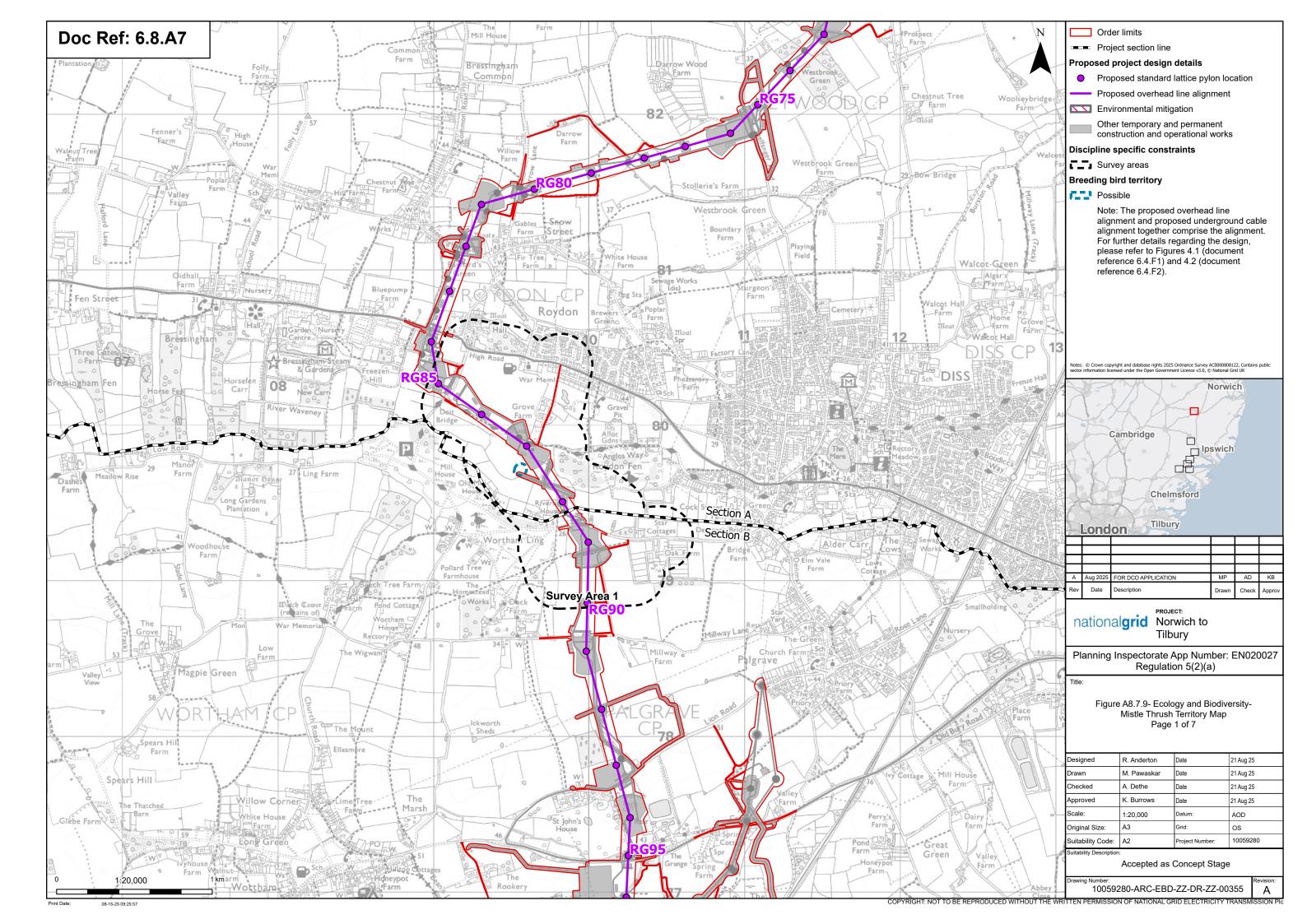


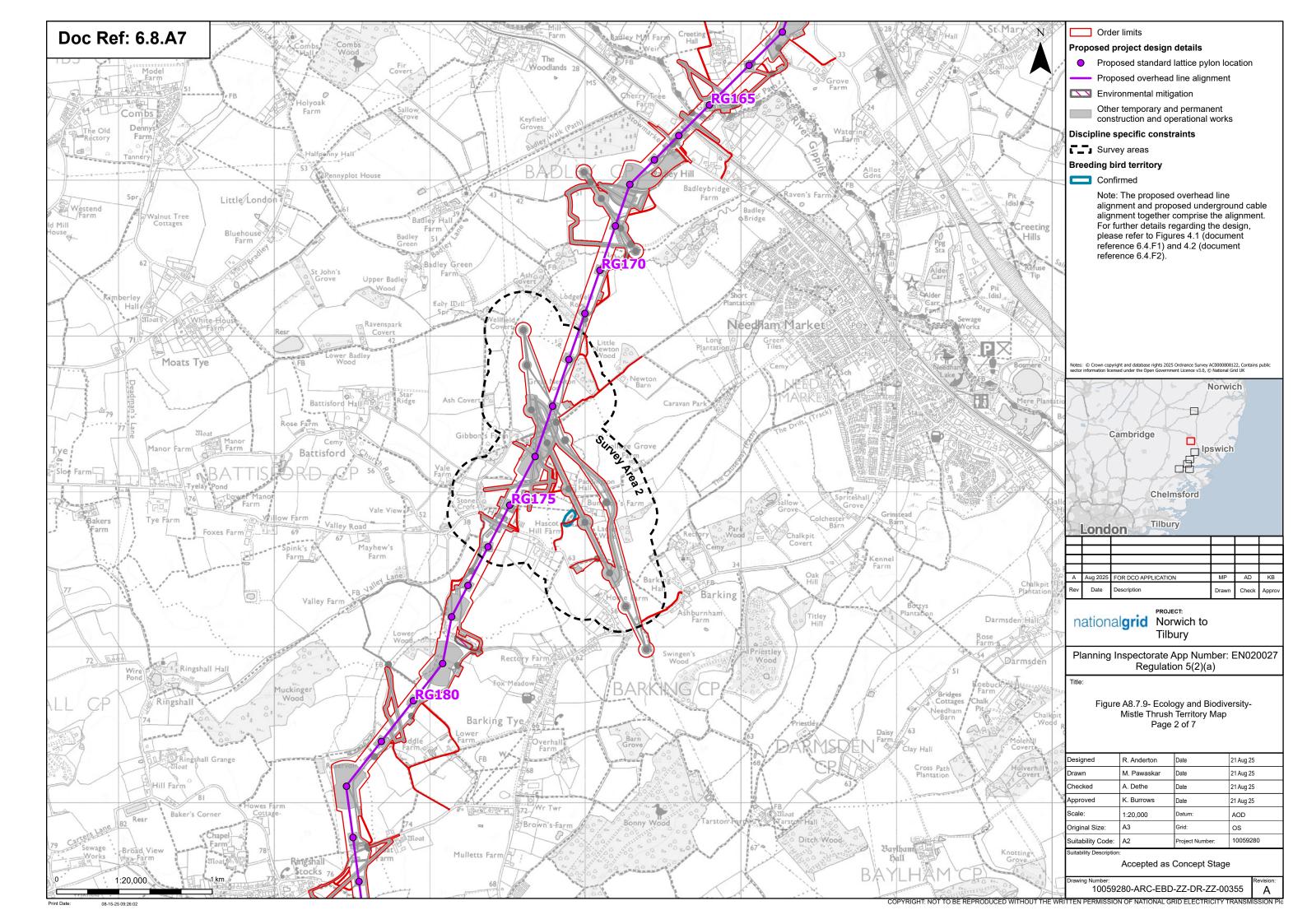


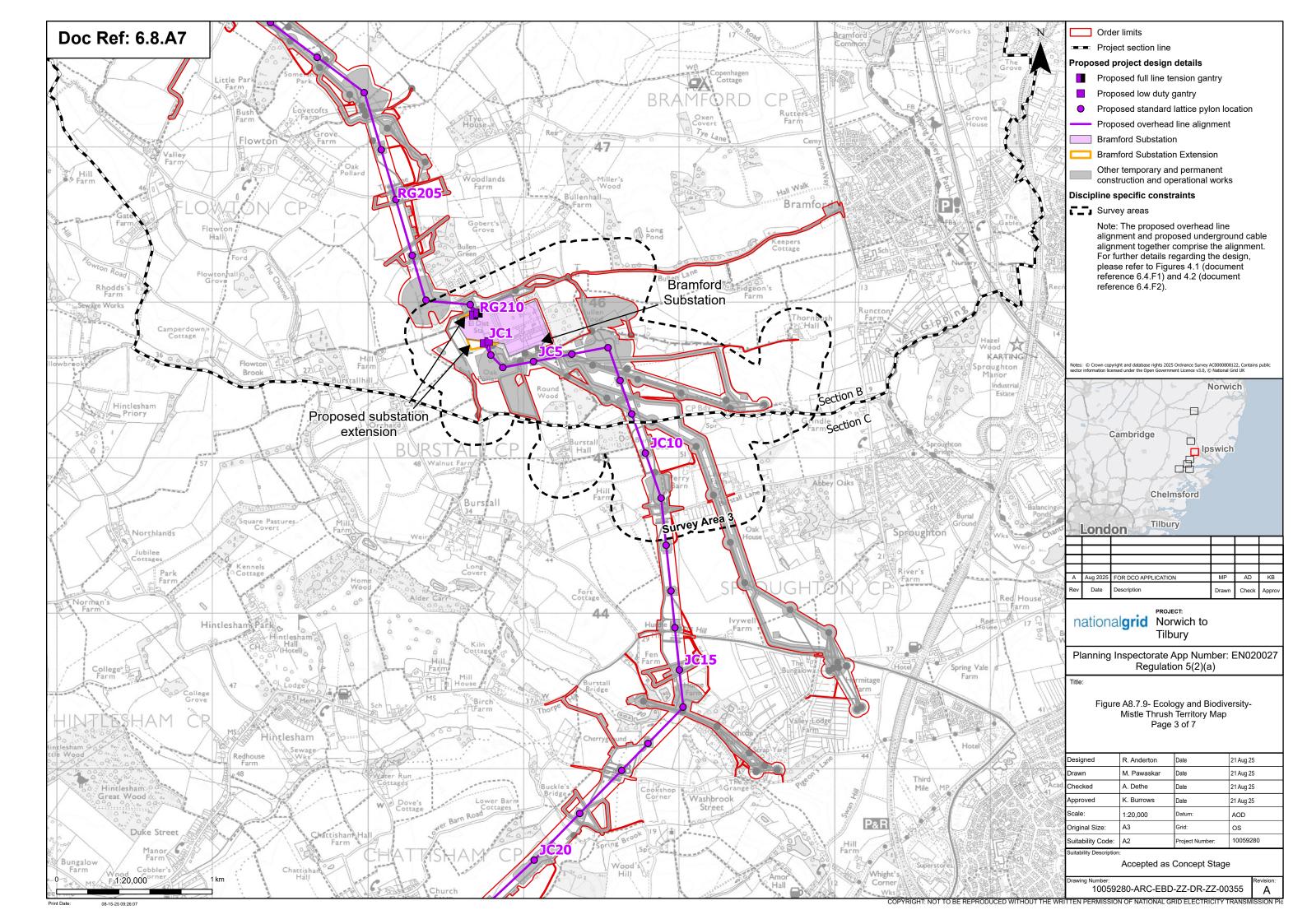


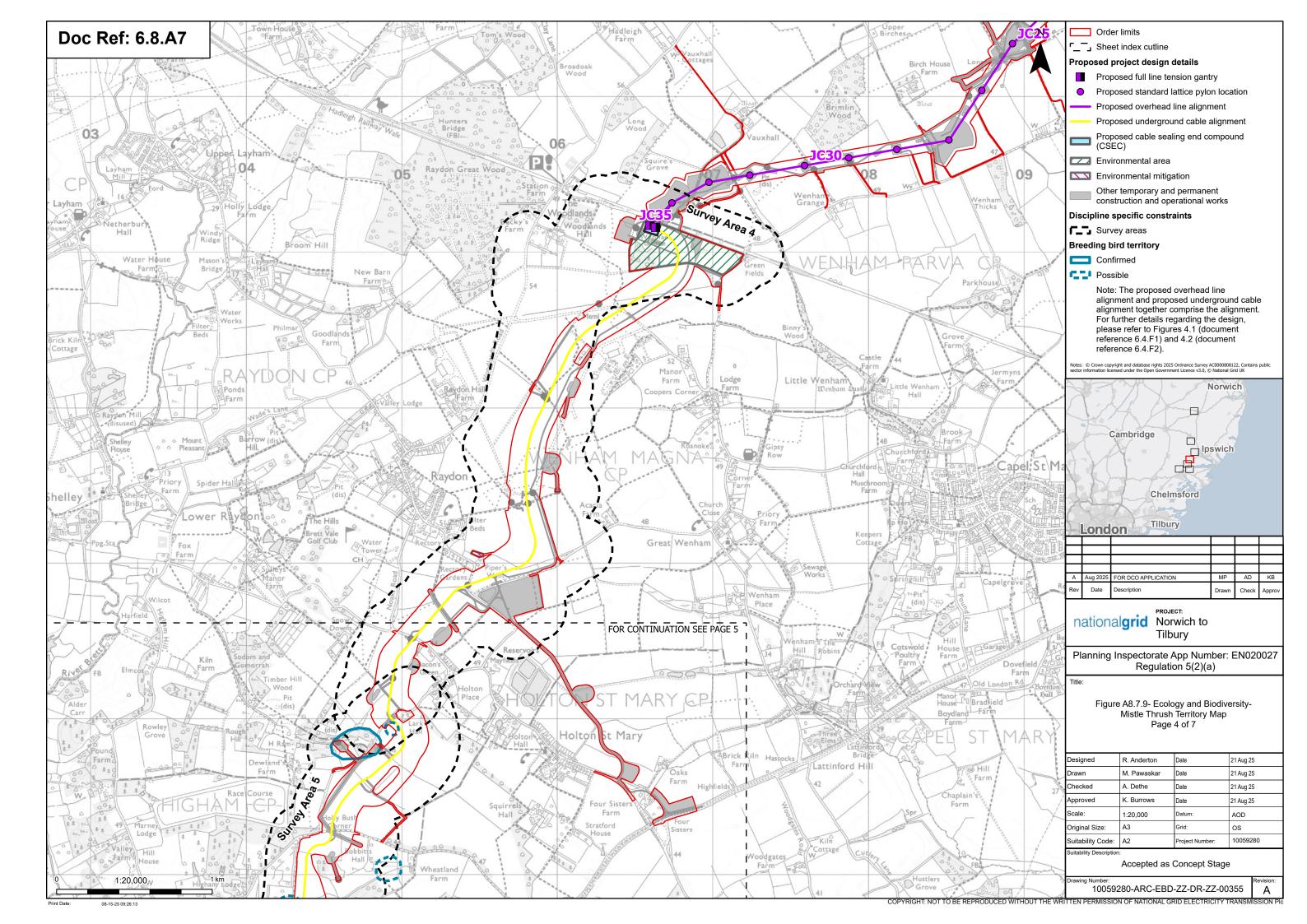


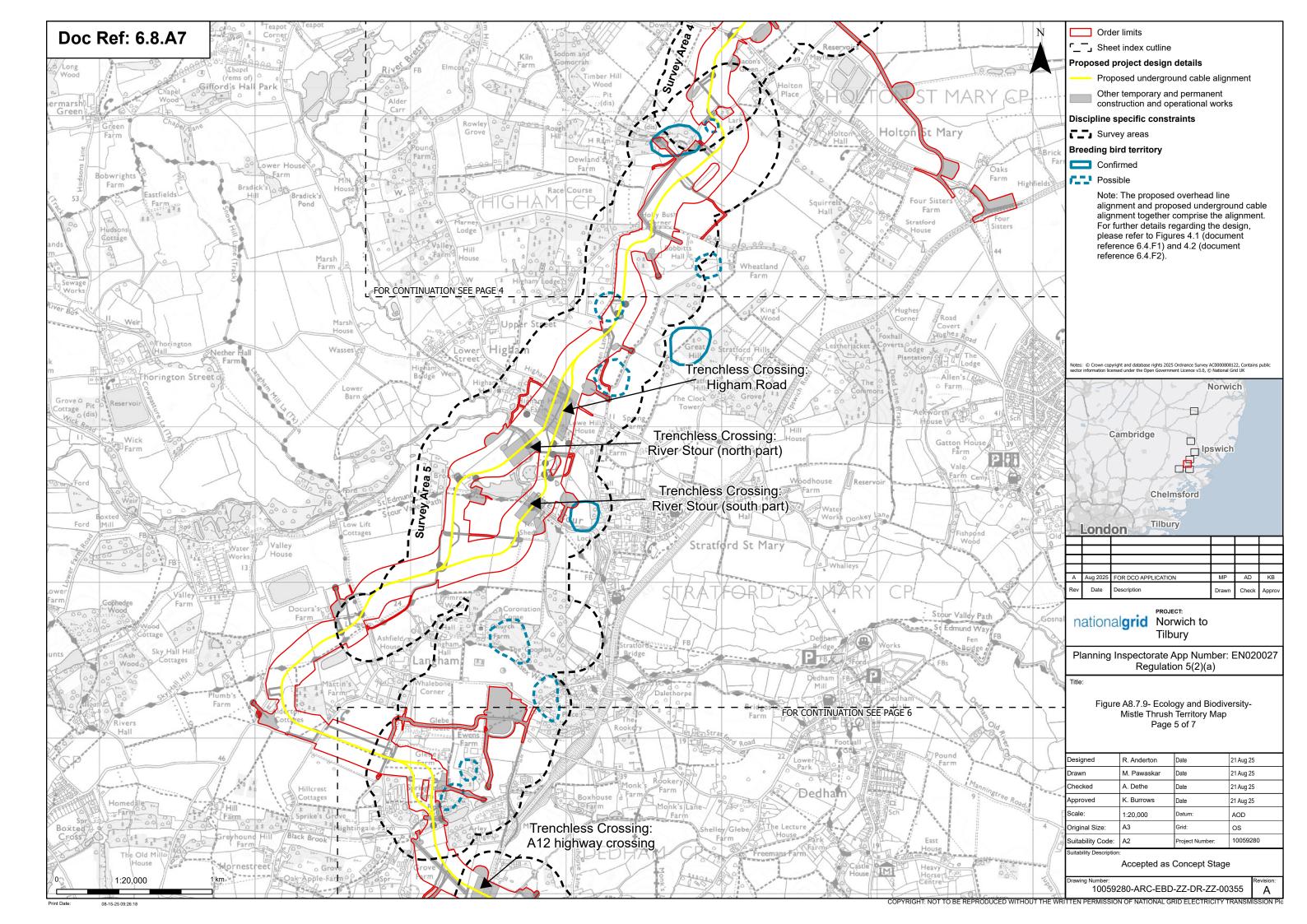


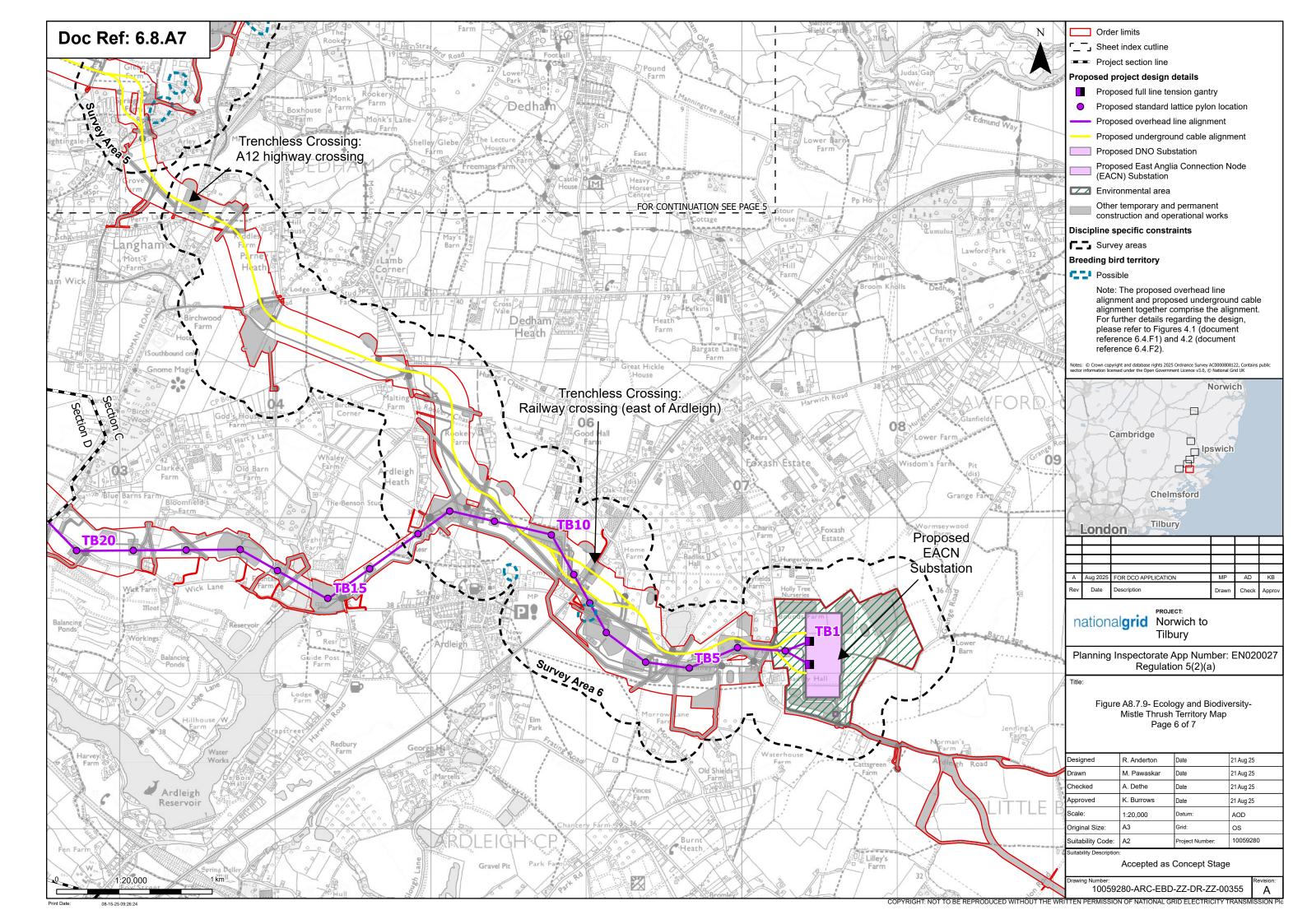


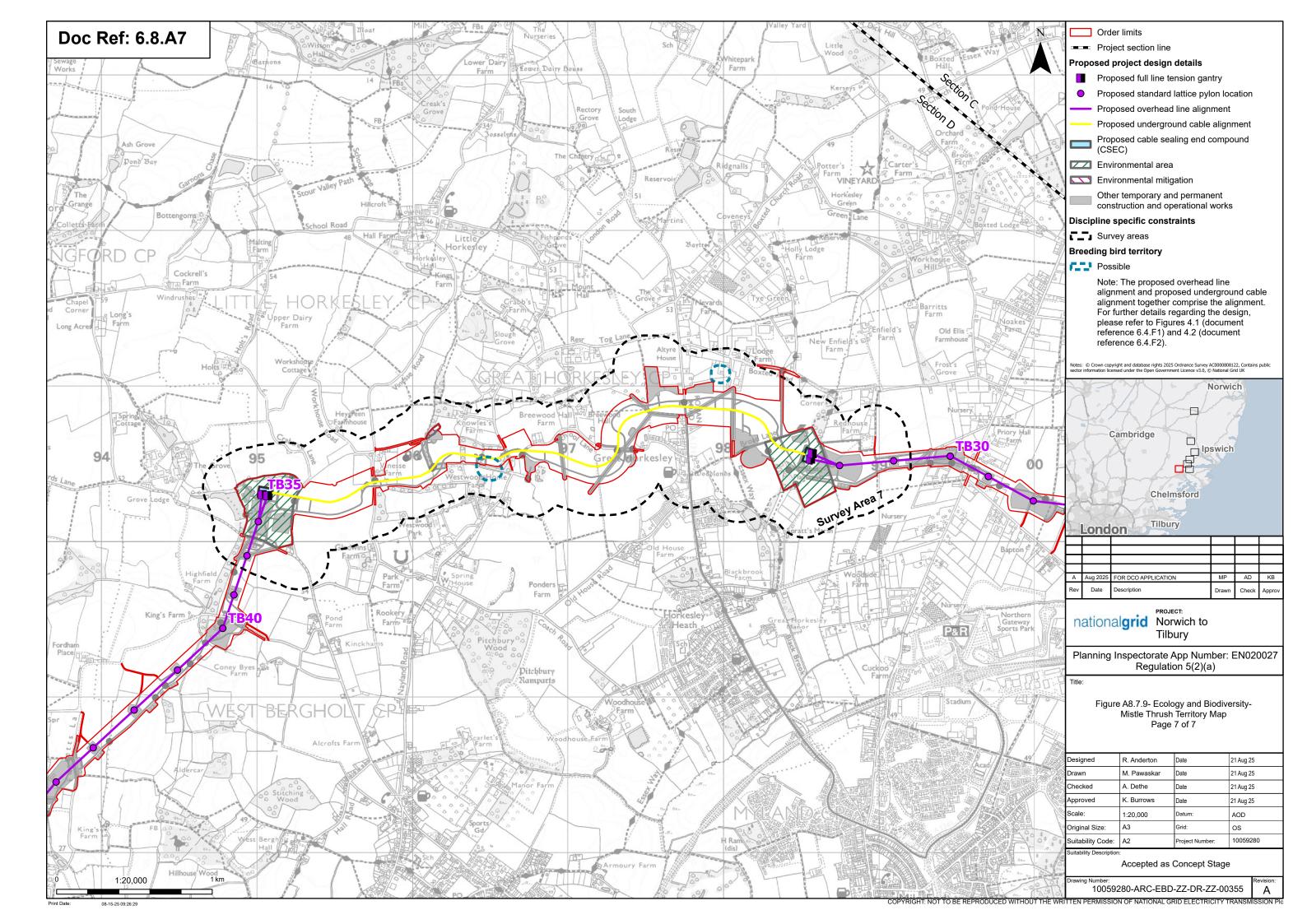


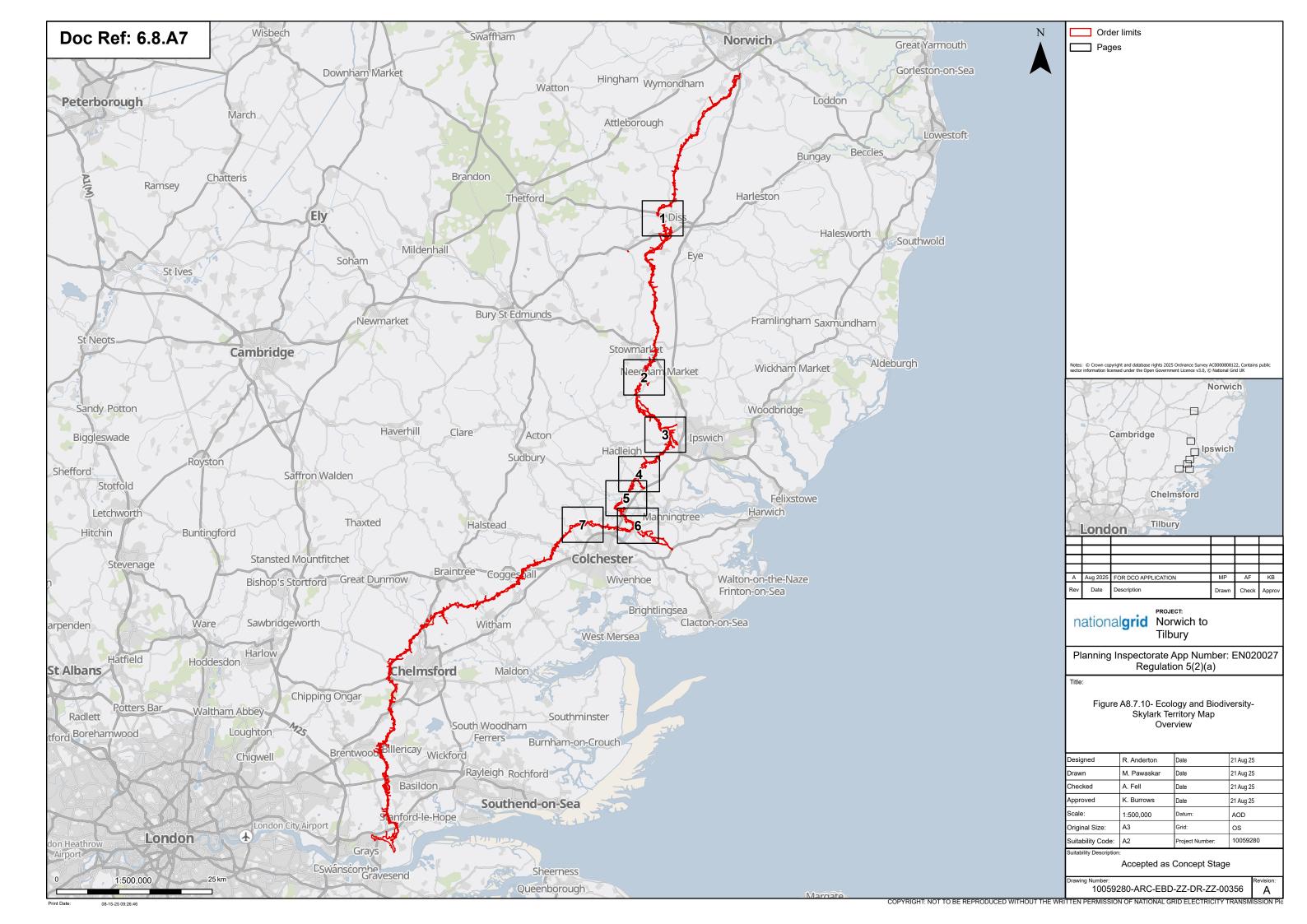


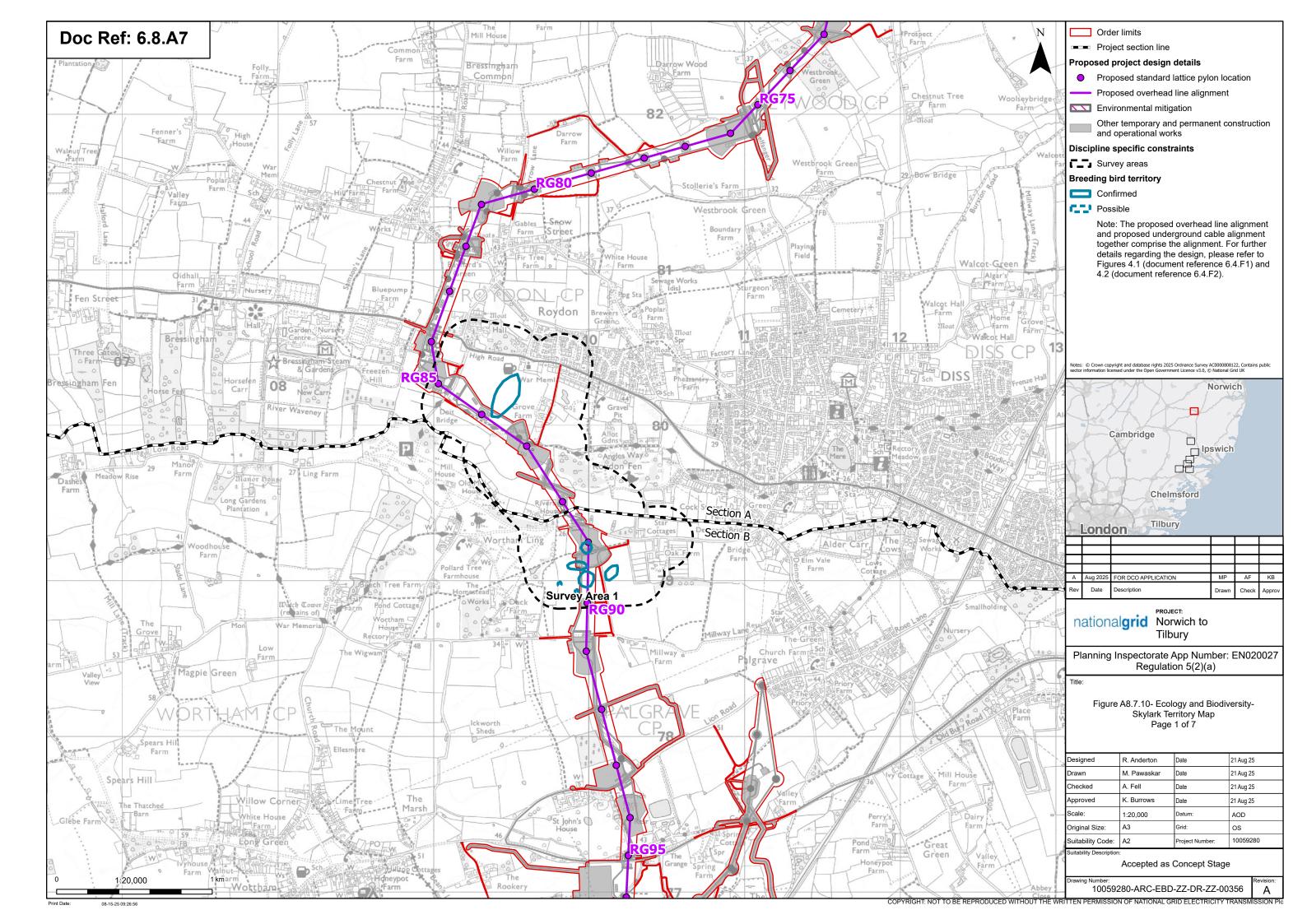


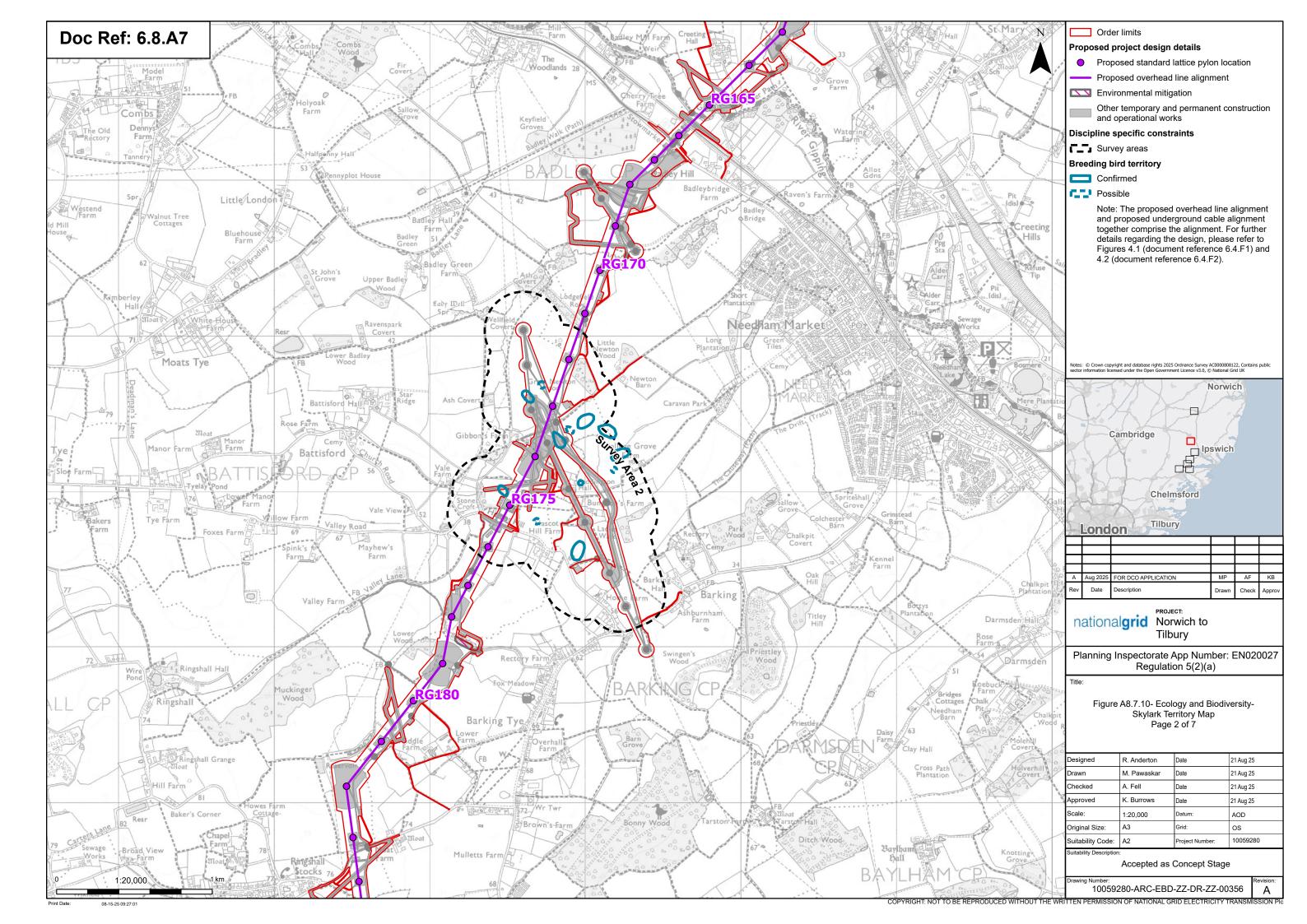


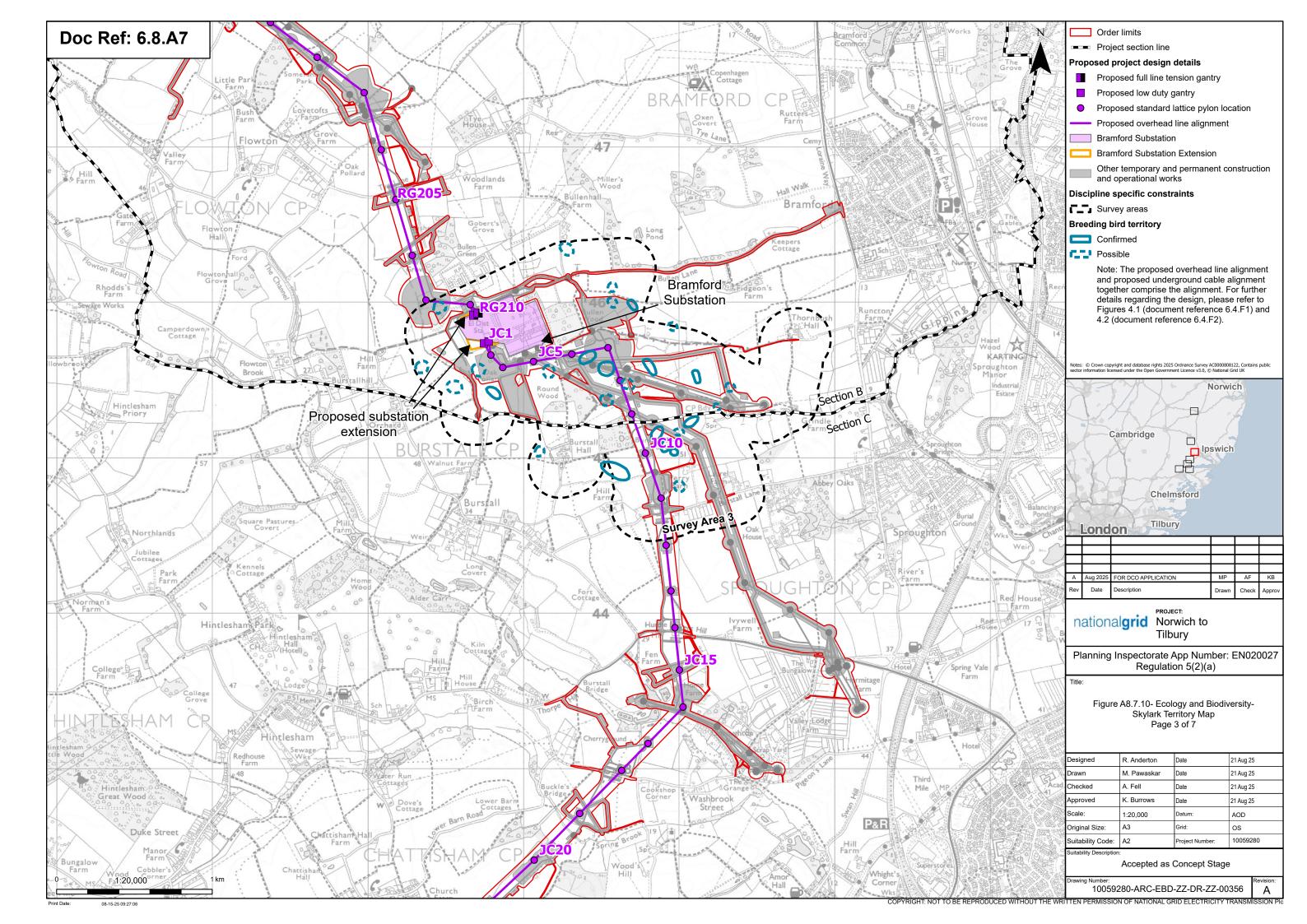


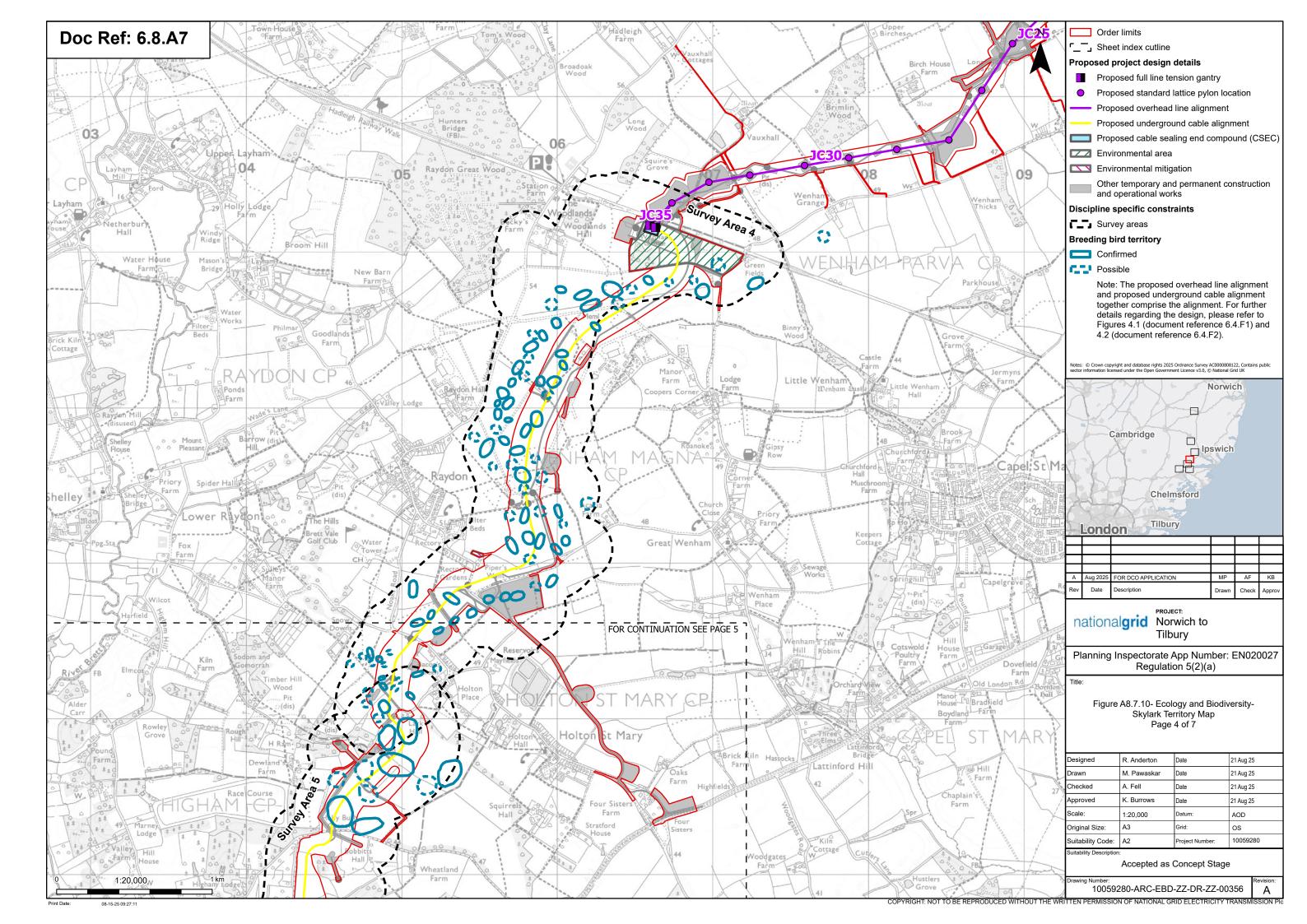


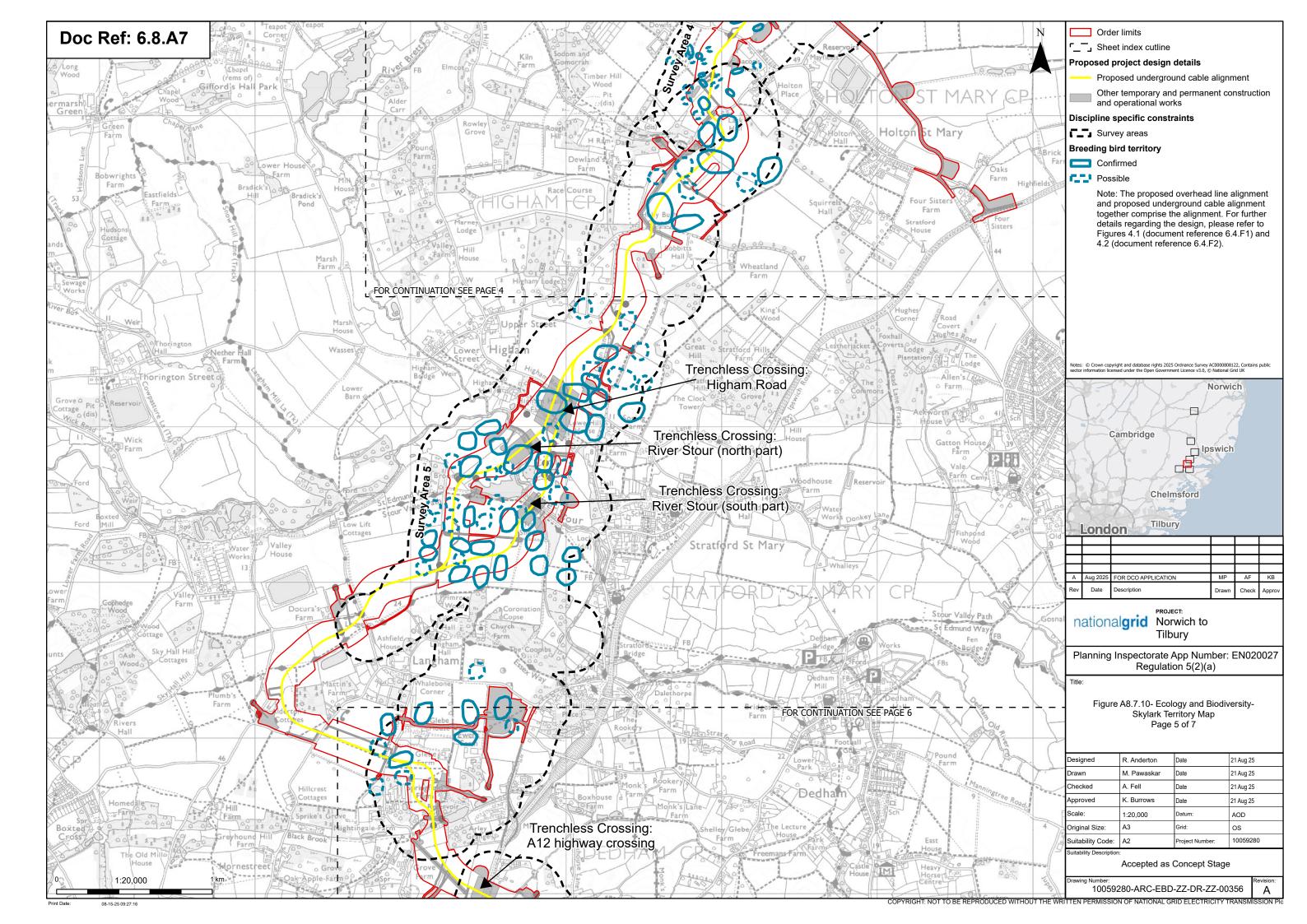


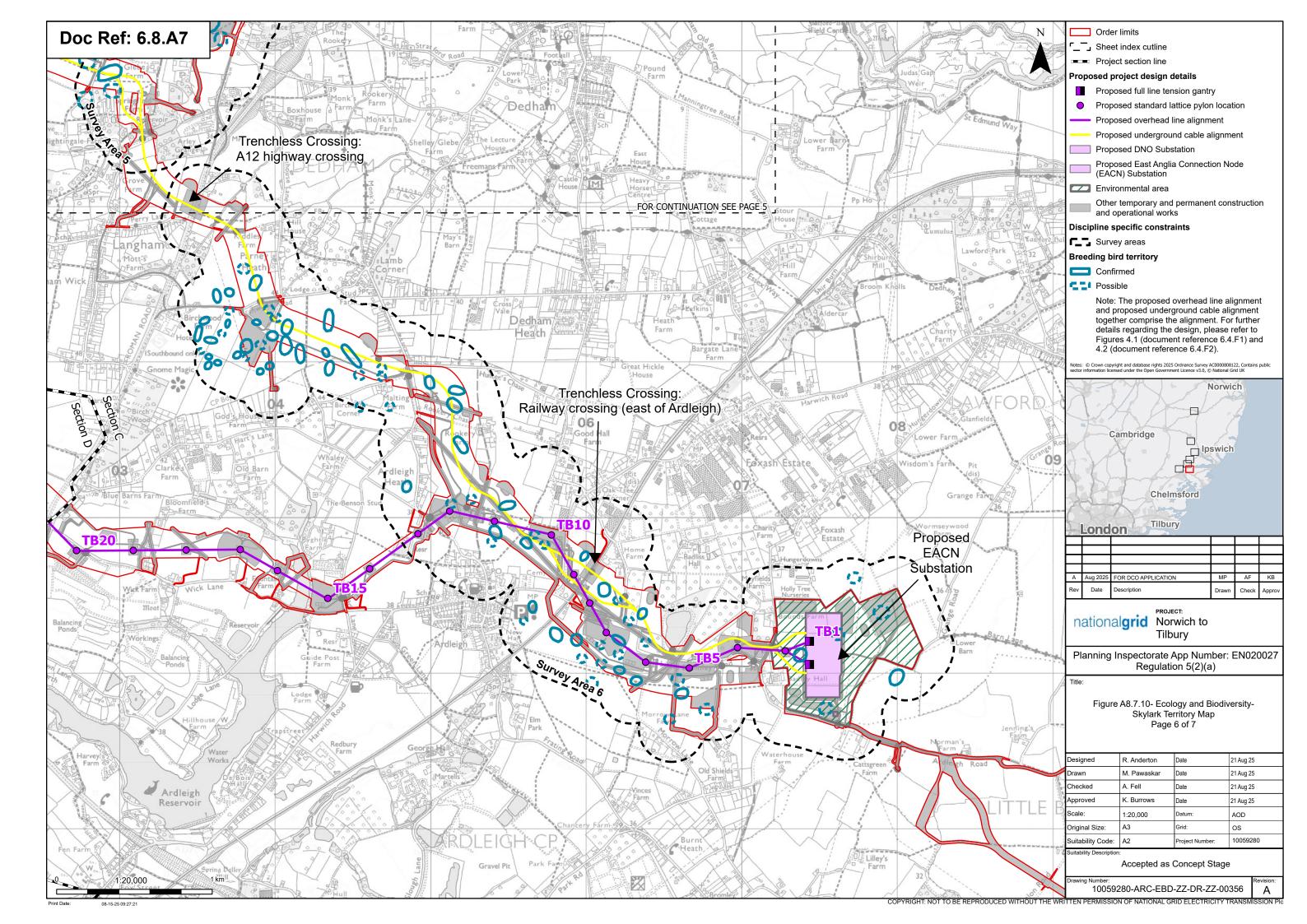


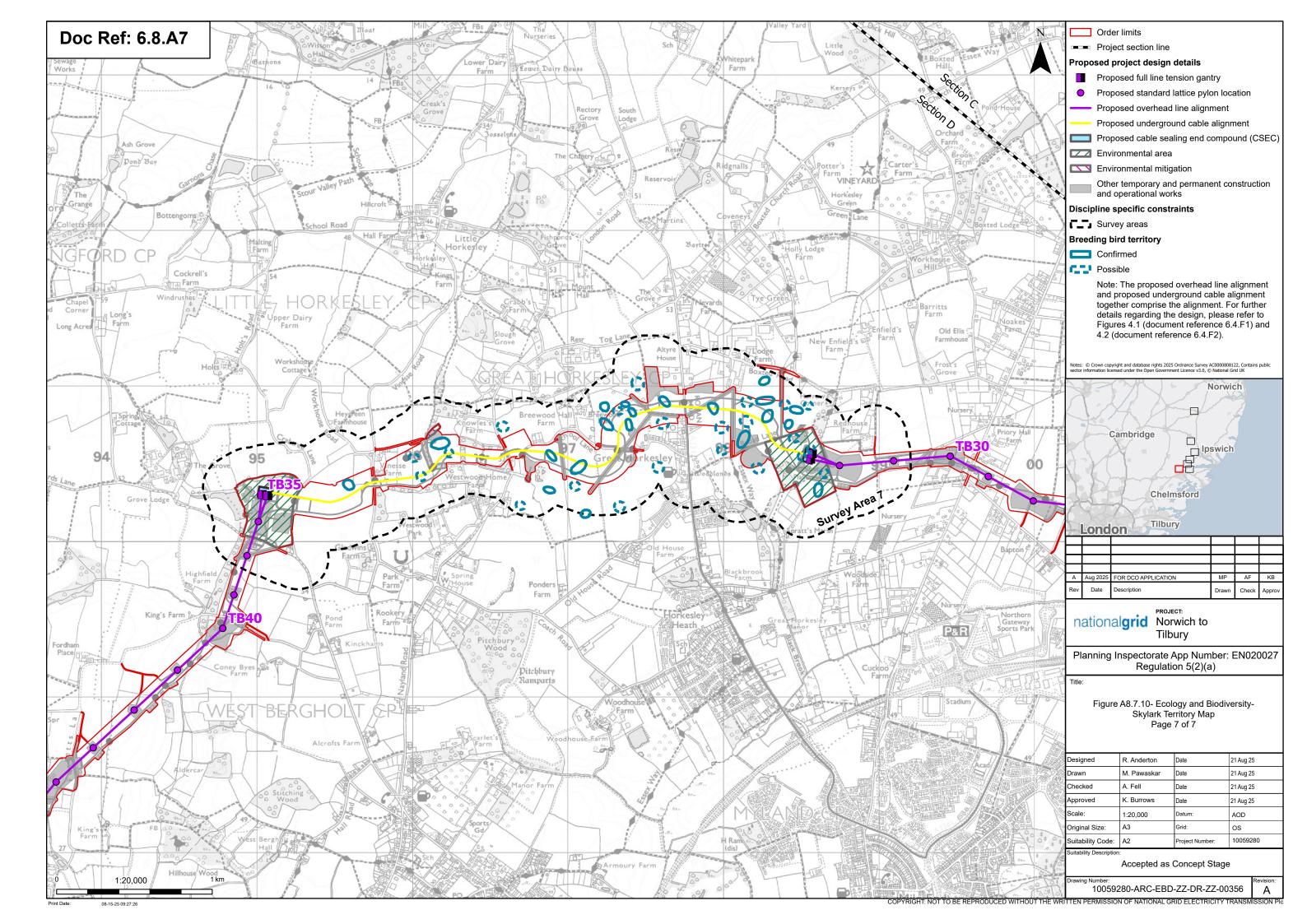


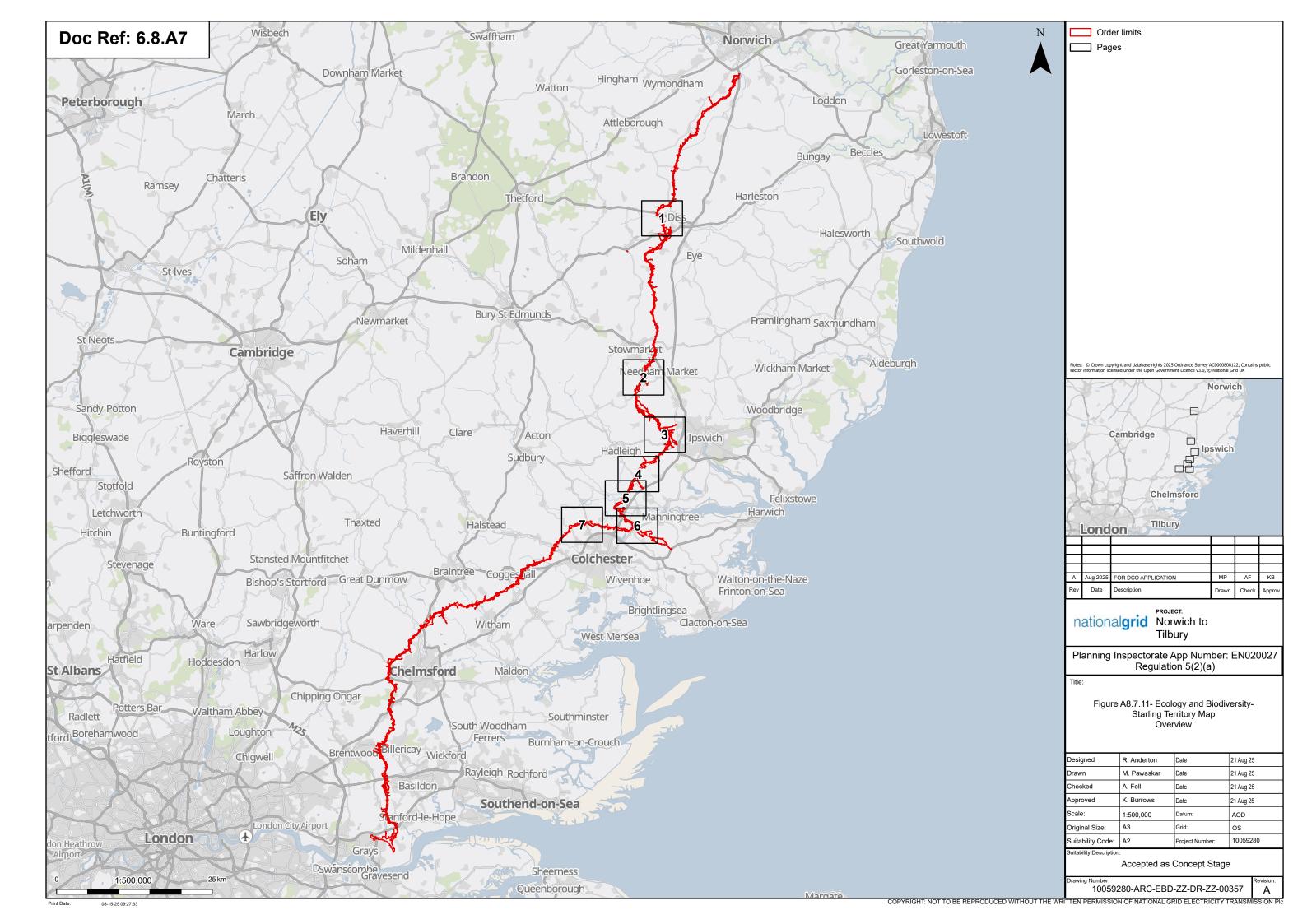


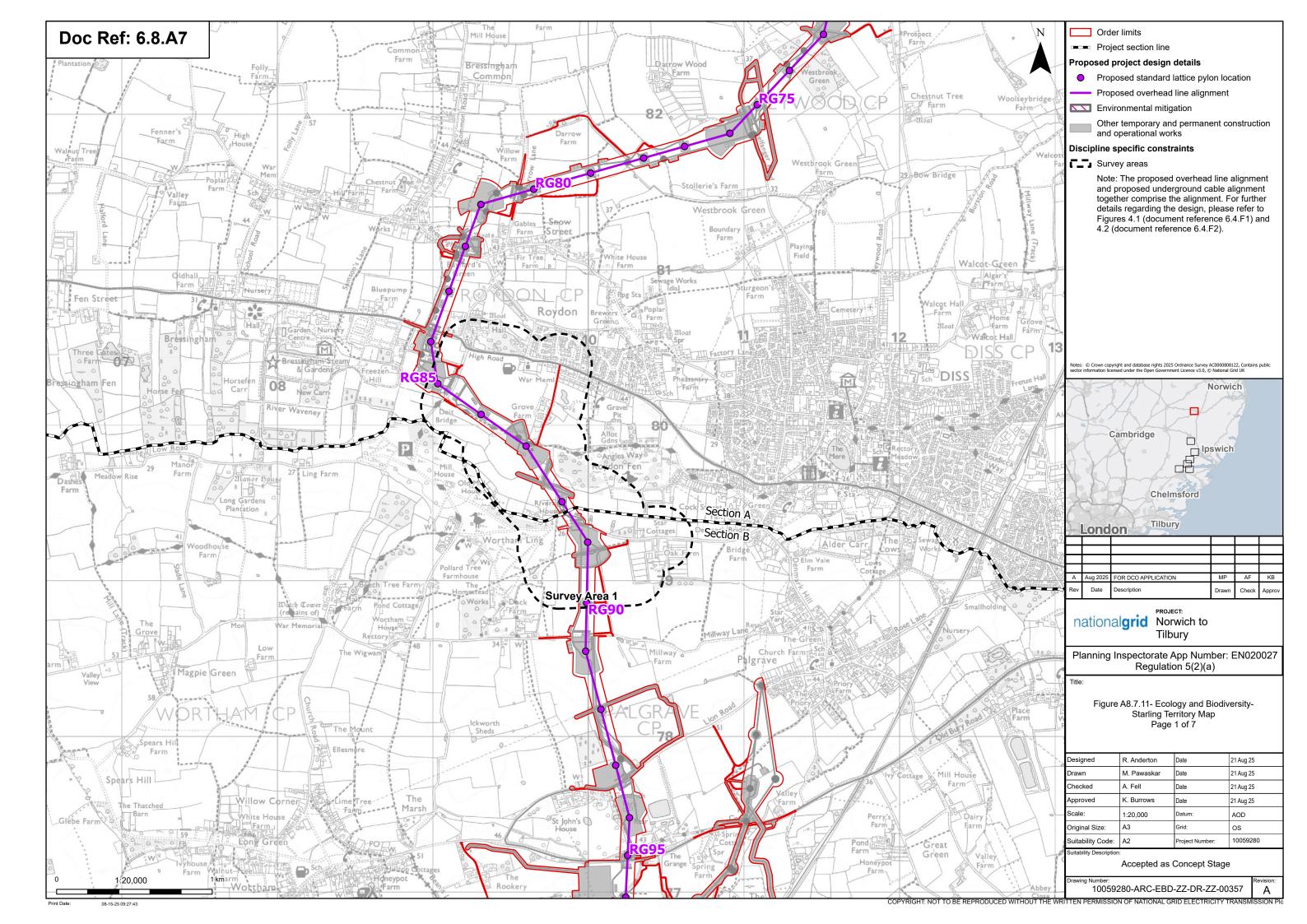


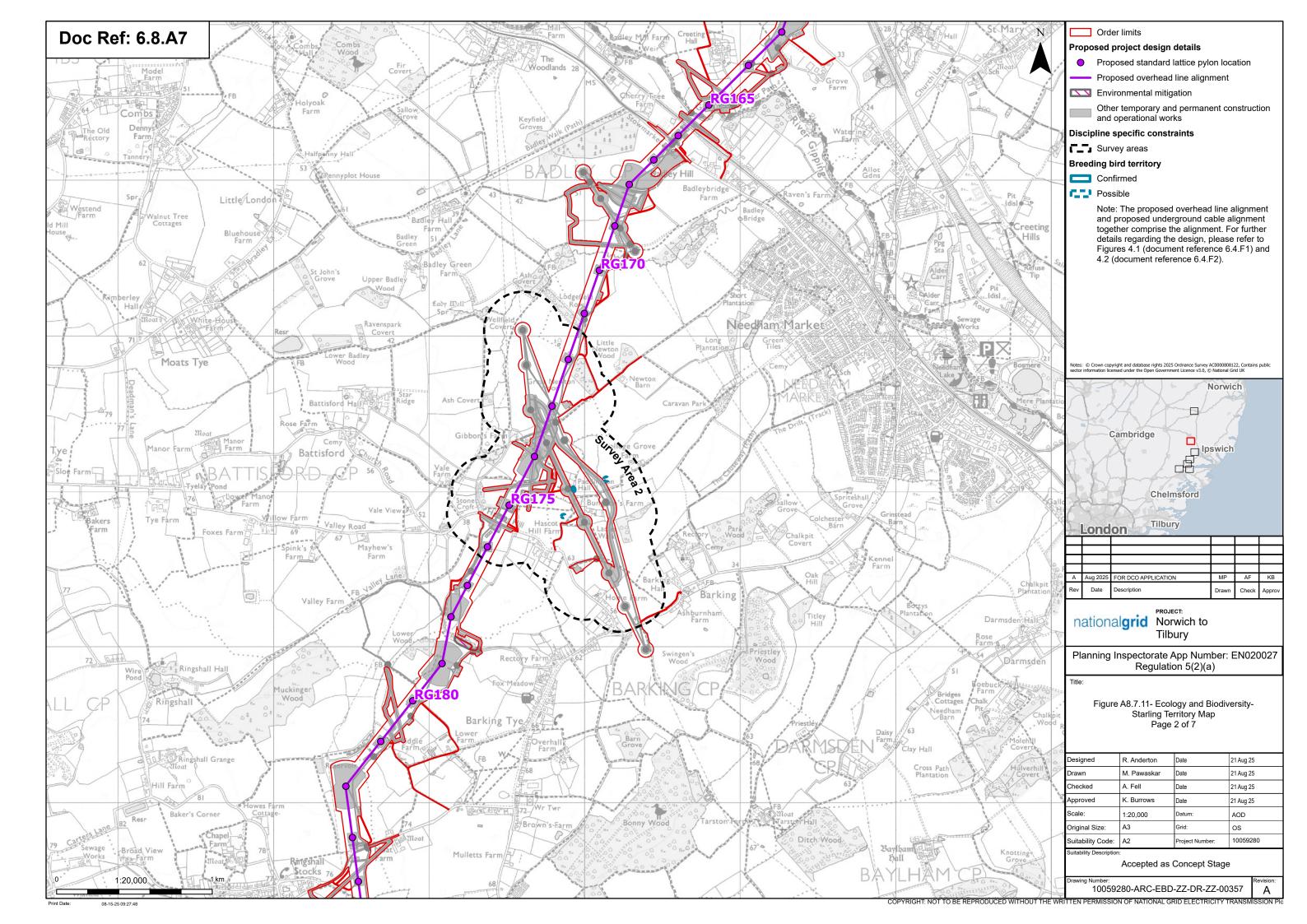


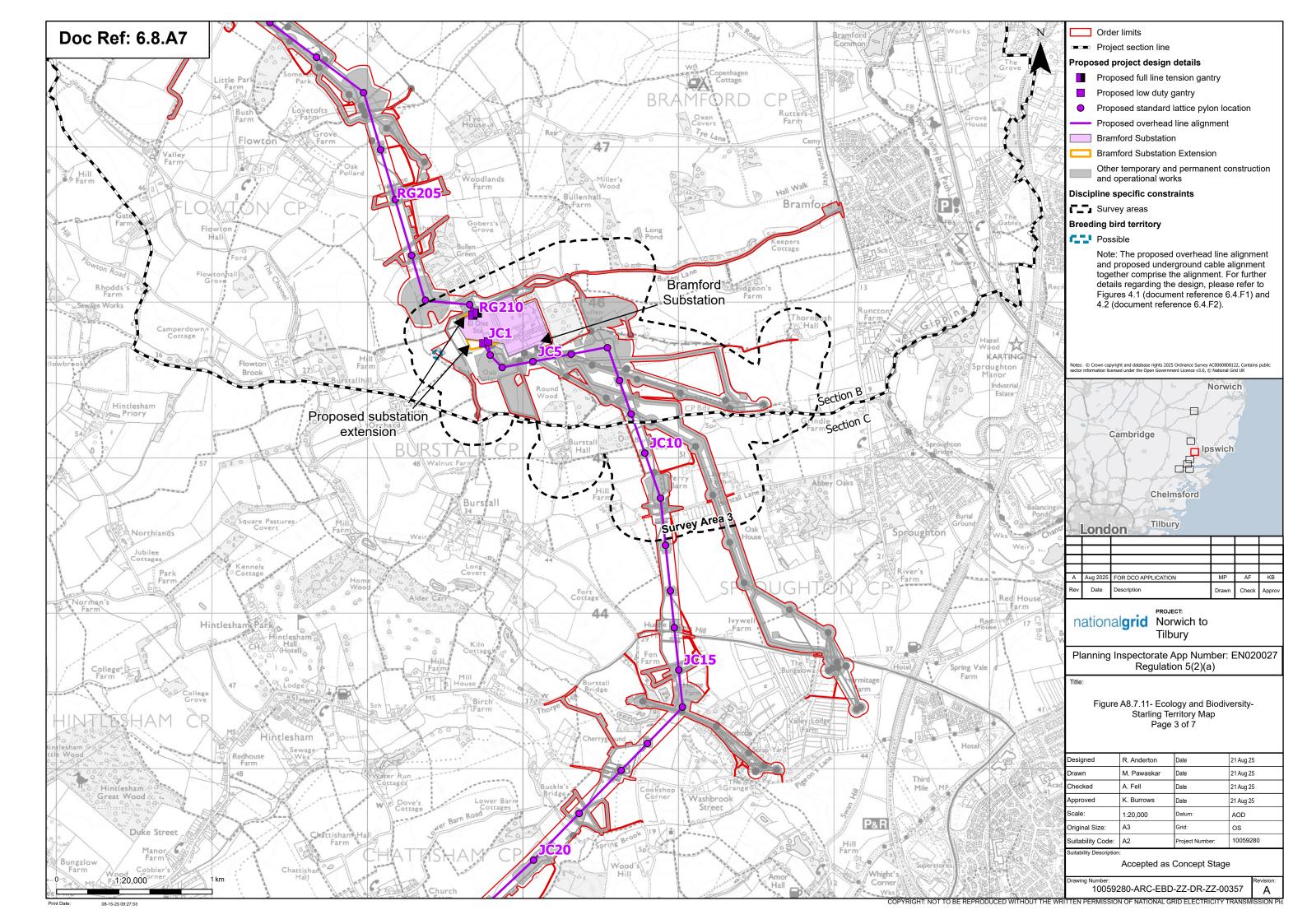


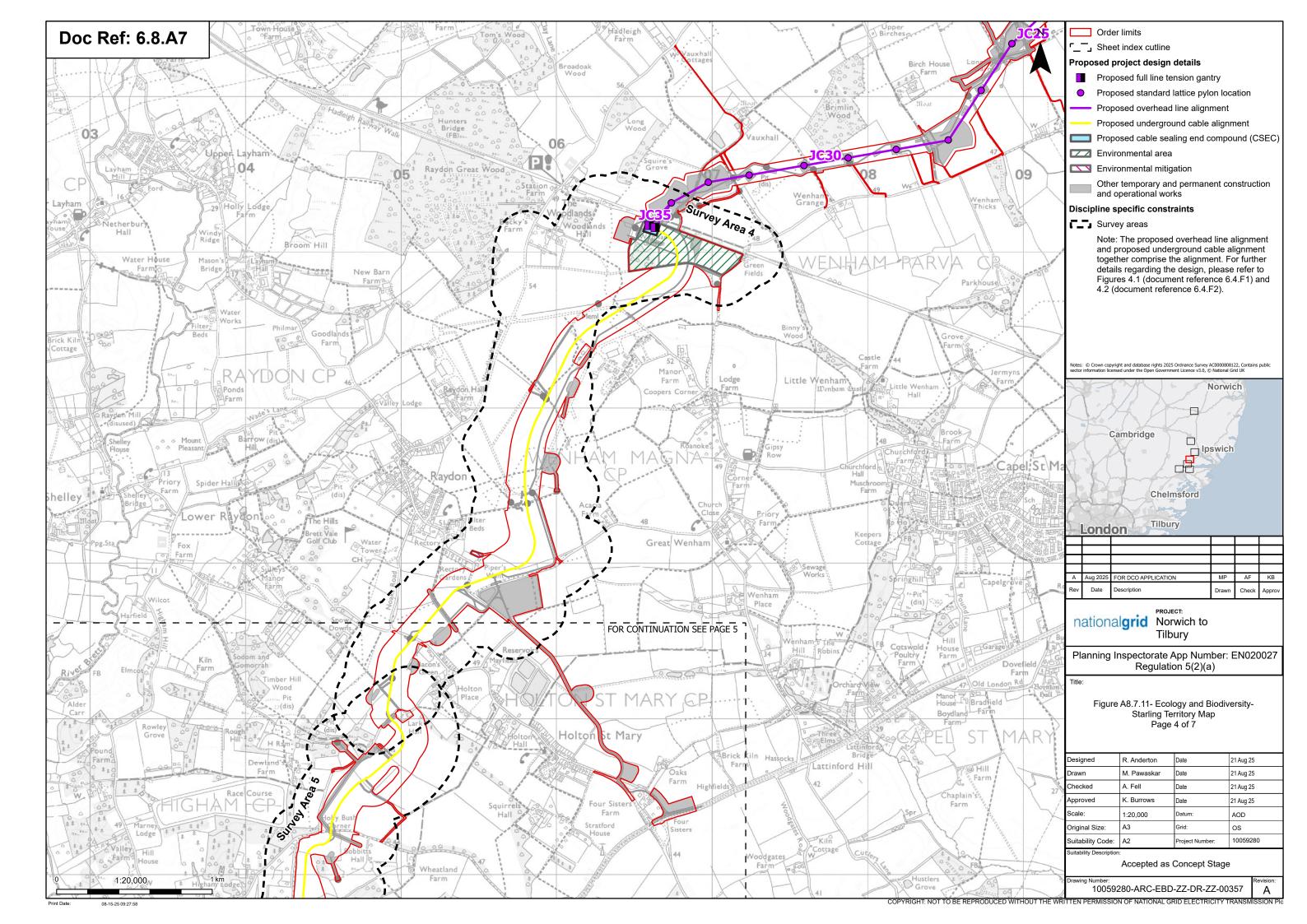


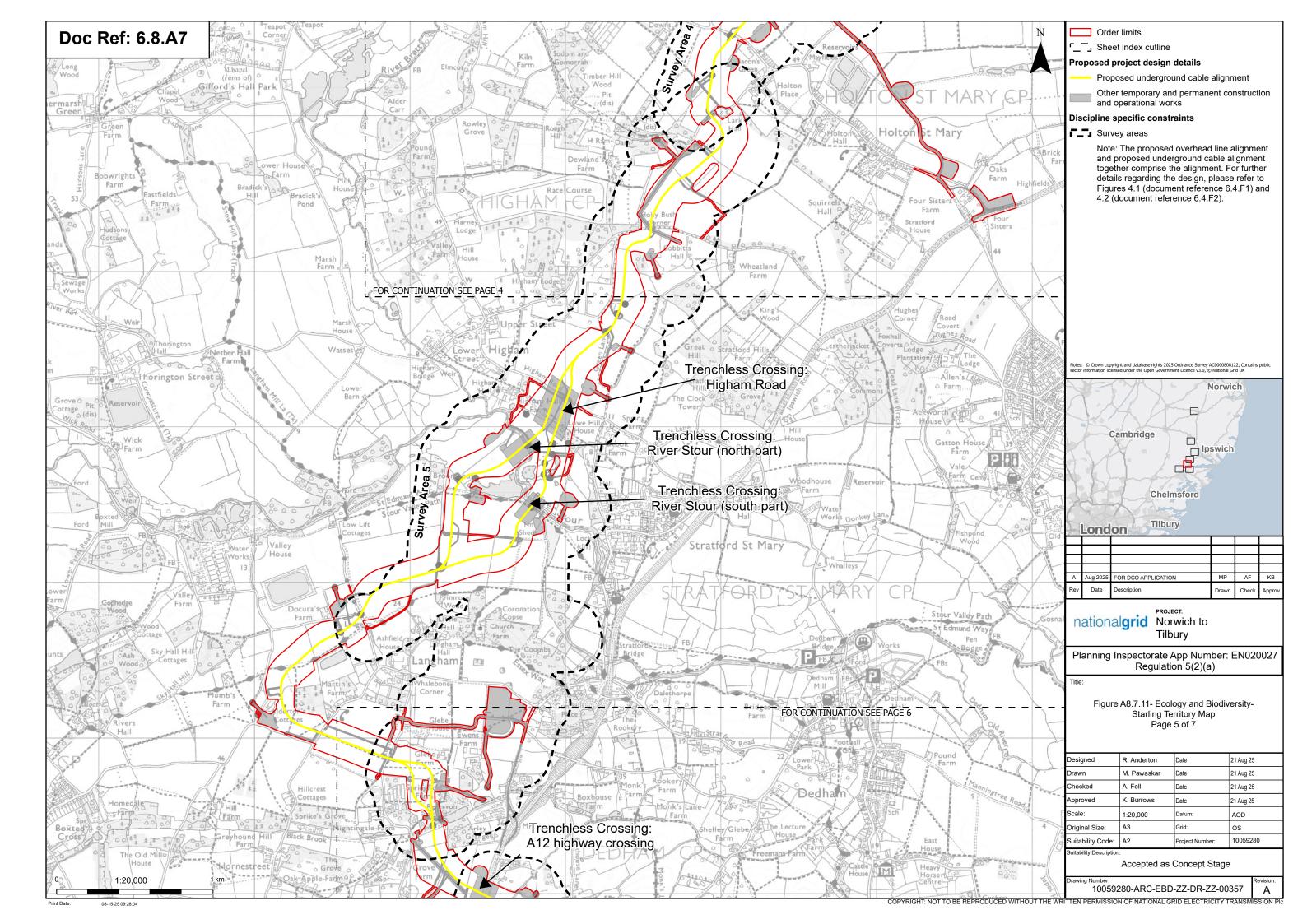


