Preliminary Environmental Information Report Volume 2

Appendix 6.1 Soils Data

LLK1-ARU-REP-ENV-000006_AP6.1

Version 0.0

January 2026

LIONLINK

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1 Soils data

1.1 Introduction

1.1.1 This appendix sets out the survey and sampling methodology and the data used to inform the assessment of the Proposed Scheme on agricultural land and soils at Preliminary Environmental Information Report (PEIR) stage.

1.1.2 Paragraph 7.7.3 of the **EIA Scoping Report** (Ref 1) proposed that soil profiles will be examined at an observation density to be agreed with Natural England for the different elements of the Proposed Onshore Scheme. The **EIA Scoping Report** anticipated that the permanent works will be surveyed at the normal observation density of one auger profile per hectare but that it may be appropriate to reduce the density of observations within the proposed Underground Cable Corridors.

1.1.3 Natural England has since been consulted (meeting of 4 November 2024) on the proposed approach to soil sampling within the proposed Underground Cable Corridors and confirmed that the proposed approach is acceptable. The approach is described in **Section 1.2** of this appendix.

1.1.4 The **Scoping Opinion** (Ref 2) (ID 3.2.4) advised that the survey effort should be sufficient to establish the baseline condition to enable a robust impact assessment and that the Environmental Statement (ES) should describe the final survey method and extent, with evidence of agreement (or otherwise) with relevant consultation bodies.

1.2 Methodology

Data sources

1.2.1 The Ground Investigations (GI) surveys in 2024 and 2025 involved a programme of collecting data from boreholes, trial pits and window samples at locations distributed throughout the Draft Order Limits (DOL).

1.2.2 The Agricultural Land and Soils team selected a number of locations which were representative of soil types and land uses in the local area, and requested that the GI team took soil samples from the topsoil, upper subsoil and lower subsoil horizons at these locations. The sampled locations are shown on **Figure 6.2** of this PEIR for Sections B-D. These samples were later transported to the Agricultural Land and Soils team for analysis.

1.2.3 The GI survey of Section A has been completed in 2025, however, the soil samples have yet to be analysed, therefore, soil profile results described in **Section 1.3** exclude Section A. The assessment has therefore been informed by data available from the **Sea Link ES** (Ref 3, Ref 4).

Analysis

1.2.4 The analysis of the soil samples then followed the same methodology as would be followed during a detailed soil survey, namely examining soil characteristics in terms of the Agricultural Land Classification (ALC) criteria and guidelines (Ref 5). Each sample was analysed for the following characteristics:

a. Texture
b. Colour
c. Stone content
d. Consistency
e. Structure
f. Permeability
g. Mottling
h. Calcium carbonate content and
i. Visible roots

1.2.5 These characteristics were then assembled to establish the full soil profile, enabling a Wetness Class (WC) to be assigned, and a droughtiness limitation calculated. Each profile was then graded according to the established guidelines and criteria for classifying agricultural land, under the ALC system of England and Wales (Ref 5).

1.3 Soils profile results

1.3.1 Three soil types were identified from the soil samples taken. A schedule of the observations made is provided at **Annex A** and provides the basis for the ALC of the DOL shown in **Figure 6.2** of **Chapter 6** of this PEIR.

1.3.2 In the centre and north of the DOL (in Sections C and D as defined in **Figure 2.1** of this PEIR), between around Middleton and Walberswick, the soils have been defined as sandy loam or loamy sand topsoils. The topsoil is friable, finely structured and slightly stony. The upper subsoils have similar characteristics or are otherwise sand, mainly fine- or medium-grained. Most profiles pass with depth to sand in lower subsoils. The soil profiles are well drained, in WC I, and are limited by droughtiness to varying degrees, depending largely upon the proportions of sand. The profiles have been classified as Grades 2, 3a or 3b.