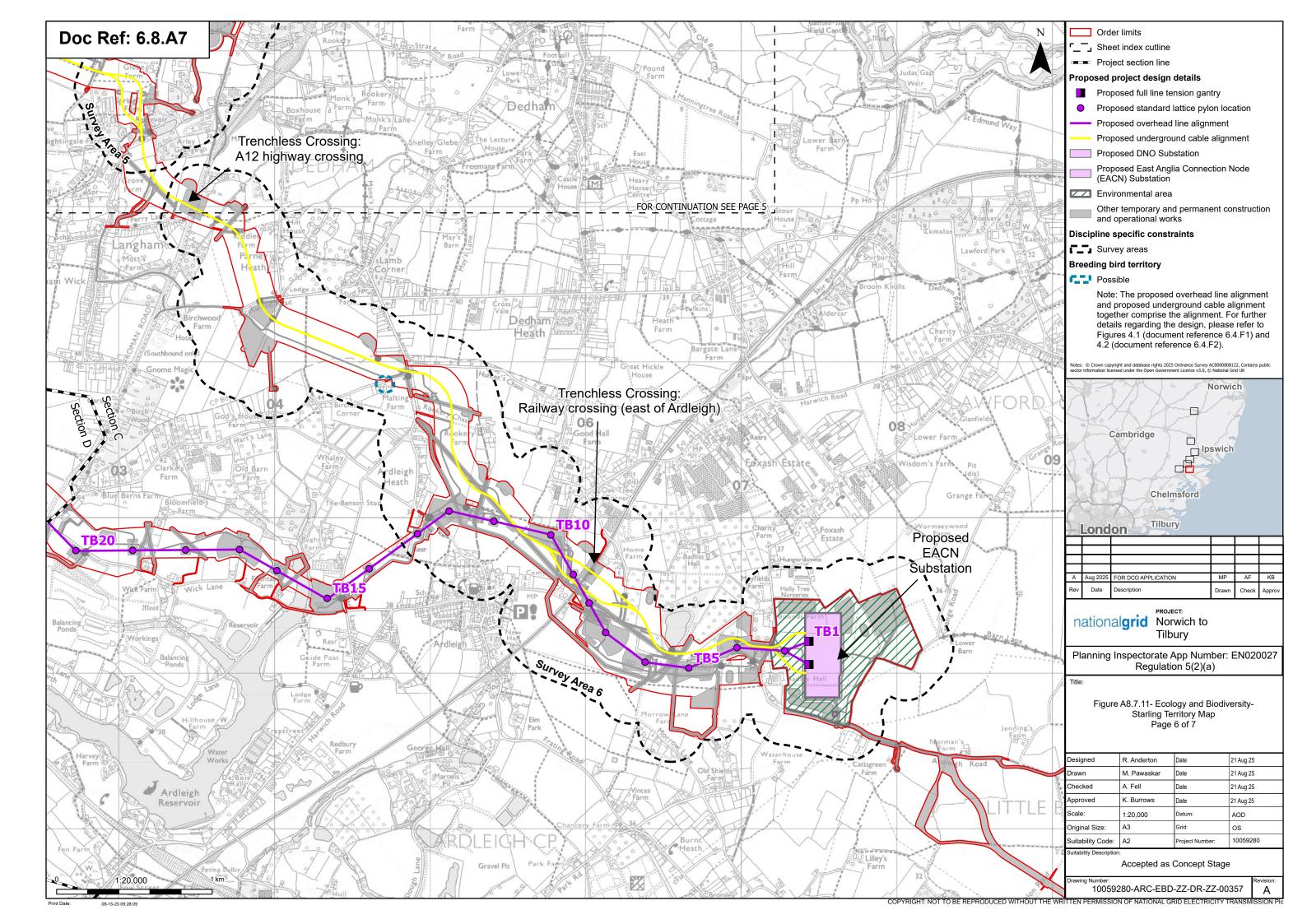


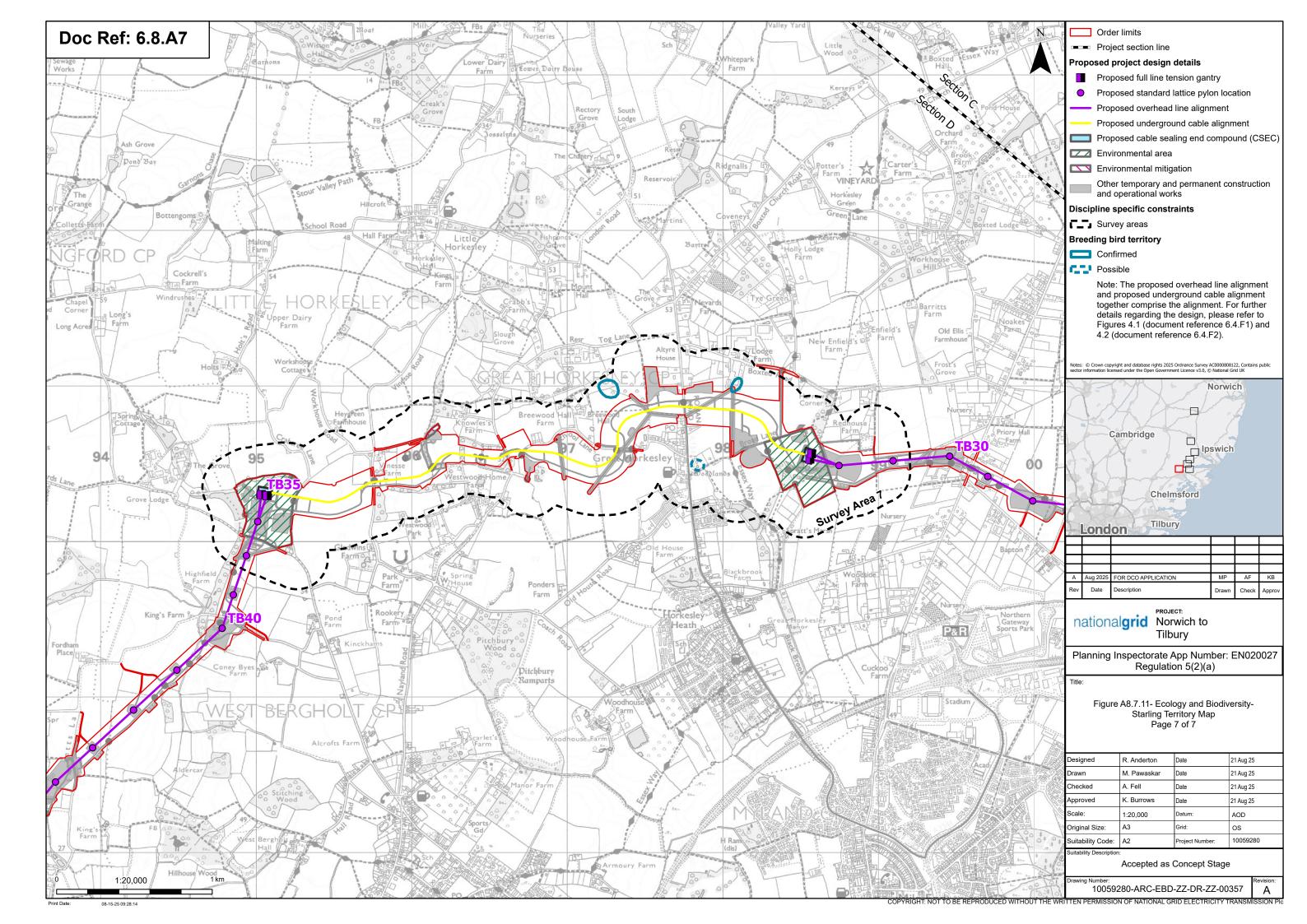


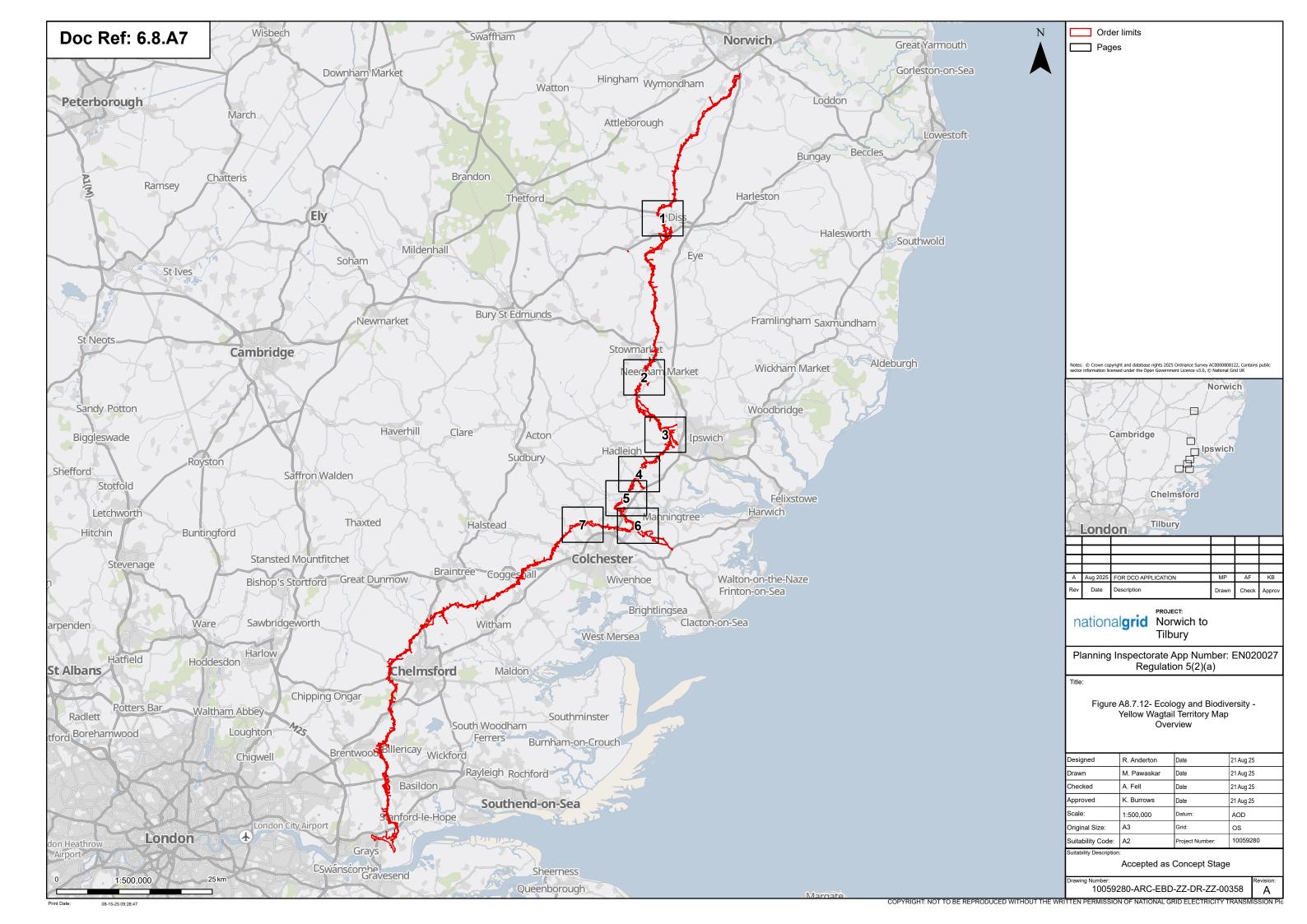


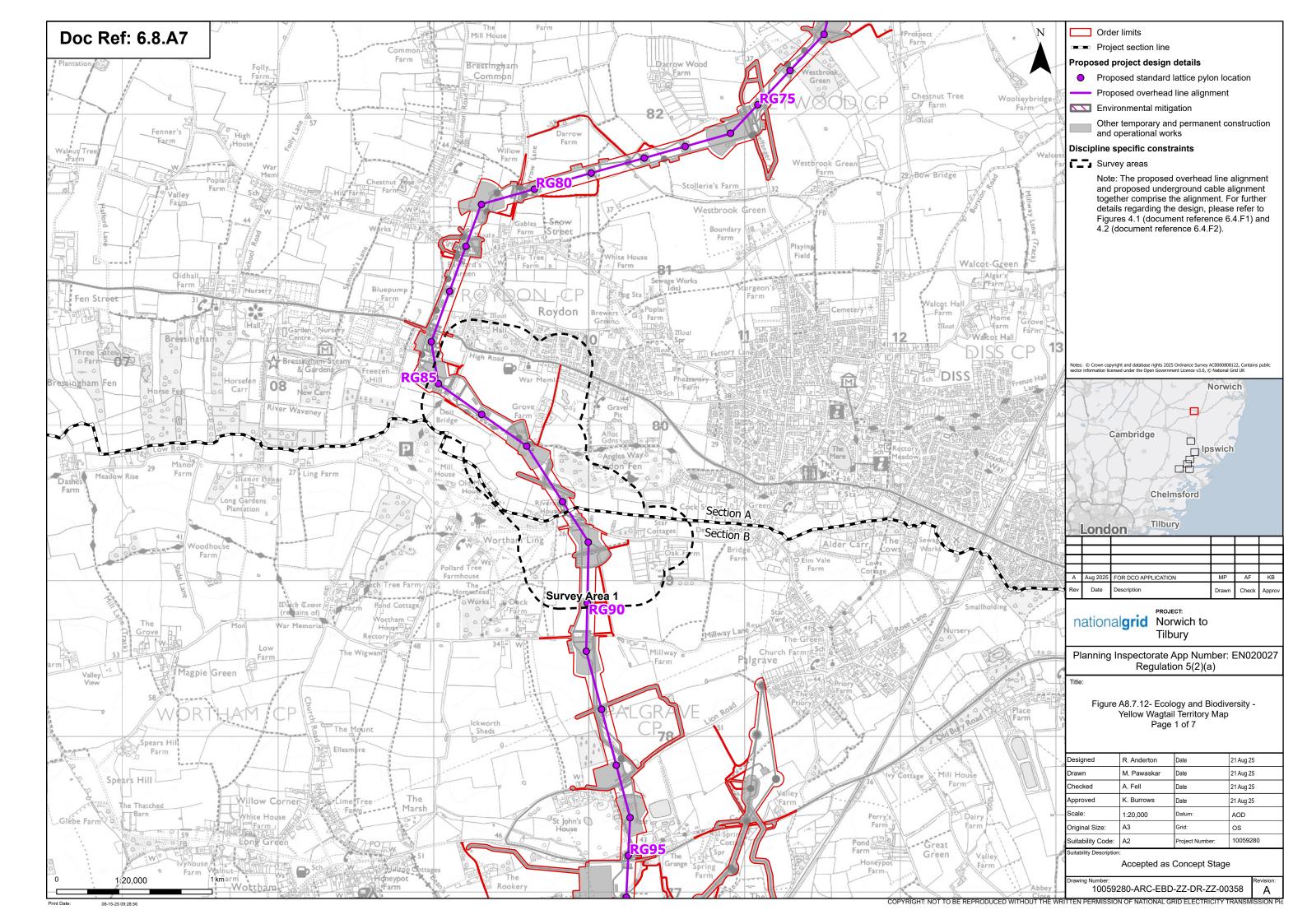


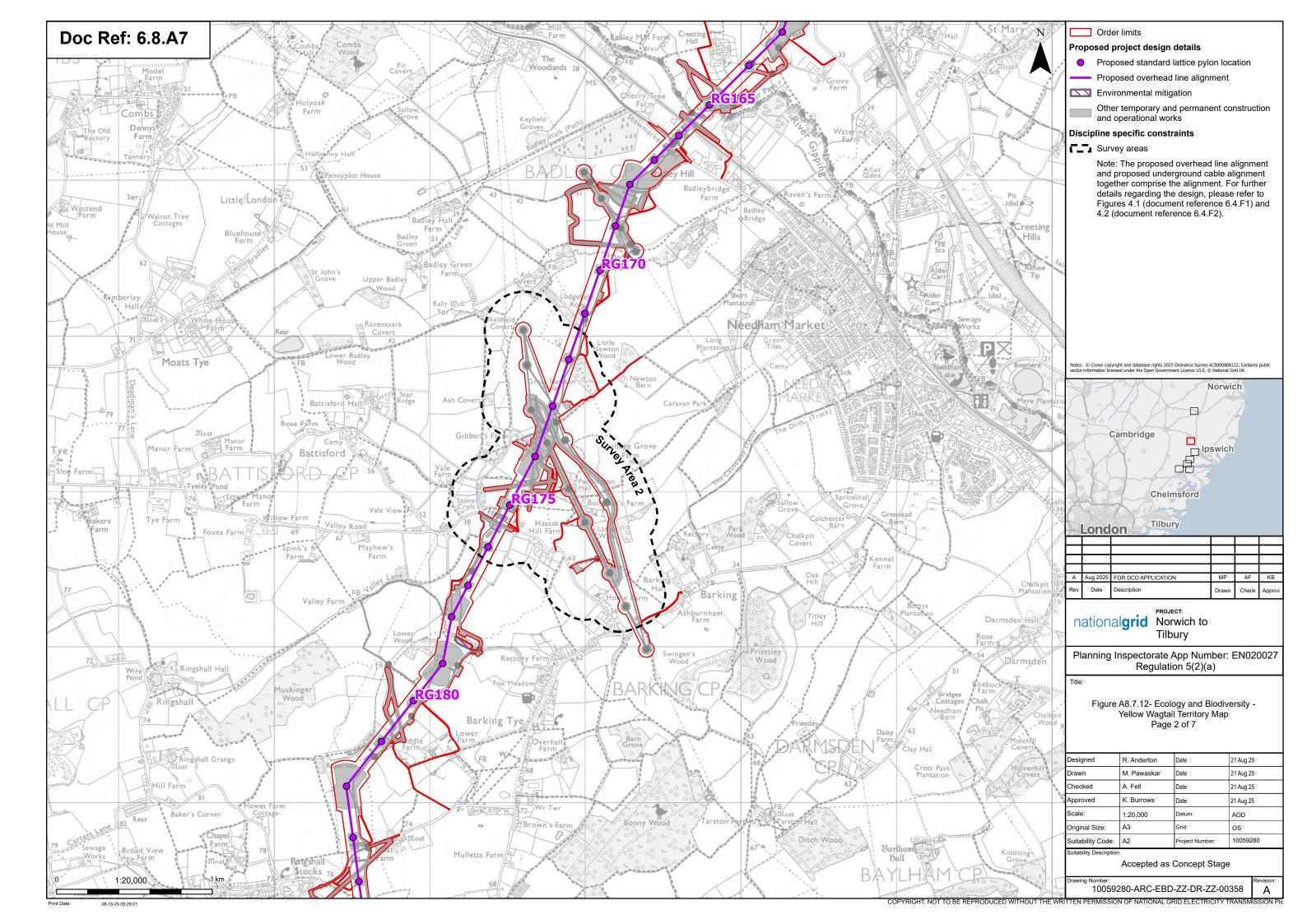


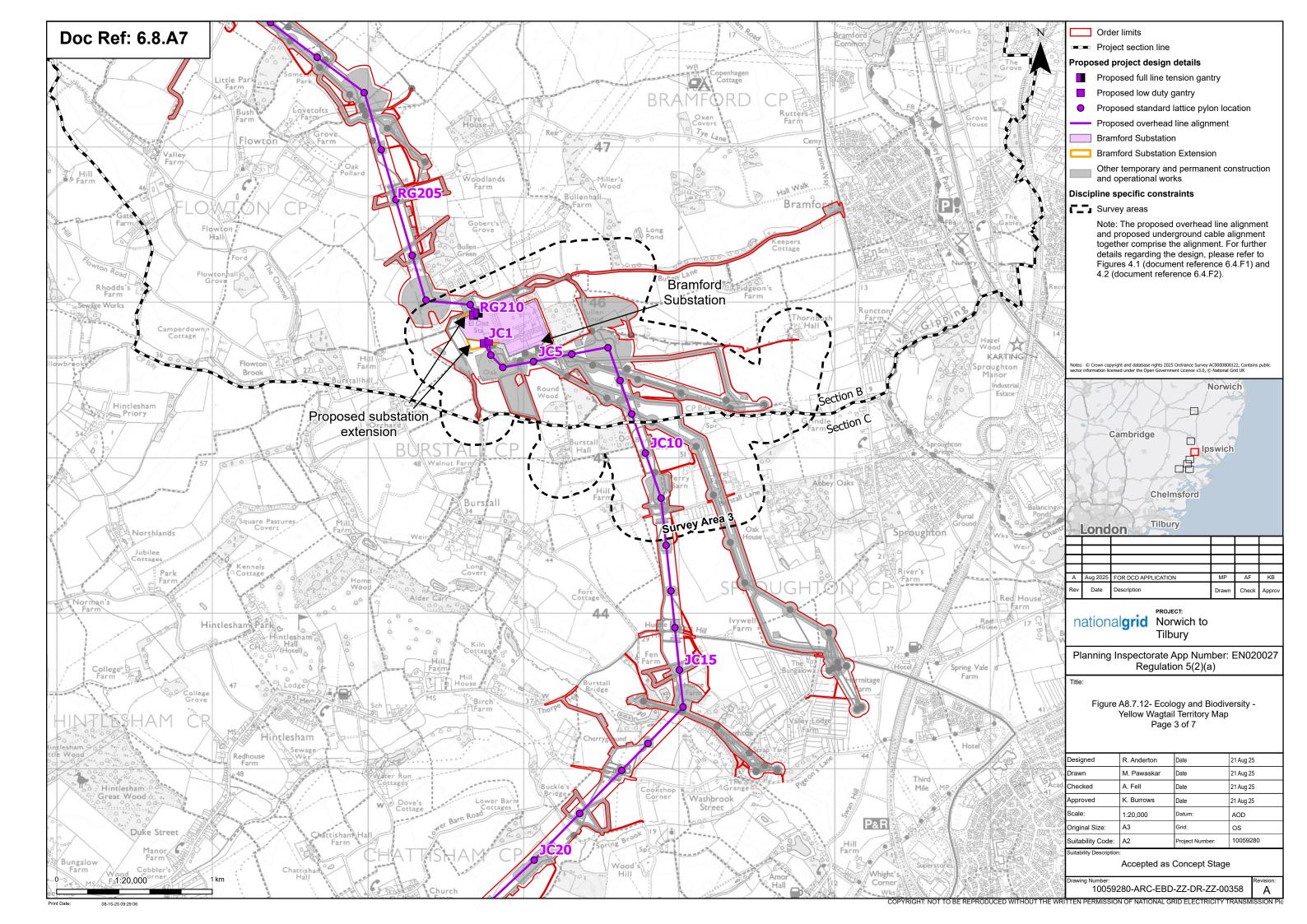


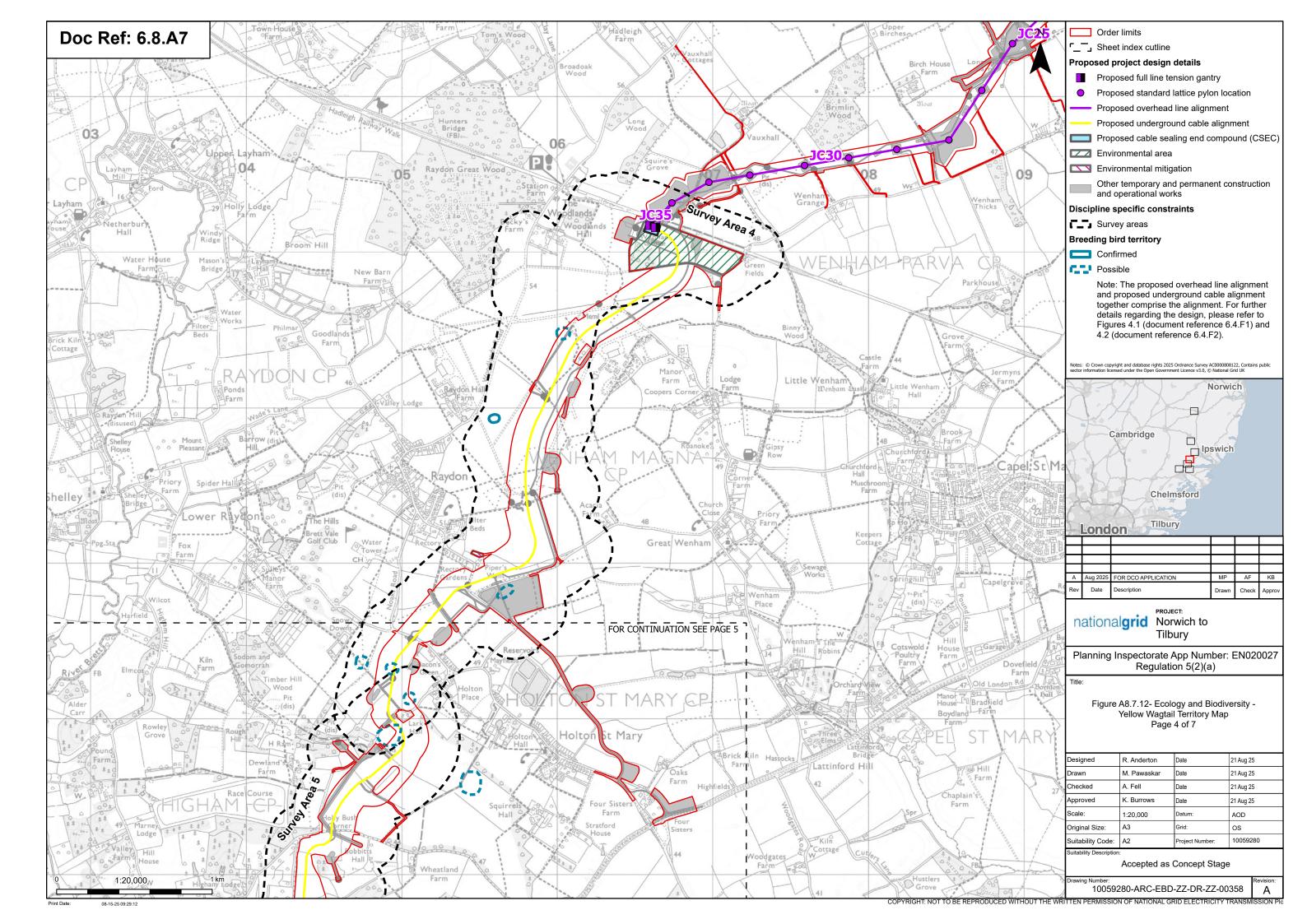


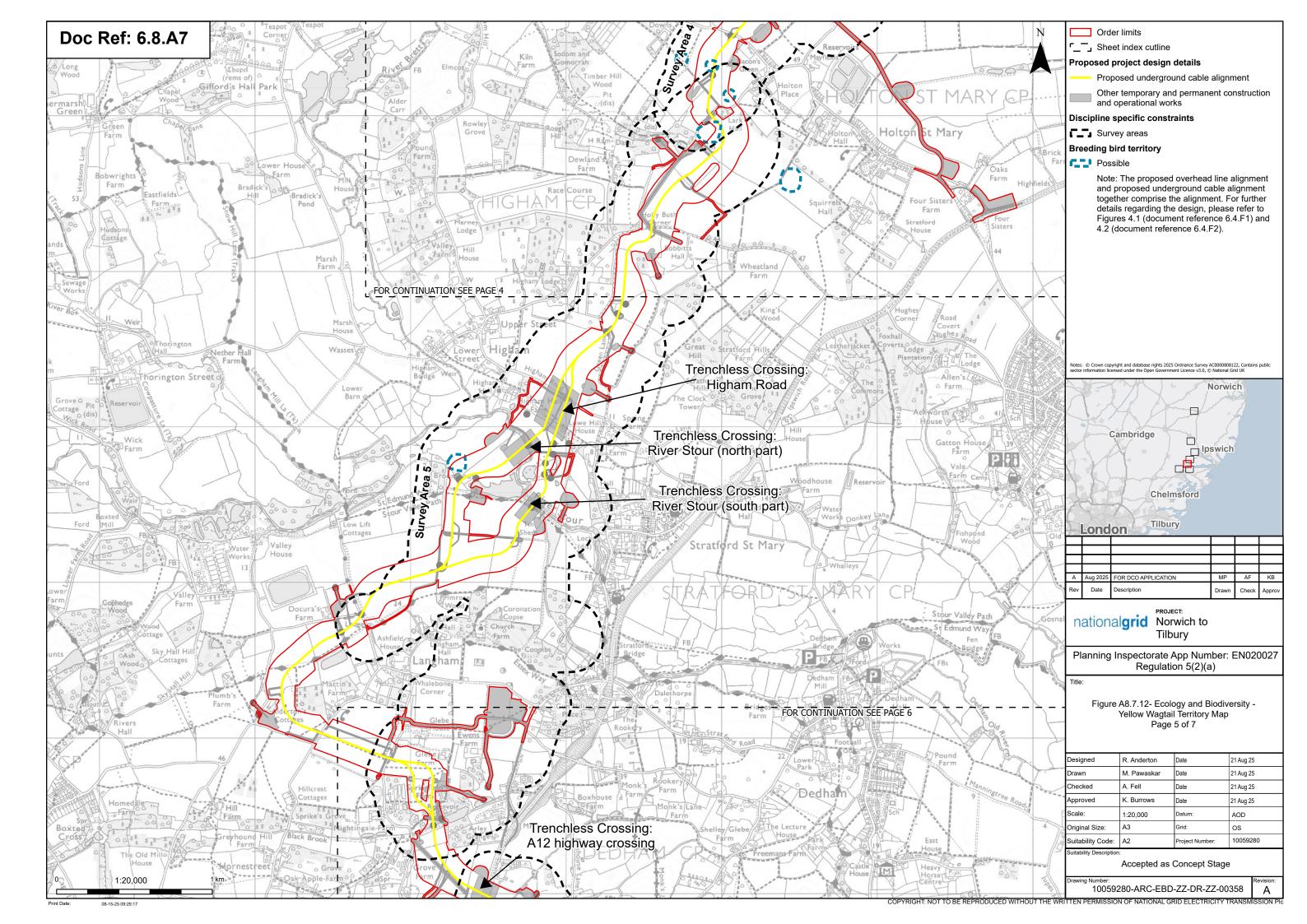


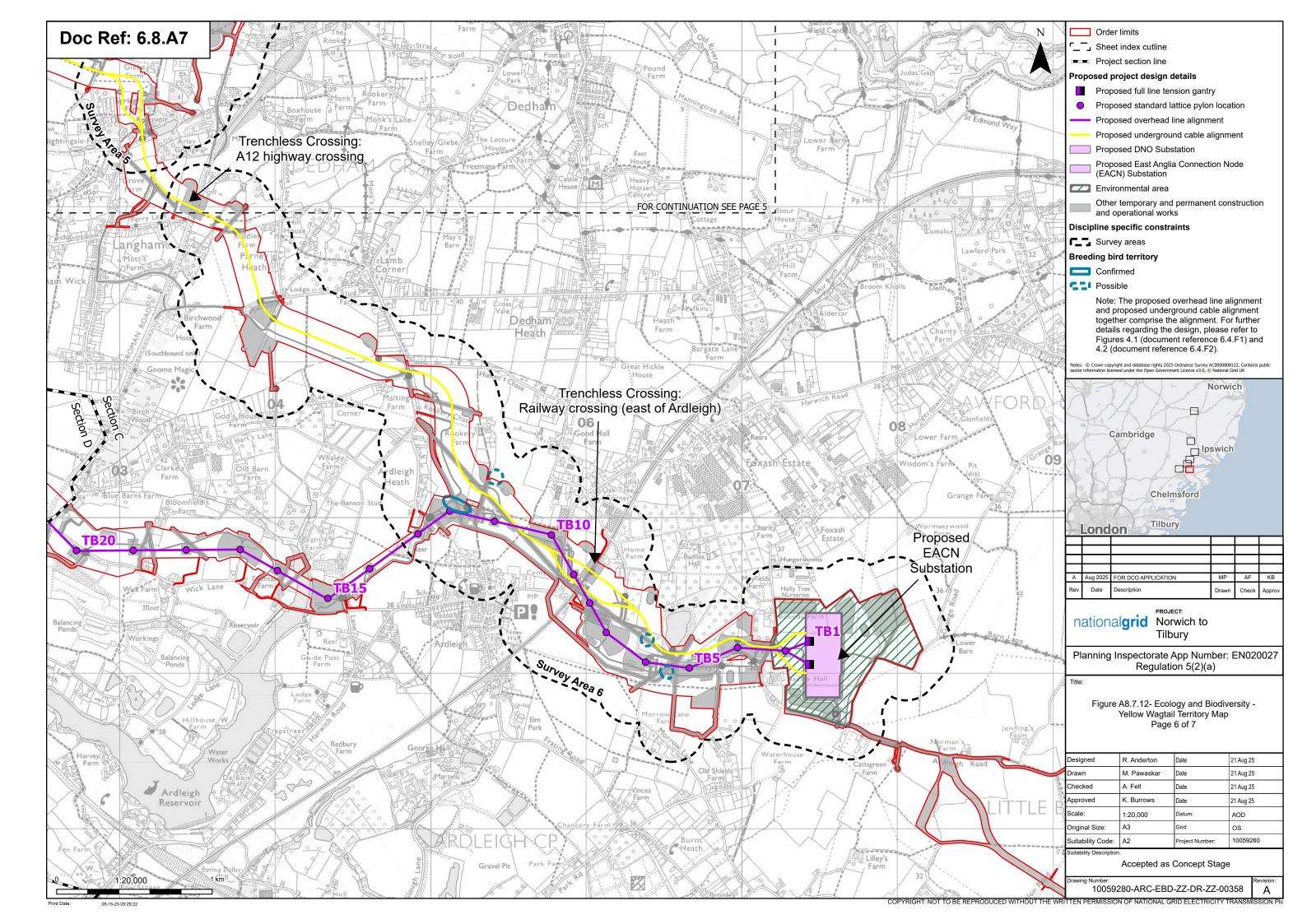


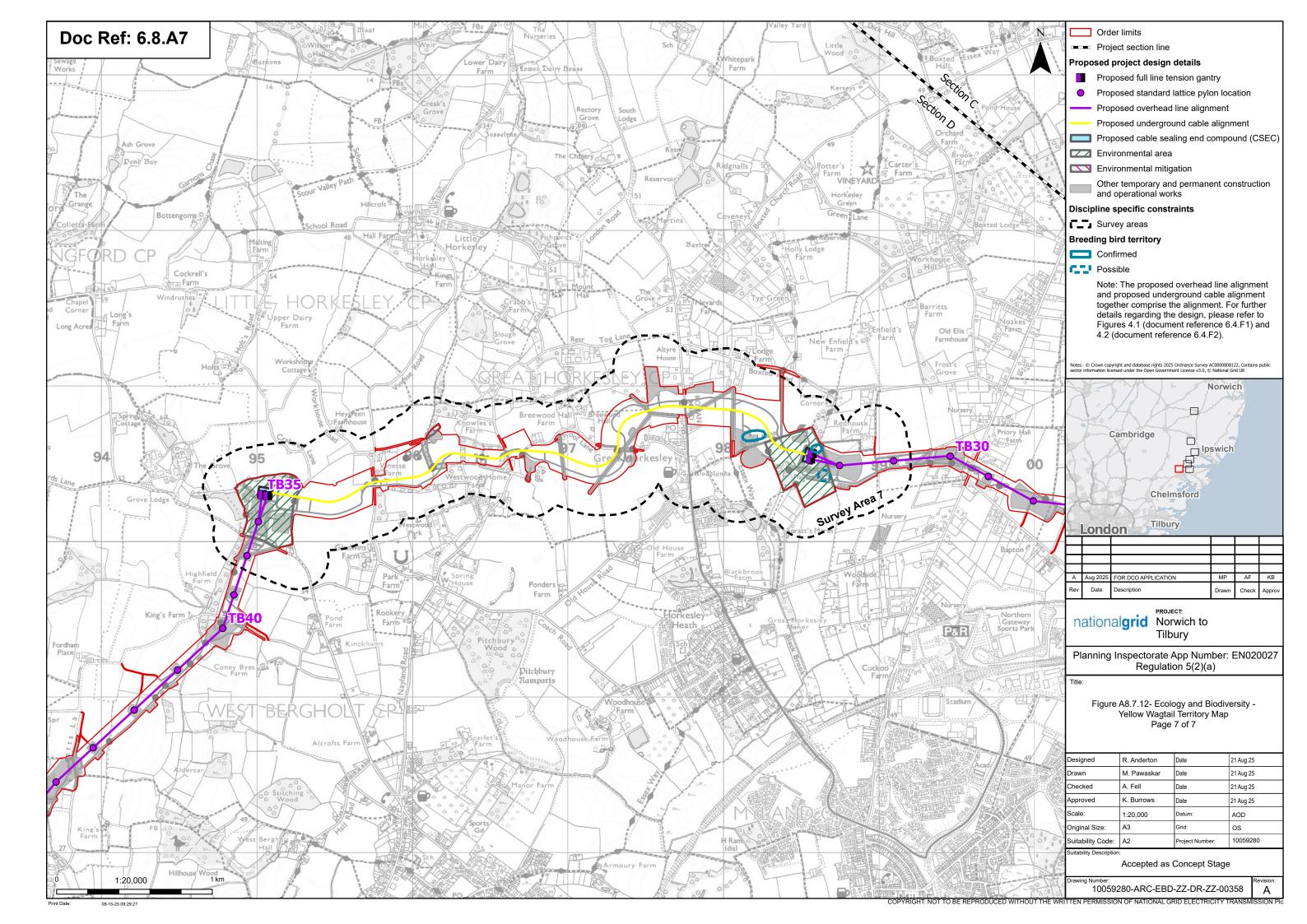


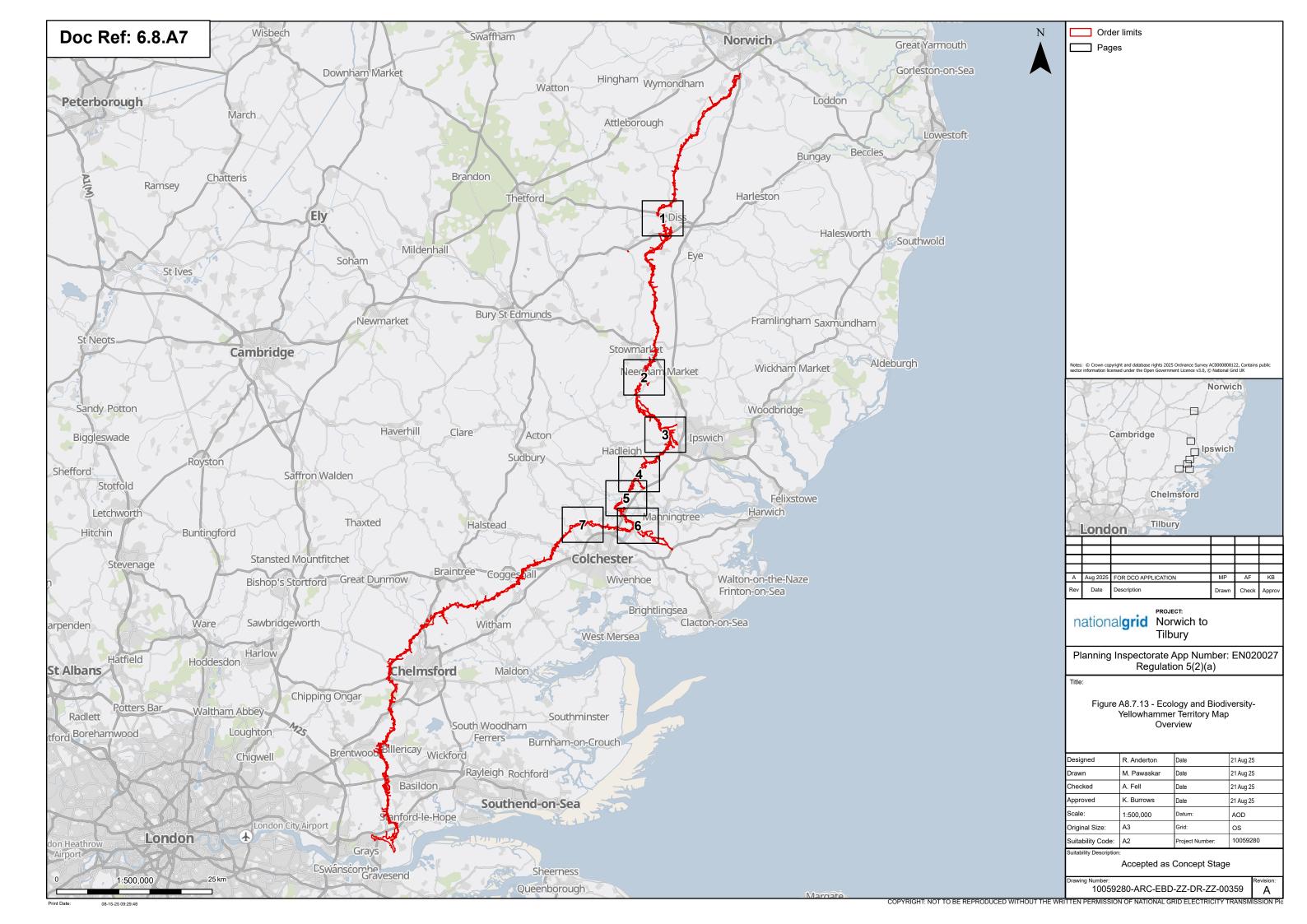


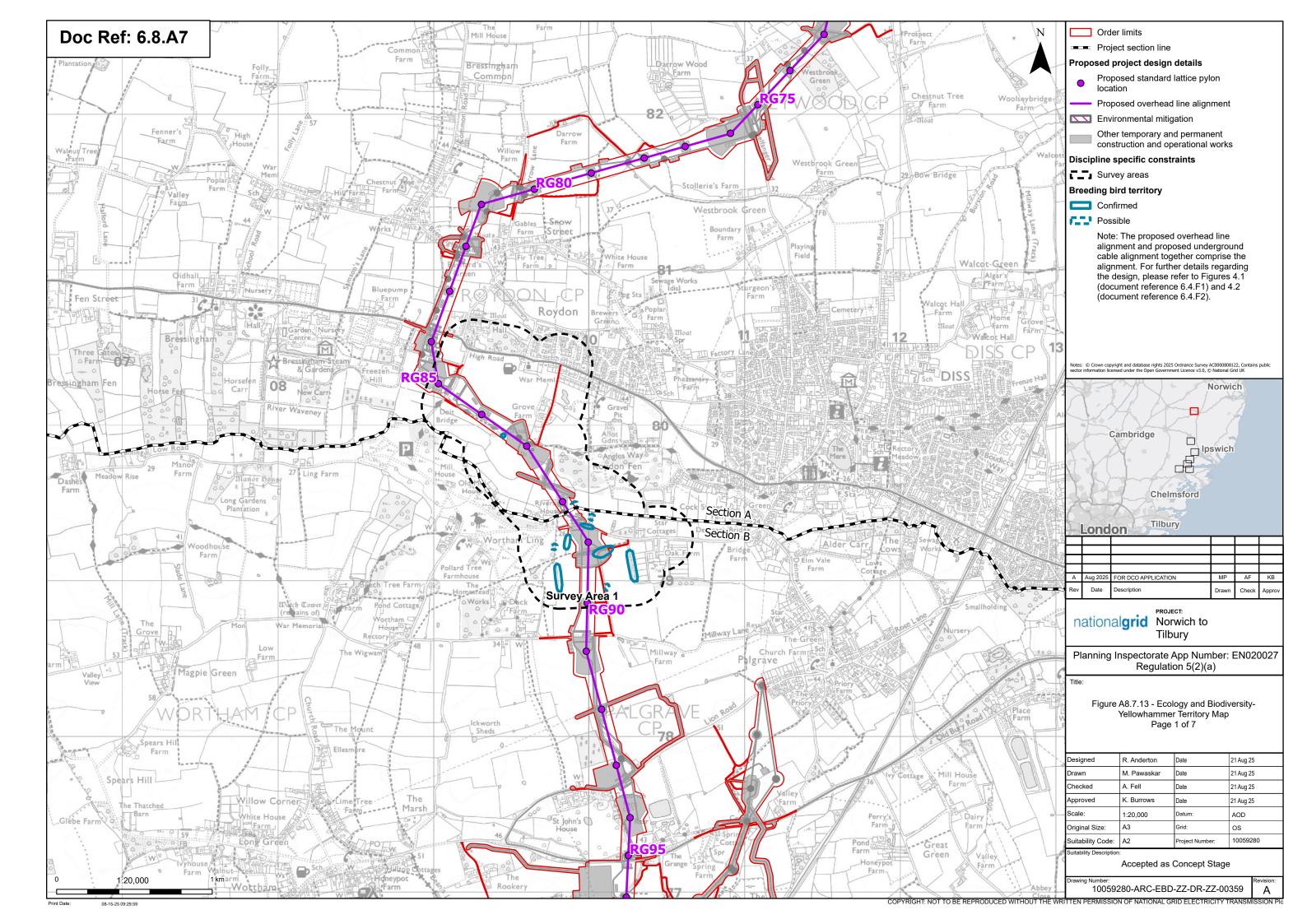


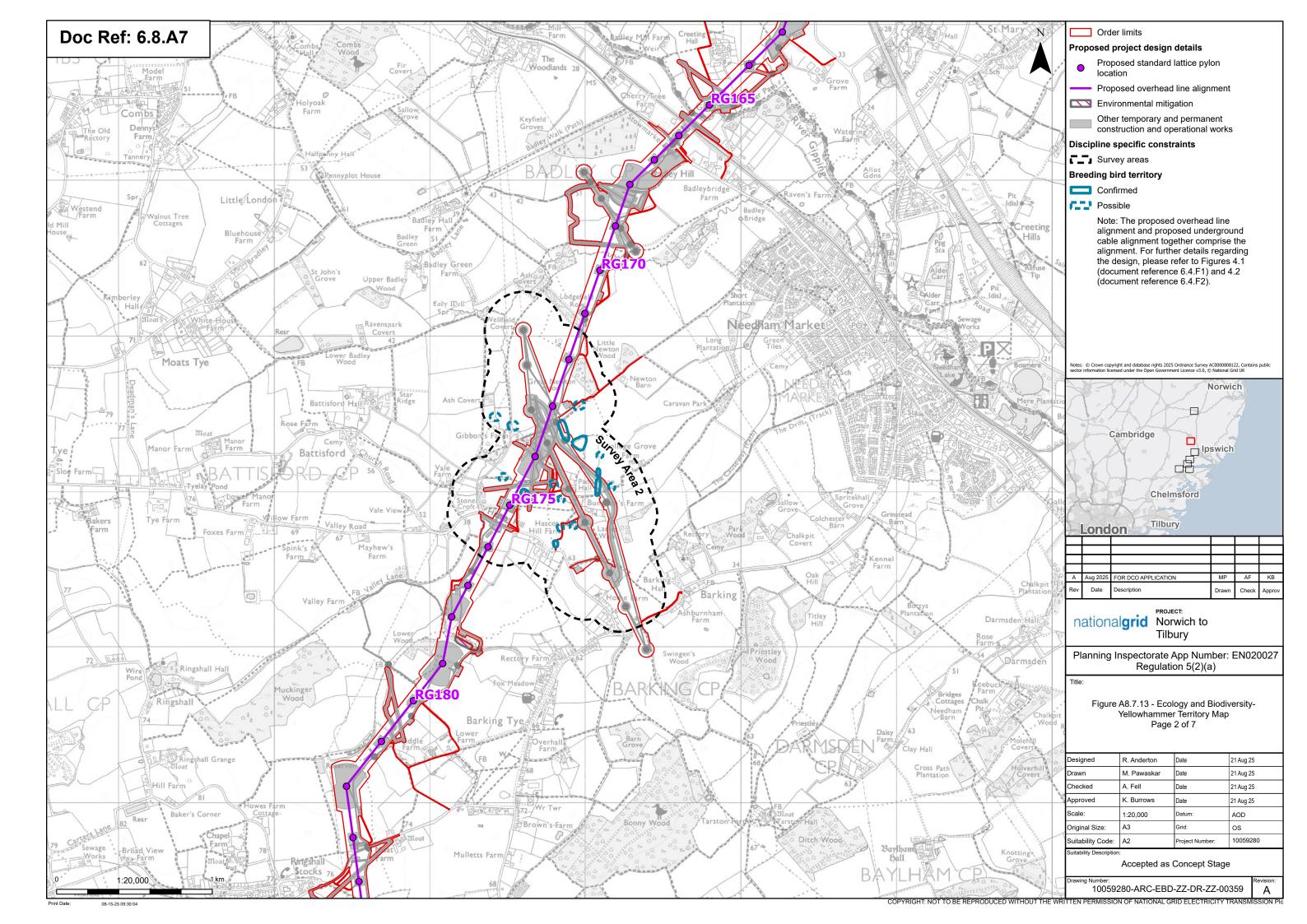


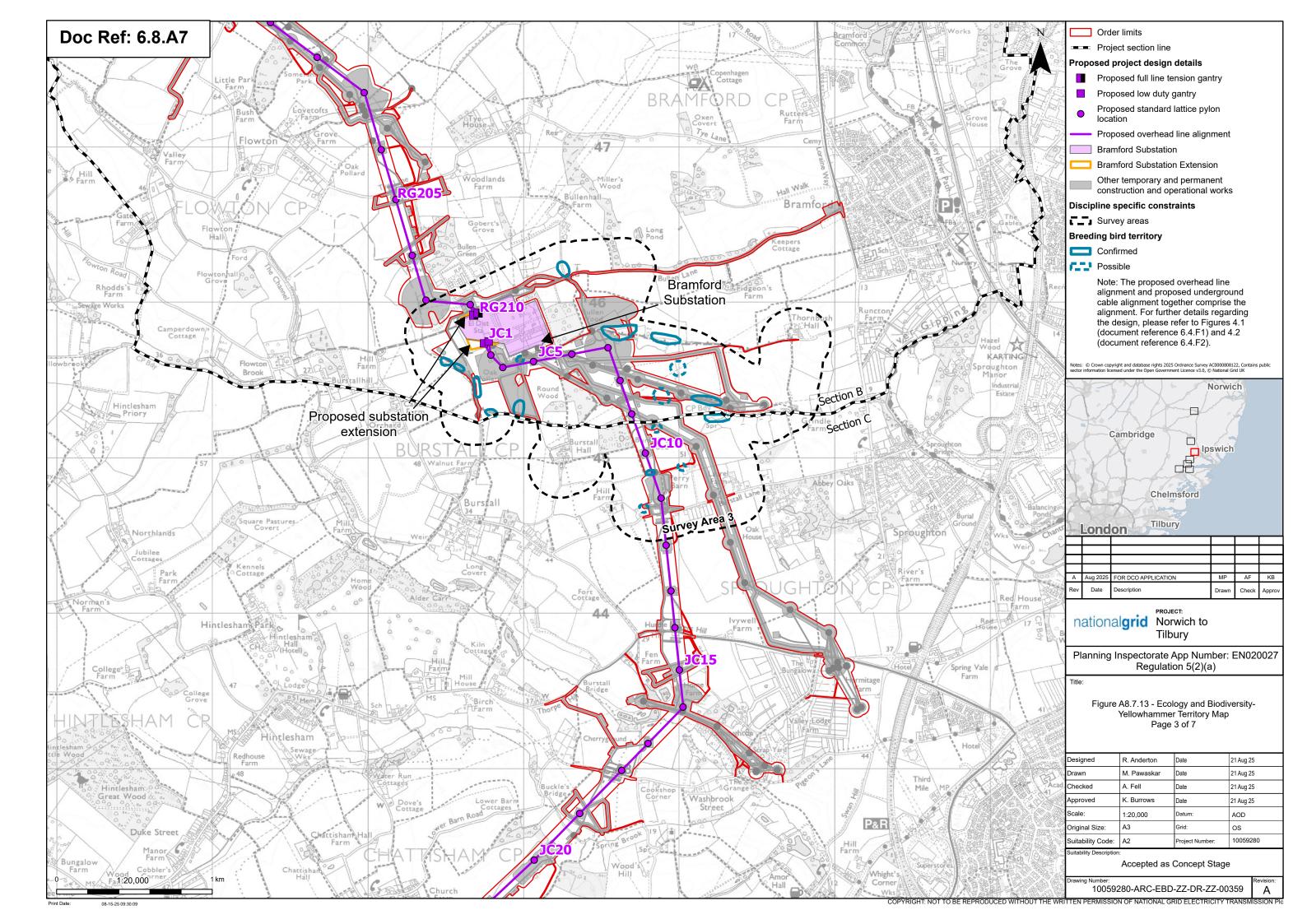


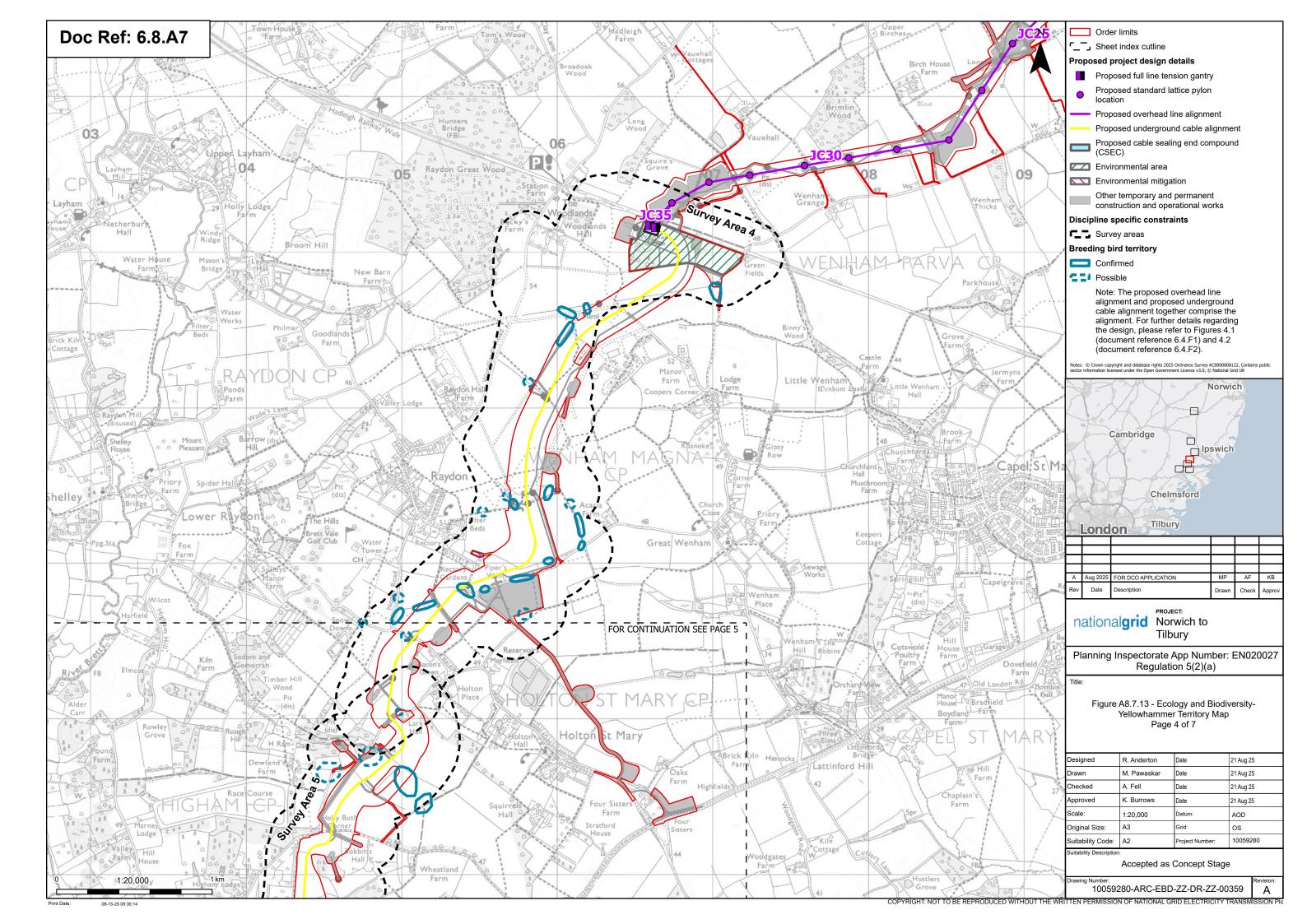


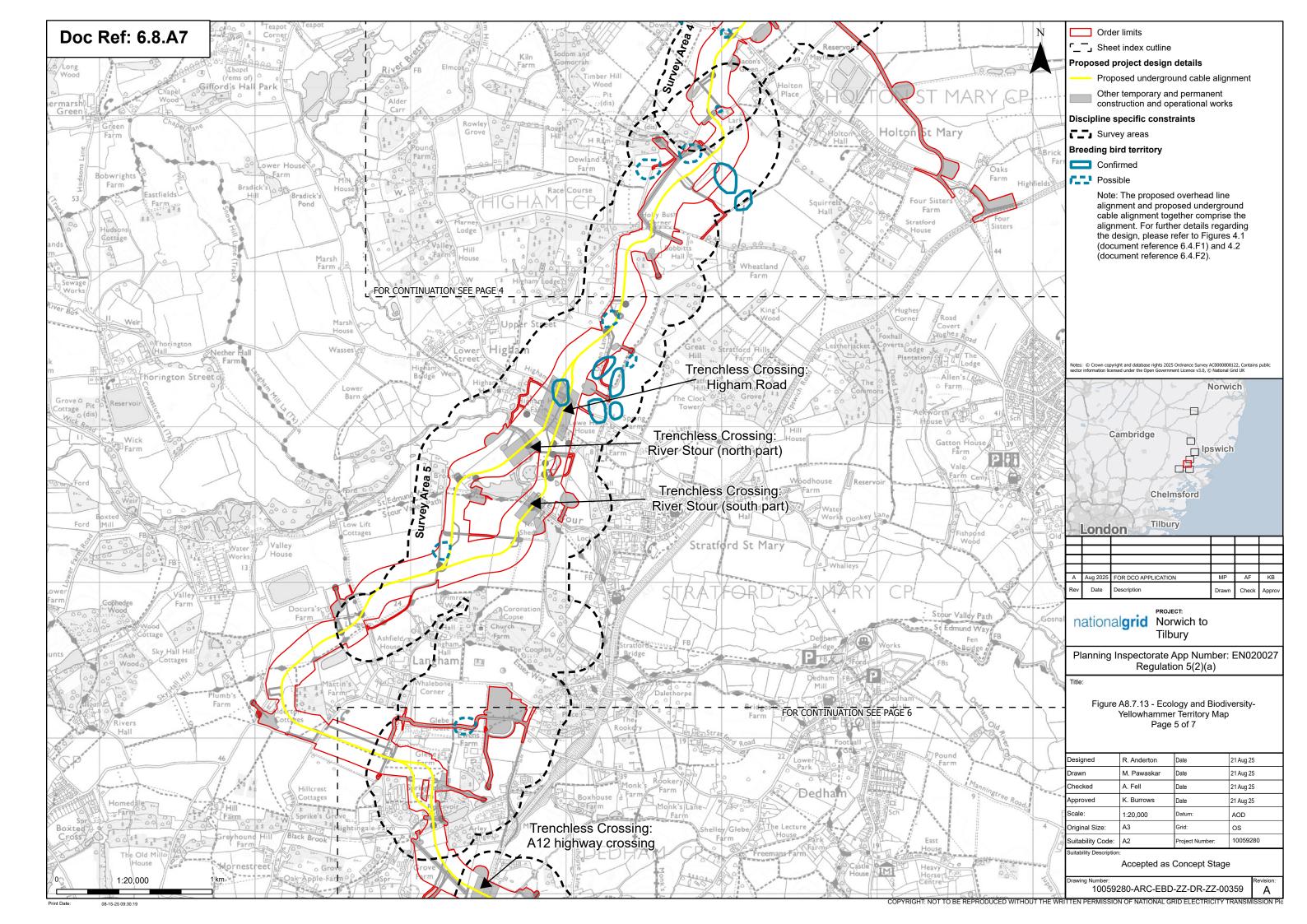


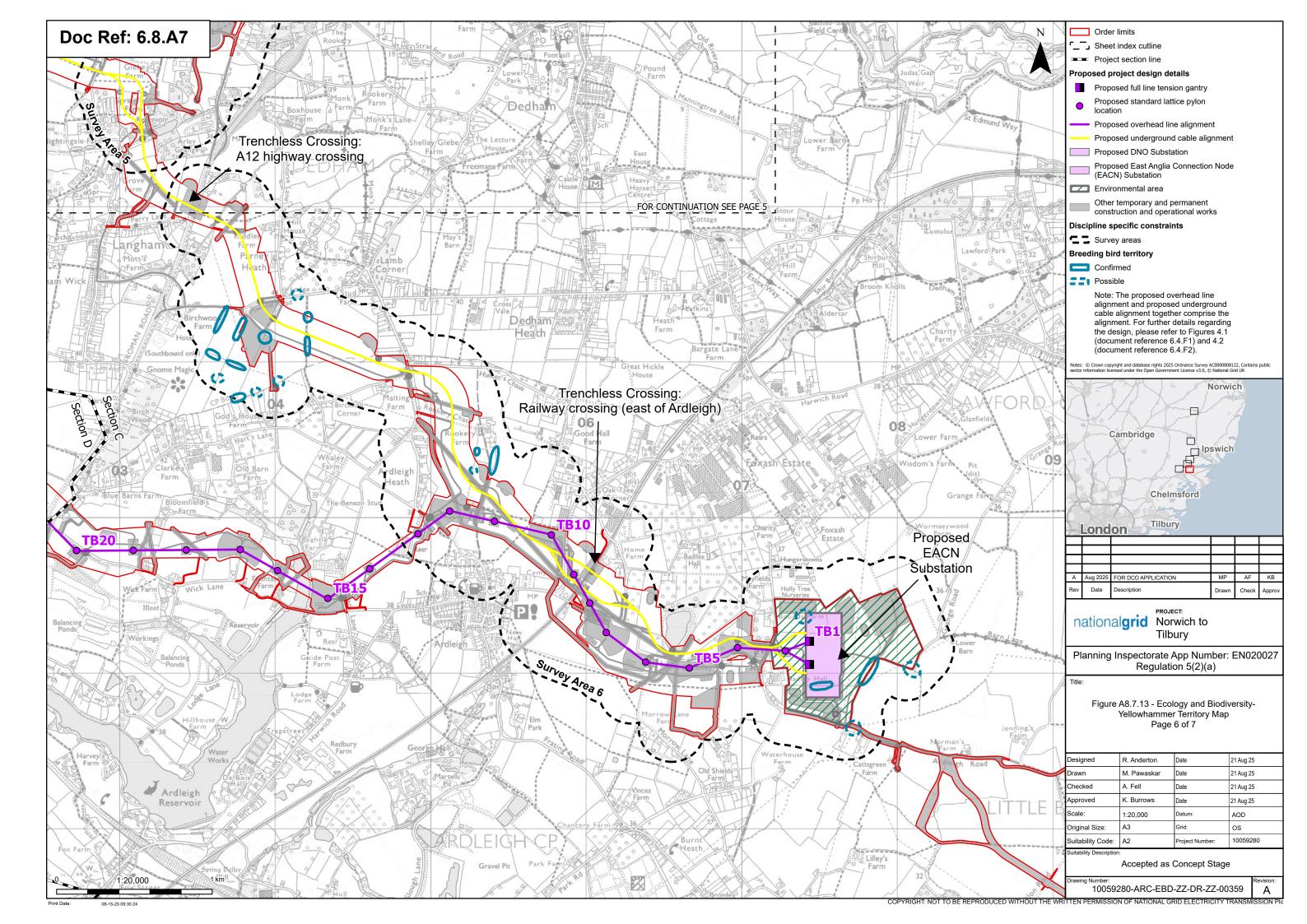


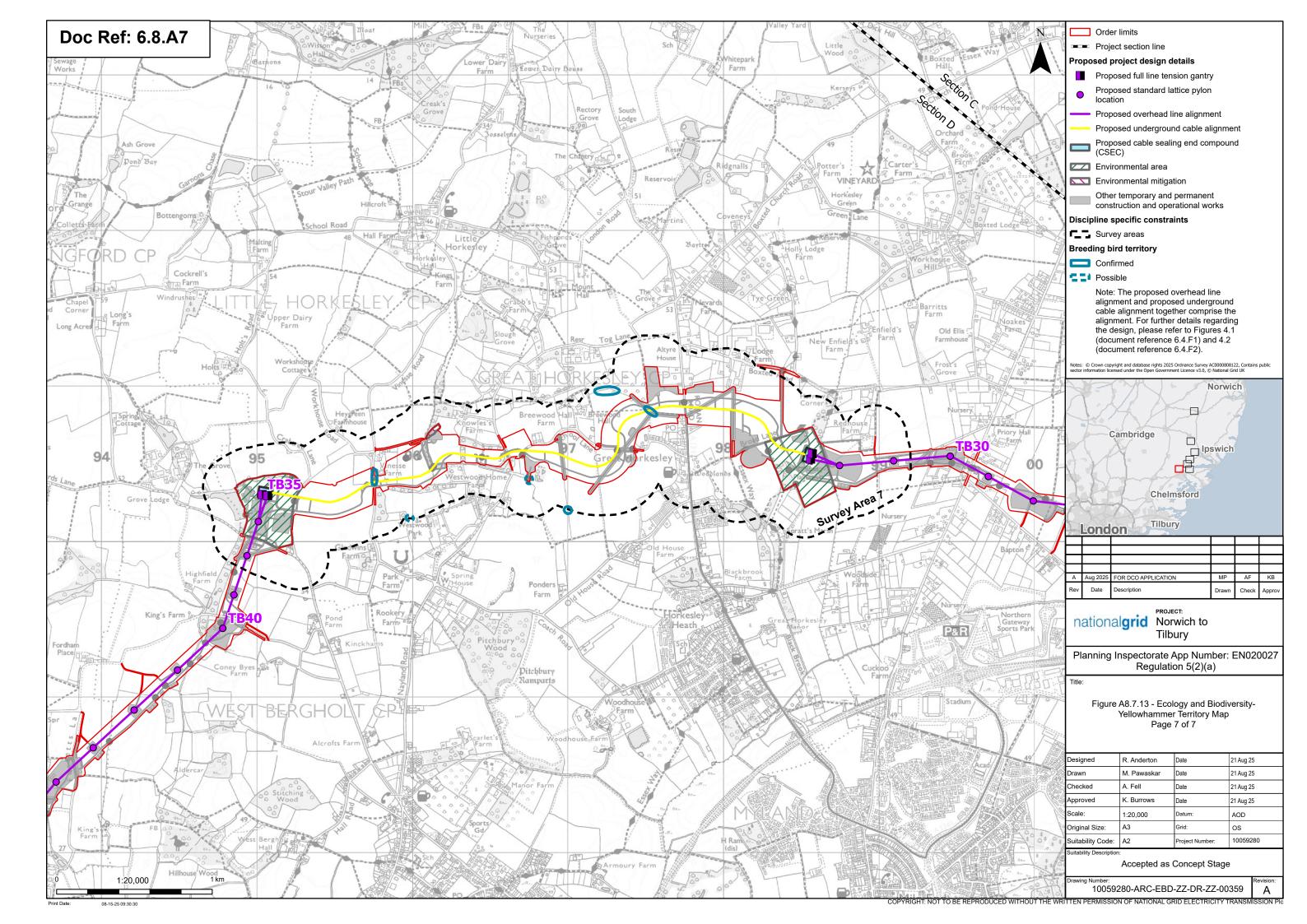












### Figure A8.7.14 Barn Owl Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.15 Cetti's Warbler Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.16 