1.3.3 In the south of the DOL in Section B and also between Westleton and Darsham in Section C, the contrasting soil type has been defined as mostly heavy clay loam or clay topsoil textures, with occasionally medium clay loam or sandy clay loam. The topsoil is mostly stoneless, is friable to firm, and in rare instances is very slightly calcareous. The subsoils are clay or sandy clay throughout, and become progressively more grey and calcareous with depth. The subsoils are typically firm or very firm and have coarse structures which inhibit permeability. The profiles are imperfectly (WC III) or poorly drained (WC IV). Profiles in WC III with medium clay loam or sandy clay loam topsoils are limited by wetness to

Subgrade 3a, and those with heavy clay loam or clay topsoil, and all profiles in WC IV, are limited by wetness to Subgrade 3b.

1.3.4 The third soil type in Sections B and C is a transitional type between the two, characterised by sandy loam or loamy sand topsoils over variably calcareous clay and sandy clay subsoils. The profiles are slowly permeable in the lower subsoils and are moderately well drained (WC II). The profiles are limited by soil wetness to Grade 2.

1.3.5 Photographs of each of the soil types are provided at **Annex B**.

Annex A: Soil profile data

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
B01	0.25	mCL	10YR3/2	0	2	few, f	friable	mab	n	n	I	2/3a DR
B01	0.5	SCL	10YR4/3	0	1	rare, f	friable	msab	n	n		
B01	0.7	mSL	10YR4/4	0	12	rare, f	friable	fab	n	n		
B01	1.0	mSL	10YR4/3	0	2	rare, f	friable	fsab	n	n		
BHB04	0.2	hCL	10YR4/2	0-1	1	rare, f	firm	cab	n	n	II	3a WE
BHB04	0.5	C	10YR5/3	4	20	rare, f	firm	fab	cfd	n		
BHB04	1.0	C	10Y5/1	4	10	none	firm	csab	cmd	y/n		
BHB05	0.3	hCL	10YR4/2	0	5	few, f	firm	fab	n	n	II	3a WE
BHB05	0.5	C	10YR5/2	4	10	rare, f	firm	cab	cfd	(y)		
BHB05	1.0	C	2.5Y6/2	4	12	none	v firm	cab	cfd	y		
BHB11	0.3	mCL	10YR4/2	0	5	few, f	firm	mab	n	n	III	3a WE
BHB11	0.5	C	2.5Y5/3	4	5	none	firm	cab	cfd	y		
BHB11	1.0	C	2.5Y6/3	4	20	rare, f	firm	mab	cff	n		
BHB18	0.1	mCL	10YR3/3	0	1	few, f	firm	mab	n	n	IV	3b WE
BHB18	0.4	C	2.5Y5/1	1	2	rare, f	firm	cab	cff	y		
BHB18	1.0	C	10YR4/1	1	10	none	firm	cab	cff	y		
BHB19	0.3	hCL	10YR4/2	0-1	2	rare, f	firm	cab	fmf	n	IV	3b WE
BHB19	0.3	hCL	2.5Y4/3	2	1	rare, f	firm/friable	cab	cmf	y		
BHB19	0.6	C	10Y5/1	3	12	none	firm	cab	cmd	y		
BHC01	0.2	mCL	10YR4/3	0	0	com, m	friable	fab	n	n	I	2/3a