Hobby Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.17 Kingfisher Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.18 Marsh Harrier Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.19 Peregrine Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

### Figure A8.7.20 Red Kite Constraints Map FIGURE REMOVED AS IS CONFIDENTIAL

# Annex B. Survey Results



#### Annex B Survey Results

Table A8.7.9 Breeding bird species list, breeding status and number of pairs

Species	Scientific Name	Conservation Status	•		_		-		C Project S		•		Project Se		Project Se	
		Otatus	Survey Area Breeding Status	Pairs	Survey Are Breeding Status	Pairs	Survey Are Breeding Status	Pairs	Survey A Breeding Status		Survey Are Breeding Status	Pairs	Survey Are Breeding Status	Pairs	Survey Are Breeding Status	Pairs
Arctic Tern	Sterna paradisaea	Red BoCC									Non- breeding	-				
Barn Owl	Tyto alba	Green List, Sch-1	Present	-	Present	-			Present	-	Present	-			Present	-
Blackbird	Turdus merula	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Blackcap	Sylvia atricapilla	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Black-headed Gull	Chroicocephalus ridibundus	Amber BoCC									Non- breeding	-				
Blue Tit	Cyanistes caeruleus	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Bullfinch	Pyrrhula pyrrhula	Amber BoCC													Possible	0/2
Canada Goose	Branta canadensis	Not-listed							Present	-	Present	-			Present	-
Carrion Crow	Corvus corone	Green List	Present	-	Present	-	Present	-	Present	-			Present	-	Present	-
Cetti's Warbler	Cettia cetti	Green List, Sch-1									Present	-	Present	-		
Chaffinch	Fringilla coelebs	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Chiffchaff	Phylloscopus collybita	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Coal Tit	Periparus ater	Green List			Present	-	Present	-			Present	-	Present	-	Present	-