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
BHC01	0.5	mSL	10YR4/3	0	5	com, f	friable	fab	n	n		DR 3b - FZ
BHC01	0.8	mS	10YR5/2	0	0	none	friable	crumb	n	n		
BHC02	?	mSL	10YR3/3	0	1	rare, f	friable	fsab	n	n	I	
BHC02	0.2	LmS	10YR2/2	0	1	rare, f	friable	fsab	n	n		2/3a DR 3b FZ
BHC02	0.6	SCL	10YR5/4	0	1	none	friable	fab	cfd	n		
BHC02	0.9	SCL	10YR4/4	0	5	none	friable	fab	cfd	n		
BHC03	0.2	mSL	10YR4/2	0	1	few, f	friable	fab	n	n	I	
BHC03	0.5	LmS	10YR5/6	0	1	none	friable	crumb	n	n		3a/3b DR
BHC03	0.8	mS	2.5Y6/4	0	2	none	v friable	crumb	n	n		
BHC04	0.2	mSL	10YR4/2	0	2	com, m	friable	fsab	n	n	I	
BHC04	0.4	LmS	10YR3/3	0	5	few, f	friable	fab	n	n		3a DR
BHC04	0.7	LmS	10YR3/6	0	1	none	v friable	crumb	n	n		
BHC07	0.2	SCL	10YR4/2	0	1	few, m	friable	msab	n	n	IV	
BHC07	0.4	SC	10YR4/2	0	0	none	firm	cab	cfd	y		3b WE
BHC07	0.6	SC	2.5Y5/3	2	2	rare, f	firm	cab	cmd	y		
BHD04	0.1	LmS	10YR3/3	0	1	none	friable	crumb	cfd	n	I	3b DR
BHD04	1.0	LmS	10YR4/3	0	5	none	friable	crumb	n	n		
BHD05	0.1	LmS	10YR4/3	0	0	none	friable	crumb	n	n	I	
BHD05	0.5	C+mS	10YR5/4	0	1	none	friable	mab	n	n		3a DR
BHD05	1.0	mS	10YR5/3	0	1	none	friable	crumb	n	n		
BHD05	1.4	mS	10YR5/3	0	1	none	friable	crumb	n	n		
F03	0.1	SCL	10YR3/2	0	2	rare, f	friable	msab	n	n	III	3a

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
F03	0.6	hCL	10YR5/3	1	5	rare, f	firm	csab	cfd	(y)		WE
F03	1.5	C	10YR5/1	4	10	none	firm	cab	cff	y		
F06	0.6	C	10YR6/3	4	10	none	friable	mab	cff	n	I	2 WE DR
F06	1.0	C	2.5Y6/3	4	15	none	firm	fab	n	n		
F06	1.5	C	2.5Y6/2	4	25	none	firm	fab	cff	n		
TPB01	0.2	SC	10YR4/2	0	5	few, f	v firm	cab	n	n	IV	3b WE
TPB01	0.6	C	10YR5/1	4	10	few, f	v firm	cab	cmf	y		
TPB01	1.2	C	10YR5/1	4	10	few, f	v firm	cab	cmf	y		
TPB02	0.15	SCL	10YR4/1	0	1	few, f	firm	fab/mab	n	n	II	2 WE DR
TPB02	0.75	SCL	10YR5/2	0	10	few, f	firm but breaks	mab	cmd	n		
TPB02	1.2	C	10YR5/1	3	10	none	v firm	cab	cmf	y		
TPB03	0.15	hCL	10YR4/2	0	5	com, f	firm	mab	n	n	III	3b WE
TPB03	0.7	C	10YR5/3	0	5	rare, f	firm	cab	cfd	y		
TPB03	1.5	C	10Y6/1	4	12	none	firm	cab	cfd	y		
TPB05	0.1	LmS	10YR3/3	0	8	rare, f	friable	fab	n	n	II	3b DR
TPB05	0.15	hCL	10YR5/3	0	10	rare, f	firm	m/cab	cff	y		
TPB05	0.5	LmS	10YR4/4	0	1	none	v friable	crumb	n	n		
TPB05	0.75	C/SC	10YR5/3	0	2	none	firm	cab	cfd	y		
TPB05	1.2	C	10Y6/1	4	12	none	firm	mab	cfd	n		
TPB06	0.1	SCL	10YR4/2	1	1	few, f	firm	mab	n	n	IV	3b WE
TPB06	0.5	C	10YR6/1	3	10	rare, f	v firm	m+cab	mff	y		
TPB06	1.2	C	10Y6/1	4	10	none	v firm	m+cab	cff	y		

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPB07	0.1	hCL	10YR4/2	0	2	rare, f	v firm	fab	n	n	IV	
TPB07	0.45	C	10YR5/2	0-1	1	rare, f	v firm	cab	cfd	y		3b WE
TPB07	0.75	C	10Y8/1	4	10	none	v firm	cab	cfd	y		
TPB07	1.5	C	10Y8/1	4	10	none	v firm	cab	cfd	y		
TPB08	0.15	(h)SCL	10YR4/2	0	2	com, f	firm	mab	n	n	IV	
TPB08	0.5	C	10YR5/2	0	5	none	v firm	cab	cfd	y		3b WE
TPB08	1	C	2.5Y5/1	4	5	rare, f	v firm	cab	cfd	y		
TPB08	1.5	C	N4	4	12	none	v firm	cab	cfd	y		
TPB09	0.1	SCL	10YR3/3	0	10	few, f	firm	fab	n	n	III	
TPB09	0.5	S+C	10YR5/3	0	2	rare, f	firm	mab	cmf	y		3a WE
TPB09	1.2	C	2.5Y5/1	4	10	none	v firm	cab	cmd	y		
TPB10	0.1	hCL	10YR4/2	0	10	com, m	firm	fab	n	n	III	
TPB10	0.5	C	10YR4/1	4	15	rare, f	v firm	mab	cfd	(y)		3b WE
TPB10	1.2	C	10Y5/1	3	12	none	v firm	cab	cmd	y		
TPB11	0.15	hCL	10YR4/2	0	5	few, f	firm	mab	n	n	II	
TPB11	0.5	SC	10YR5/2	0	1	few, f	firm	mab	cmf	mod		3a WE
TPB11	1.2	C	10YR6/2	4	10	none	friable	mab	cmd	n		
TPB12	0.2	SCL	10YR4/2	0	0	few, f	firm	msab	n	n	IV	
TPB12	0.5	SC	2.5Y5/3	0	2	few, f	firm	cab	cfd	y		3b WE
TPB12	1.2	SC	2.5Y6/2	3	2	none	firm	csab	cmp	y		
TPB12	1.5	C+S	10Y6/1	4	12	none	firm	cab	cfd	y		
TPB13	0.15	C	10YR4/2	0	2	com, f	v firm	csab	n	n	IV	3b

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPB13	0.5	C	10YR5/1	0	1	few, f	firm	mab	cmf	y		WE
TPB13	1.2	C	10Y4/1	4	12	none	v firm	cab	cmf	y		
TPB14	0.1	SC?	10YR4/2	0	12	few, f	v firm	mab	n	n	II	3a WE
TPB14	0.5	SCL	10YR4/2	0	0	rare, f	friable	mab	cfd	n		
TPB14	1.2	mSL	10YR5/2	4	10	none	friable	fab	cmd	n		
TPD15	0.1	LmS	10YR2/2	0	15	rare, f	loose	single grain	n	n	I	3b DR
TPB16	0.15	hCL	10YR4/2	0	1	rare, f	firm	mab	n	n	II	3a WE
TPB16	1.2	C	2.5Y4/1	3	10	few, f	firm	mab	cmf	(y)		
TPB16	1.5	C	2.5Y3/1	4	10	none	firm	cab	cff	y		
TPB18	0.15	hCL	10YR4/2	0-1	2	com, f	firm	fab	n	n	IV	3b WE
TPB18	0.5	C	10YR5/2	3	1	rare, f	v firm	cab	cmd	y		
TPB18	1.2	C+	2.5Y5/1	3	5	none	v firm	cab/massive	cfd	y		
TPB20	0.2	mSL	10YR4/2	0	1	rare, f	friable	fsab	n	n	I	3b DR
TPB20	0.6	LmS	10YR5/6	0	2	none	firm	m/cab	n	n		
TPB20	1.4	mS	10YR5/4	0	0	none	loose	crumb	n	n		
TPB23	0.2	mSL	10YR4/3	0	10	few, f	firm	fab	n	n	I	3a DR
TPB23	0.6	mSL	10YR4/3	0	1	few, f	v firm	csab	cff	n		
TPB23	1.5	mS	10YR3/3	0	0	none	v firm	cab	n	n		
TPB25	0.3	hCL	10YR5/1	0	5	few, f	v firm	fab	n	n	III	3b WE
TPB25	1.2	SC	10YR5/3	1	10	none	v firm	cab	cfd	y		
TPB26	0.1	hCL	10YR4/1	0	5	few, f	firm	fab	n	n	III	3b WE
TPB26	0.5	C	10YR5/3	0	2	few, f	firm	cab	cfd	y		