Collared Dove	Streptopelia decaocto	Green List			Present	-			Present	-	Present	-	Present	-	Present	-
Common Buzzard	Buteo buteo	Green List	Present	-	Present	-			Present	-			Present	-	Present	-
Common Gull	Larus canus	Red BoCC											Non- breeding	-		
Coot	Fulica atra	Green List									Present	-	Present	-		
Cormorant	Phalacrocorax carbo	Green List			Present	-					Present	-				
Corn Bunting	Emberiza calandra	Red BoCC									Non- breeding	-	Breeding	1 / 1		
Cuckoo	Cuculus canorus	Red BoCC	Breeding	1/2					Possible	0 / 1	Breeding	1/3	Possible	0 / 1	Breeding	1 / 1

Species	Scientific Name	Conservation Status	Project Sect Survey Area		Project Se Survey Are		Project Se Survey Are	•	Project Se Survey Ar		Project Sec Survey Are		Project Se Survey Are		Project Se Survey Are	
			Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs
Dunnock	Prunella modularis	Amber BoCC	Breeding	2/7	Breeding	7 / 14	Breeding	7 / 14	Breeding	10 / 16	Breeding	15 / 34	Breeding	10 / 22	Breeding	15 / 26
Egyptian Goose	Alopochen aegyptiaca	Not-listed	Present	-							Present	-				
Fieldfare	Turdus pilaris	Red BoCC, Sch-1									Non- breeding	-			Non- breeding	-
Fulmar	Fulmarus glacialis	Amber BoCC									Non- breeding	-				
Gadwall	Anas strepera	Amber BoCC									Non- breeding	-				
Garden Warbler	Sylvia borin	Green List					Present	-			Present	-			Present	-
Goldcrest	Regulus regulus	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Goldfinch	Carduelis carduelis	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Great Black- backed Gull	Larus marinus	Red BoCC									Non- breeding	-				
Great Spotted Woodpecker	Dendrocopos major	Green List	Present	-	Present	-	Present	-	Present	-	Present	-			Present	-
Great Tit	Parus major	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Green Sandpiper	Tringa ochropus	Amber BoCC, Sch-1							Non- breeding	-						
Green Woodpecker	Picus viridis	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Greenfinch	Carduelis chloris	Red BoCC	Possible	0/3	Breeding	2/5	Possible	0 / 1	Possible	0/3	Breeding	4 / 16	Breeding	2/5	Breeding	4 / 7
Grey Heron	Ardea cinerea	Green List									Present	-				
Grey Partridge	Perdix perdix	Red BoCC	Breeding	1 / 1			Possible	0 / 1	Breeding	1/2	Non- breeding	-				
Grey Wagtail	Motacilla cinerea	Amber BoCC									Non- breeding	-				
Greylag Goose	Anser anser	Amber BoCC			Non- breeding	-			Possible	0/2	Non- breeding	-	Non- breeding	-		
Herring Gull	Larus argentatus	Red BoCC	Non- breeding	-			Non- breeding	-	Non- breeding	-	Non- breeding	-	Non- breeding	-	Non- breeding	-
Hobby	Falco subbuteo	Green List, Sch-1									Present	-				
House Martin*	Delichon urbicum	Red BoCC							Breeding	1 / 1	Breeding	1 / 1				