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPB26	1	C	10Y5/1	4	12	none	v firm	fab	cff	n		
TPB26	1.5	C	10Y5/1	4	12	none	v firm	m/cab	cff	y		
TPB27	0.1	hCL	10YR4/1	0	0	rare, f	firm	mab	n	n	III	3b WE
TPB27	0.5	C	10YR5/2	2	5	none	plastic	cab	cfd	y		
TPB27	1.2	C+S	10YR5/1	4	5	none	firm	cab	cfd	y		
TPB30	0.1	mSL	10YR3/3	0	1	few, f	friable	fab	n	n	I	3a DR
TPB30	0.5	mSL	10YR4/4	0	0	rare, f	friable	fab	cff	n		
TPB30	1	mS	10YR5/6	0	0	none	v friable	crumb	n	n		
TPB30	1.5	mSL	10YR5/1	0	10	none	friable	fab	cmd	n		
TPB31	0.1	mSL	10YR4/3	0	5	few, f	friable	fab	n	n	I	3b DR
TPB31	0.6	LmS	10YR5/4	0	1	none	firm	msab	cff	n		
TPB31	1	LmS	10YR5/6	0	1	rare, f	firm	fab	cff	n		
TPB31	1.5	fS	10YR6/6	0	0	none	friable	crumb	cff	n		
TPB32	0.1	mSL	10YR4/3	0	1	few, f	firm/friable	fsab	n	n	II	2 WE DR
TPB32	0.5	SC	10YR5/4	0	0	rare, f	firm	fab	cfd	n		
TPB32	1.2	C	2.5Y6/1	4	20	few, f	firm	cab	cfd	y		
TPB32	1.5	C	2.5Y4/1	4	12	none	firm	cab	cfd	y		
TPC01	0.1	mSL	10YR4/3	0	0	few, f	friable	fab	n	n	II	2 DR
TPC01	0.6	SCL	10YR4/4	0	1	none	friable	fab	cfd	n		
TPC01	1.0	mS + C	10YR4/4	0	0	none	v friable	crumb	cfd	n		
TPC01	1.5	mS + C	10YR5/4	0	0	none	friable	crumb	cfd	n		
TPC03	0.1	LmS	10YR3/3	0	0	rare, f	friable	fsab	n	n	II	2/3a

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPC03	0.6	SC	10YR3/4	0	0	rare, f	firm	cab	cmf	y		DR
TPC03	1.0	SC	10YR3/4	0	0	rare, f	firm	cab	cmf	y		
TPC03	1.5	C	2.5Y5/2	3	15	none	firm	cab	cmd	y		
TPC04	0.1	mSL	10YR5/3	0	5	many fine	firm	msab	n	n	I	3a DR
TPC04	0.5	LmS	10YR6/4	0	5	few, f	friable	fab	n	n		
TPC04	1.2	mS	10YR6/6	0	0	none	friable	crumb	n	n		
TPC05	0.1	SCL	10YR4/2	0	1	com, f	firm	cab	cfd	n	II	2 WE
TPC05	0.6	SC	10YR4/2	0	10	rare, f	v firm	mab	cmd	n?		
TPC05	1.2	C	10YR4/1	2	10	rare, f	firm	m+cab	cfd	n		
TPC05	1.5	C	10Y4/1	2	10	none	firm	cab	cmf	y		
TPC06	0.1	SCL	10YR3/3	0	2	few, f	friable	fsab	n	n	III	3a WE
TPC06	0.6	SCL	10YR4/4	0	1	rare, f	firm	mab	cmf	y		
TPC06	1.1	C	10YR5/2	1	10	none	firm	mab	cfd	y		
TPC06	1.5	SCL	2.5Y5/4	3	12	none	firm/friable	mab	cfd	n		
TPC07	0.1	hCL	10YR4/2	1	2	rare, f	friable	mab	n	n	IV	3b WE
TPC07	0.6	C	10YR5/2	4	5	none	plastic	massive	cff	y		
TPC07	1.1	C	10YR5/1	3	10	none	plastic	massive	cmf	y		
TPC07	1.5	C	10Y3/1	4	12	none	v firm	cab	cmf	y		
TPC08	0.1	hCL/SCL	10YR4/2	0	1	rare, f	firm/friable	fsab	n	n	IV	3b WE
TPC08	0.6	C	10YR5/3	0	5	none	Firm	cab	cfd	y		
TPC08	1	C	10Y4/1	4	10	none	v firm	cab	cmd	y		
TPC08	1.5	C	10Y3/1	4	12	none	v firm	cab	cmf	y		