Species	Scientific Name	Conservation Status	Project Sect Survey Area		Project Se Survey Are		Project Se Survey Are	•	Project Se Survey A		Project Se		Project Se Survey Are		Project Se Survey Are	
			Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs
House Sparrow*	Passer domesticus	Red BoCC			Breeding	2/2	Breeding	1 / 1	Breeding	1 / 1	Breeding	1 / 1	Breeding	1/2	Breeding	5/6
Jackdaw	Corvus monedula	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Jay	Garrulus glandarius	Green List	Present	-	Present	-	Present	-			Present	-	Present	-	Present	-
Kestrel	Falco tinnunculus	Amber BoCC	Breeding	1 / 1	Possible	0 / 1			Possible	0/2	Breeding	2/3	Breeding	1/2	Possible	0 / 1
Lapwing	Vanellus vanellus	Red BoCC	Breeding	1 / 1							Possible	0 / 1			Non- breeding	-
Lesser Black- backed Gull	Larus fuscus	Amber BoCC			Non- breeding	-	Non- breeding	-	Non- breeding	-	Non- breeding	-	Non- breeding	-	Non- breeding	-
Lesser Spotted Woodpecker	l Dryobates minor	Red BoCC			Possible	0 / 1										
Lesser Whitethroat	Sylvia curruca	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Linnet*	Linaria cannabina	Red BoCC	Breeding	1 / 4	Breeding	1 / 4	Breeding	4 / 7	Breeding	4/8	Breeding	4/5	Breeding	7 / 12	Breeding	7 / 11
Little Egret	Egretta garzetta	Green List														
Little Grebe	Tachybaptus ruficollis	Green List														
Long-tailed Tit	Aegithalos caudatus	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Magpie	Pica pica	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Mallard	Anas platyrhynchos	Amber BoCC	Breeding	3/3	Possible	0 / 1			Possible	0 / 1	Breeding	3 / 7	Breeding	1/2	Possible	0/3
Marsh Harrier	Circus aeruginosus	Amber BoCC, Sch-1	Present	-												
Marsh Tit	Poecile palustris	Red BoCC			Breeding	1 / 1					Non- breeding	-				
Meadow Pipit	Anthus pratensis	Amber BoCC	Possible	0 / 1					Possible	0/3			Possible	0/2		
Mistle Thrush	Turdus viscivorus	Red BoCC	Possible	0 / 1	Breeding	1 / 1			Possible	0 / 1	Breeding	7 / 10	Possible	0/2	Possible	0/2
Moorhen	Gallinula chloropus	Amber BoCC	Breeding	1/2	Possible	0 / 1	Possible	0 / 1			Breeding	5/6	Breeding	2/2		
Mute Swan	Cygnus olor	Green List									Present	-				
Nightingale	Luscinia megarhynchos	Red BoCC			Breeding	1/2			Breeding	2/3	Possible	0 / 1			Breeding	1/2
Nuthatch	Sitta europaea	Green List			Present	-	Present	-					Present	-		

Species	Scientific Name	Conservation Status	Project Sect Survey Area	•	Project Sec Survey Are		Project Sec Survey Are	•	Project Se Survey Ar		Project Sec Survey Are		Project Se Survey Are		Project Se Survey Are	
			Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs
Oystercatcher	Haematopus ostralegus	Amber BoCC									Non- breeding	-			Possible	0 / 1
Peregrine	Falco peregrinus	Green List					Present	-	Present	-	Present	-				
Pheasant	Phasianus colchicus	Not-listed	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Pied Wagtail	Motacilla alba	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Pochard	Aythya ferina	Red BoCC									Non- breeding	-				
Raven	Corvus corax	Green List			Present	-	Present	-								
Red Kite	Milvus milvus	Green List, Sch-1							Present	-	Present	-	Present	-	Present	-
Red-legged Partridge	Alectoris rufa	Not-listed	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Redshank	Tringa totanus	Amber BoCC									Non- breeding	-				
Redstart	Phoenicurus phoenicurus	Amber BoCC									Possible	0 / 1				
Reed Bunting	Emberiza schoeniclus	Amber BoCC	Possible	0 / 4			Possible	0 / 1	Breeding	1/2	Breeding	7 / 16				
Reed Warbler	Acrocephalus scirpaceus	Green List									Present	-	Present	-		
Ring-necked Parakeet	Psittacula krameri	Not-listed														
Robin	Erithacus rubecula	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Rook*	Corvus frugilegus	Amber BoCC	Non- breeding	-			Non- breeding	-	Breeding	1/1	Breeding	8/8	Breeding	3/3	Breeding	1 / 1
Sand Martin	Riparia riparia	Green List														
Scaup	Aythya marila	Red BoCC, Sch-1									Non- breeding	-				
Sedge Warbler	Acrocephalus schoenobaenus	Amber BoCC									Breeding	2/5				
Shelduck	Tadorna tadorna	Amber BoCC									Possible	0/2				
Skylark	Alauda arvensis	Red BoCC	Breeding	5/7	Breeding	8 / 12	Breeding	11 / 26	Breeding	53 / 87	Breeding	40 / 69	Breeding	43 / 77	Breeding	20 / 42
Song Thrush	Turdus philomelos	Amber BoCC	Breeding	5 / 7	Breeding	7 / 14	Breeding	13 / 20	Breeding	4 / 10	Breeding	20 / 25	Breeding	13 / 18	Breeding	4 / 13
Sparrowhawk	Accipiter nisus	Amber BoCC	Possible	0 / 1			Possible	0 / 1	Breeding	1/1	Non- breeding	-	Breeding	1/1	Possible	0 / 1

Species	Scientific Name	Conservation Status	Project Secti Survey Area	•	Project Sec Survey Are		Project Sec Survey Are	•	Project Se Survey A		Project Sec Survey Are		Project Se Survey Are		Project Se Survey Are	
			Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs	Breeding Status	Pairs
Starling*	Sturnus vulgaris	Red BoCC					Non- breeding	-			Non- breeding	-	Possible	0 / 1	Breeding	2/3
Stock Dove	Columba oenas	Amber BoCC	Breeding	1/3	Breeding	1 / 4	Breeding	5/7	Breeding	1 / 1	Breeding	2/7	Breeding	2/4	Breeding	3/5
Swallow	Hirundo rustica	Green List	Present	-	Present	-			Present	-	Present	-	Present	-	Present	-
Swift	Apus apus	Red BoCC					Non- breeding	-			Non- breeding	-	Possible	0 / 1		
Tawny Owl	Strix aluco	Amber BoCC	Breeding	1/3			Possible	0 / 1	Possible	0/2	Non- breeding	-				
Treecreeper	Certhia familiaris	Green List	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-	Present	-
Whitethroat	Sylvia communis	Amber BoCC	Breeding	3/5	Breeding	11 / 14	Breeding	14 / 17	Breeding	15 / 26	Breeding	22 / 36	Breeding	15 / 31	Breeding	6 / 21
Willow Tit	Poecile montanus	Red BoCC									Non- breeding	-				
Willow Warbler	Phylloscopus trochilus	Amber BoCC	Breeding	3 / 5					Possible	0 / 1						
Woodpigeon	Columba palumbus	Amber BoCC	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-
Wren	Troglodytes troglodytes	Amber BoCC	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-	Breeding	-
Yellow Wagtail	Motacilla flava	Red BoCC							Breeding	1/6	Possible	0/3	Breeding	1 / 4	Breeding	2/3
Yellowhammer	Emberiza citrinella	Red BoCC	Breeding	6 / 10	Breeding	6 / 17	Breeding	11 / 17	Breeding	14 / 23	Breeding	7 / 13	Breeding	12 / 20	Breeding	4/6

Pairs are displayed as Minimum/Maximum number of pairs. Minimum = breeding number of pairs (confirmed and probable), Maximum = breeding + possible number of pairs.

<sup>\*</sup> Indicates the pair figures include number of breeding colonies or social groups rather than individual pairs.

# Annex C. Confidential Schedule 1 Results

### **Annex C Confidential Schedule 1 Results**

#### APPENDIX REMOVED AS IS CONFIDENTIAL



## Annex D. Desk Study Results



### **Annex D Desk Study Results**

Table A8.7.12 Breeding bird records within the Order Limits

Species	Scientific Name	Conservation Status		Total no. of Individuals		Last Recorded Year
Barnacle Goose	Branta leucopsis	Amber BoCC	1	1	1	2016
Blackbird	Turdus merula	Green List	5	6	2	2020
Black-headed Gull	Chroicocephalus ridibundus	Amber BoCC	7	9	2	2019
Blue Tit	Cyanistes caeruleus	Green List	7	8	2	2019
Bullfinch	Pyrrhula pyrrhula	Amber BoCC	3	10	4	2020
Buzzard	Buteo buteo	Green List	17	24	4	2020
Canada Goose	Branta canadensis	Not Listed	8	22	9	2020
Carrion Crow	Corvus corone	Green List	9	12	2	2020
Coal Tit	Periparus ater	Green List	1	1	1	2016
Collared Dove	Streptopelia decaocto	Green List	4	4	1	2019
Common Tern	Sterna hirundo	Amber BoCC	2	9	8	2019
Coot	Fulica atra	Green List	2	2	1	2018
Cormorant	Phalacrocorax carbo	Green List	2	1	1	2013
Cuckoo	Cuculus canorus	Red BoCC	4	10	4	2020
Curlew	Numenius arquata	Red BoCC	2	4	3	2018
Dunnock	Prunella modularis	Amber BoCC	7	8	2	2020
Gadwall	Mareca strepera	Amber BoCC	3	12	10	2018
Goldcrest	Regulus regulus	Green List	4	7	2	2020
Goldfinch	Carduelis carduelis	Green List	5	6	2	2019
Great Spotted Woodpecker	Dendrocopos major	Green List	7	13	5	2020
Great Tit	Parus major	Green List	6	7	2	2019
Great White Egret	Ardea alba	Amber BoCC	1	1	1	2016

Species	Scientific Name	Conservation Status	No. of Records	Total no. of Individuals	_	Last Recorded Year
Green Woodpecker	<u>Picus viridis</u>	Green List	6	11	5	2020
Greenfinch	Chloris chloris	Red BoCC	4	21	16	2020
Grey Heron	Ardea cinerea	Green List	4	5	2	2020
Grey Partridge	Perdix perdix	Red BoCC	1	1	1	2020
Grey Wagtail	Motacilla cinerea	Amber BoCC	4	8	5	2020
Greylag Goose	Anser anser	Amber BoCC	8	19	6	2020
Herring Gull	Larus argentatus	Red BoCC	2	2	1	2020
House Martin	Delichon urbicum	Red BoCC	7	20	9	2020
House Sparrow	Passer domesticus	Red BoCC	3	3	1	2019
Jackdaw	Coloeus monedula	Green List	5	6	2	2018
Jay	Garrulus glandarius	Green List	3	4	2	2020
Kestrel	Falco tinnunculus	Amber BoCC	13	19	3	2020
Lapwing	Vanellus vanellus	Red BoCC	3	37	20	2019
Lesser Black- backed Gull	Larus fuscus	Amber BoCC	4	6	2	2020
Lesser Redpoll	Acanthis cabaret	Red BoCC	2	5	4	2018
Linnet	Linaria cannabina	Red BoCC	12	54	30	2020
Little Egret	Egretta garzetta	Green List	8	11	2	2020
Little Grebe	Tachybaptus ruficollis	Green List	3	4	2	2019
Little Owl	Athene noctua	Not Listed	2	2	1	2020
Magpie	Pica pica	Green List	5	6	2	2019
Mallard	Anas platyrhynchos	Amber BoCC	10	21	7	2020
Mandarin Duck	Aix galericulata	Not Listed	1	1	1	2020
Meadow Pipit	Anthus pratensis	Amber BoCC	4	11	4	2020
Mistle Thrush	Turdus viscivorus	Red BoCC	6	9	4	2019
Moorhen	Gallinula chloropus	Amber BoCC	3	8	6	2019
Mute Swan	Cygnus olor	Green List	5	14	6	2020
Nuthatch	Sitta europaea	Green List	1	1	1	2016

Species	Scientific Name	Conservation Status		Total no. of Individuals		Last Recorded Year
Oystercatcher	Haematopus ostralegus	Amber BoCC	3	9	4	2020
Pied Wagtail	Motacilla alba	Green List	6	10	3	2020
Red-legged Partridge	Alectoris rufa	Not Listed	4	4	1	2018
Redshank	Tringa totanus	Amber BoCC	2	9	8	2015
Redstart	Phoenicurus phoenicurus	Amber BoCC	1	1	1	2013
Reed Bunting	Emberiza schoeniclus	Amber BoCC	8	16	7	2020
Ringed Plover	Charadrius hiaticula	Red BoCC	1	1	1	2018
Robin	Erithacus rubecula	Green List	5	6	2	2019
Rook	Corvus frugilegus	Amber BoCC	6	7	2	2018
Sand Martin	Riparia riparia	Green List	2	4	3	2018
Shelduck	Tadorna tadorna	Amber BoCC	4	16	13	2020
Siskin	Spinus spinus	Green List	1	2	2	2013
Skylark	Alauda arvensis	Red BoCC	14	27	5	2020
Snipe	Gallinago gallinago	Amber BoCC	7	37	16	2020
Song Thrush	Turdus philomelos	Amber BoCC	8	12	3	2020
Sparrowhawk	Accipiter nisus	Amber BoCC	6	6	1	2019
Spotted Flycatcher	Muscicapa striata	Red BoCC	1	1	1	2016
Starling	Sturnus vulgaris	Red BoCC	7	13	6	2019
Stock Dove	Columba oenas	Amber BoCC	6	10	3	2020
Stonechat	Saxicola rubicola	Green List	2	4	3	2014
Swallow	Hirundo rustica	Green List	9	16	4	2020
Swift	Apus apus	Red BoCC	5	7	4	2021
Tawny Owl	Strix aluco	Amber BoCC	1	1	1	2015
Teal	Anas crecca	Amber BoCC	5	45	22	2020
Treecreeper	Certhia familiaris	Green List	2	7	5	2019
Tufted Duck	Aythya fuligula	Green List	4	5	2	2014

Species	Scientific Name	Conservation Status	No. of Records	Total no. of Individuals	_	Last Recorded Year
Turtle Dove	Streptopelia turtur	Red BoCC	3	3	1	2020
Water Rail	Rallus aquaticus	Green List	1	2	2	2020
Whitethroat	Sylvia communis	Amber BoCC	1	3	3	2020
Wigeon	Anas penelope	Amber BoCC	3	11	7	2018
Woodcock	Scolopax rusticola	Red BoCC	2	2	1	2017
Woodpigeon	Columba palumbus	Amber BoCC	10	11	2	2019
Wren	Troglodytes troglodytes	Amber BoCC	10	10	1	2021
Yellow Wagtail	Motacilla flava	Red BoCC	3	11	6	2020
Yellowhammer	Emberiza citrinella	Red BoCC	12	20	6	2021

Table A8.7.13 Breeding bird records within the 2 km buffer

Species	Scientific Name	Conservation Status		Total no. of Individuals		Last Recorded Year
Barnacle Goose	Branta leucopsis	Amber BoCC	20	32	6	2020
Black Swan	Cygnus atratus	Not Listed	3	3	1	2018
Blackbird	Turdus merula	Green List	298	1342	102	2020
Black-headed Gull	Chroicocephalus ridibundus	Amber BoCC	316	2793	400	2021
Blue Tit	Cyanistes caeruleus	Green List	297	1307	117	2020
Bullfinch	Pyrrhula pyrrhula	Amber BoCC	136	434	64	2021
Buzzard	Buteo buteo	Green List	431	1271	58	2022
Canada Goose	Branta canadensis	Not Listed	132	985	90	2020
Carrion Crow	Corvus corone	Green List	294	1197	140	2020
Cattle Egret	Bubulcus ibis	Amber BoCC	1	1	1	2019
Coal Tit	Periparus ater	Green List	86	330	115	2020
Collared Dove	Streptopelia decaocto	Green List	204	712	98	2020
Common Tern	Sterna hirundo	Amber BoCC	84	321	44	2022
Coot	Fulica atra	Green List	196	1302	99	2020

Species	Scientific Name	Conservation Status	No. of Records	Total no. of Individuals	_	Last Recorded Year
Cormorant	Phalacrocorax carbo	Green List	148	575	73	2020
Corn Bunting	Emberiza calandra	Red BoCC	26	111	18	2020
Crane	Grus grus	Amber BoCC	3	5	2	2020
Cuckoo	Cuculus canorus	Red BoCC	131	304	28	2021
Curlew	Numenius arquata	Red BoCC	45	322	108	2020
Dunnock	Prunella modularis	Amber BoCC	252	1006	150	2022
Egyptian Goose	Alopochen aegyptiaca	Not Listed	25	76	10	2021
Gadwall	Mareca strepera	Amber BoCC	56	347	36	2020
Goldcrest	Regulus regulus	Green List	111	487	149	2020
Goldfinch	Carduelis carduelis	Green List	251	1157	101	2020
Grasshopper Warbler	Locustella naevia	Red BoCC	7	17	7	2020
Great Crested Grebe	Podiceps cristatus	Green List	165	889	93	2021
Great Spotted Woodpecker	Dendrocopos major	Green List	186	1140	239	2020
Great Tit	Parus major	Green List	258	1033	99	2020
Great White Egret	Ardea alba	Amber BoCC	20	20	2	2021
Green Woodpecker	Picus viridis	Green List	235	1423	269	2020
Greenfinch	Chloris chloris	Red BoCC	211	606	30	2021
Grey Heron	Ardea cinerea	Green List	165	456	48	2020
Grey Partridge	Perdix perdix	Red BoCC	30	48	12	2021
Grey Wagtail	Motacilla cinerea	Amber BoCC	109	259	32	2021
Greylag Goose	Anser anser	Amber BoCC	116	376	42	2022
Hawfinch	Coccothraustes coccothraustes	Red BoCC	14	54	22	2018
Herring Gull	Larus argentatus	Red BoCC	168	1506	1000	2020
House Martin	Delichon urbicum	Red BoCC	147	427	50	2021
House Sparrow	Passer domesticus	Red BoCC	241	893	126	2021

Species	Scientific Name	Conservation Status	No. of Records	Total no. of Individuals	_	Last Recorded Year
Jackdaw	Coloeus monedula	Green List	118	356	36	2018
Jay	Garrulus glandarius	Green List	169	693	147	2020
Kestrel	Falco tinnunculus	Amber BoCC	332	771	49	2022
Lapwing	Vanellus vanellus	Red BoCC	93	425	62	2020
Lesser Black- backed Gull	Larus fuscus	Amber BoCC	206	526	21	2021
Lesser Redpoll	Acanthis cabaret	Red BoCC	72	236	27	2020
Lesser Spotted Woodpecker	Dryobates minor	Red BoCC	14	59	1	2017
Linnet	Linaria cannabina	Red BoCC	193	1078	28	2021
Little Egret	Egretta garzetta	Green List	150	410	200	2021
Little Grebe	Tachybaptus ruficollis	Green List	93	307	31	2020
Little Owl	Athene noctua	Not Listed	99	154	13	2021
Long-eared Owl	Asio otus	Green List	4	5	2	2019
Magpie	Pica pica	Green List	307	1317	153	2020
Mallard	Anas platyrhynchos	Amber BoCC	214	1322	143	2020
Mandarin Duck	Aix galericulata	Not Listed	20	31	4	2020
Marsh Tit	Poecile palustris	Red BoCC	37	56	3	2022
Meadow Pipit	Anthus pratensis	Amber BoCC	103	346	30	2020
Mistle Thrush	Turdus viscivorus	Red BoCC	144	357	55	2022
Moorhen	Gallinula chloropus	Amber BoCC	275	1276	137	2022
Mute Swan	Cygnus olor	Green List	151	845	67	2021
Nightingale	Luscinia megarhynchos	Red BoCC	47	109	19	2020
Nuthatch	Sitta europaea	Green List	65	392	263	2020
Oystercatcher	Haematopus ostralegus	Amber BoCC	62	222	40	2020
Pied Wagtail	Motacilla alba	Green List	111	303	26	2020
Pochard	Aythya ferina	Red BoCC	41	193	26	2020
Red-legged Partridge	Alectoris rufa	Not Listed	94	186	20	2020
Redshank	Tringa totanus	Amber BoCC	31	98	21	2017

Species	Scientific Name	Conservation Status		Total no. of Individuals		Last Recorded Year
Redstart	Phoenicurus phoenicurus	Amber BoCC	10	11	2	2020
Reed Bunting	Emberiza schoeniclus	Amber BoCC	123	319	60	2021
Ringed Plover	Charadrius hiaticula	Red BoCC	24	96	45	2020
Robin	Erithacus rubecula	Green List	272	1192	112	2020
Rook	Corvus frugilegus	Amber BoCC	227	1254	132	2022
Sand Martin	Riparia riparia	Green List	48	163	41	2020
Sedge Warbler	Acrocephalus schoenobaenus	Amber BoCC	7	7	2	2020
Shelduck	Tadorna tadorna	Amber BoCC	80	505	106	2020
Shoveler	Anas clypeata	Amber BoCC	13	72	26	2020
Siskin	Spinus spinus	Green List	37	93	16	2018
Skylark	Alauda arvensis	Red BoCC	241	995	268	2021
Snipe	Gallinago gallinago	Amber BoCC	50	141	16	2020
Song Thrush	Turdus philomelos	Amber BoCC	253	658	1	2022
Sparrowhawk	Accipiter nisus	Amber BoCC	220	769	73	2022
Spotted Flycatcher	Muscicapa striata	Red BoCC	65	130	11	2020
Starling	Sturnus vulgaris	Red BoCC	269	1147	150	2022
Stock Dove	Columba oenas	Amber BoCC	129	380	32	2020
Stonechat	Saxicola rubicola	Green List	44	245	86	2020
Swallow	Hirundo rustica	Green List	199	577	66	2020
Swift	Apus apus	Red BoCC	259	1334	250	2021
Tawny Owl	Strix aluco	Amber BoCC	77	214	55	2021
Teal	Anas crecca	Amber BoCC	93	1105	150	2020
Tree Pipit	Anthus trivialis	Red BoCC	8	10	2	2020
Tree Sparrow	Passer montanus	Red BoCC	8	42	30	2020
Treecreeper	Certhia familiaris	Green List	73	486	178	2020
Tufted Duck	Aythya fuligula	Green List	114	1008	115	2020
Turtle Dove	Streptopelia turtur	Red BoCC	85	141	17	2021
Water Rail	Rallus aquaticus	Green List	46	107	19	2020

Species	Scientific Name	Conservation Status	No. of Records	Total no. of Individuals	_	Last Recorded Year
Whitethroat	Sylvia communis	Amber BoCC	35	101	39	2021
Wigeon	Anas penelope	Amber BoCC	36	425	194	2020
Willow Warbler	Phylloscopus trochilus	Amber BoCC	73	157	21	2020
Wood Warbler	Phylloscopus sibilatrix	Red BoCC	3	3	2	2020
Woodcock	Scolopax rusticola	Red BoCC	57	90	8	2020
Woodpigeon	Columba palumbus	Amber BoCC	356	1536	107	2020
Wren	Troglodytes troglodytes	Amber BoCC	290	975	107	2021
Yellow Wagtail	Motacilla flava	Red BoCC	72	193	29	2020
Yellowhammer	Emberiza citrinella	Red BoCC	200	414	34	2021

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