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPC09	0.1	SCL	10YR4/1	0	2	few, f	firm	fab	n	n	III	
TPC09	0.6	C	10YR4/1	2	2	few, f	firm	cab	cmf	y		3a WE
TPC09	1.2	SC	2.5Y5/2	2	2	none	firm	cab/massive	cmd	y		
TPC10	0.1	SC	10YR4/3	0	1	few, f	v firm	m+cab	cff	n	IV	
TPC10	0.6	C+S	10YR5/2	2	2	none	firm	cab	cmf	y		3b WE
TPC10	1	C	10Y5/1	2	5	none	v firm	cab	cmd	y		
TPC10	1.5	C	10YR4/1	2	12	none	v firm	cab	cff	y		
TPC11	0.1	hCL	10YR4/2	0	1	few, f	firm	cab	n	n	IV	
TPC11	0.5	SC	2.5Y5/2	0	1	rare, f	v firm	cab	cmd	y		3b WE
TPC11	1.2	C	2.5Y4/2	4	1	none	v firm	cab	cmf	y		
TPC11	1.5	C	10Y3/1	4	12	none	v firm	cab	cmf	y		
TPC12	0.1	hCL	10YR4/2	0	5	com, f	firm	mab	n	n	IV	
TPC12	0.6	C	2.5Y4/1	3	10	few, f	v firm	cab	cff	y		3b WE
TPC12	1	C	N5	4	10	few, f	firm	m+cab	cfd	y		
TPC12	1.5	C+	N4	1	2	none	v firm	massive	mff	y		
TPC13	0.1	SC	10YR4/2	0	1	few, f	firm/friable	fsab	n	n	III	
TPC13	0.6	C	2.5Y5/3	0	1	rare, f	v firm	cab	cfd	y		3b WE
TPC13	1.5	C	10Y5/1	4	10	none	v firm	cab	cmf	y		
TPC14	0.1	hCL	10YR4/2	0	2	rare, f	firm	mab	n	n	IV	
TPC14	0.6	C	10YR5/2	0	2	rare, f	firm	cab	cmf	y		3b WE
TPC14	1.2	C	10YR5/2	2	2	rare, f	firm	cab	cmd	y		
TPC14	1.5	C	10Y5/1	4	10	none	v firm	cab	cmd	y		

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPC15	0.1	hCL	2.5Y4/2	0	2	rare, f	firm/friable	fab	n	n	III	
TPC15	0.6	C	10YR5/1	3	15	none	firm	cab	cmd	(y)		3b WE
TPC15	1	C	10Y5/1	4	10	none	firm	mab	cfd	n		
TPC15	1.5	C	N4	4	10	none	v firm	cab	cfd	y		
TPC16	0.1	SCL	10YR4/2	0	2	rare, f	friable	fab	n	n	III	
TPC16	0.6	C	10YR5/2	0	1	none	firm/friable	mab	cfd	n		3a WE
TPC16	1.2	C	10Y5/1	4	2	none	firm	mab	cfd	y		
TPC16	1.5	C	10Y2.5/1	4	10	none	firm	cab	cff	y		
TPC17	0.1	mSL	10YR4/2	0	1	rare, f	friable	fsab	n	n	I	
TPC17	0.6	cS	10YR5/6	0	12	none	friable	crumb	cfd	n		3b DR
TPC17	1.1	mS	2.5Y6/3	0	15	none	v friable	fsab	cff	n		
TPC17	1.5	cS	2.5Y6/3	0	15	none	v friable	crumb	n	n		
TPC20	0.1	mSL	10YR4/2	0	1	few, f	friable	fsab	n	n	I	
TPC20	0.6	SC	10YR4/4	0	5	few, f	firm	fsab	cff	n		2/3a DR
TPC20	1	SC	10YR5/3	0	10	rare, f	firm	cab	cmd	y		
TPC20	1.5	cS	10YR5/6	0	15	none	friable	crumb	cff	n		
TPD02	0.1	LmS	10YR3/3	0	0	rare, f	v friable	crumb	n	n	II	
TPD02	0.6	SCL	10YR6/3	1	2	rare, f	friable	fab	cmf	n		2 TX DR
TPD02	1	SC	10YR5/3	0	5	rare, f	firm	cab	cmf	y		
TPD02	1.5	SC	10YR5/4	0	1	rare, f	firm/friable	mb	cmf	(y)		
TPD05	0.2	LmS	10YR3/3	0	1	rare, f	friable	crumb	n	n	I	
TPD05	0.6	cS	10YR5/4	4	10	none	loose	crumb	n	n		4 DR

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPD05	1.0	LcS	10YR5/3	4	15	none	v friable	crumb	n	n		
TPD05	1.5	SCL	2.5Y5/6	4	5	none	friable	fab	cmf	n		
TPD07	0.1	mSL	10YR3/3	0	5	few, f	friable	fsab	n	n	II	2 DR
TPD07	0.6	C	10YR4/3	3	5	none	firm	mab	cfd	(y)		
TPD07	1.0	C	10YR5/4	4	10	none	firm	fab	cff	n		
TPD07	1.5	SCL	10YR5/4	3	10	none	firm/friable	mab	cfd	n		
TPD09	0.1	LmS	10YR2/2	0	2	rare, f	v friable	fsab	n	n	III	2 WE
TPD09	0.6	SC	10YR5/3	3	1	none	firm	mab	cff	y		
TPD09	1.0	SC	10YR4/3	0	2	none	firm	mab	cff	y		
TPD09	1.5	SC	10YR5/2	4	2	none	friable/firm	mab	cff	n		
TPD11	0.1	LmS	10YR3/3	0	2	none	loose	crumb	n	n	I	3b DR
TPD11	0.5	mS	10YR4/4	0	0	none	loose	crumb	cmf	n		
TPD11	1.0	mS	10YR4/4	0	2	none	loose	crumb	cmf	n		
TPD13	0.1	LmS	10YR4/2	0	1	rare, f	friable	crumb	n	n	I	3a DR
TPD13	0.5	mSL	10YR4/4	0	1	none	v friable	fsab	cfd	n		
TPD13	1.0	C+S	10YR5/3	0	5	rare, f	firm/friable	fsab	cfd	n		
TPD13	1.5	mS	10YR4/4	0	2	none	loose	crumb	cff	n		
TPD13	1.5	mS	10YR5/8	0	2	none	loose	crumb	cff	n		
TPD14	0.3	LmS	10YR2/2	0	2	none	v friable	crumb	n	n	I	3b DR
TPD14	0.6	mS	10YR3/3	0	10	none	loose	single grain	n	n		
TPD14	1.2	mS	10YR6/4	0	0	none	loose	single grain	n	n		
TPD15	0.5	LmS	10YR4/2	0	20	few, f	loose	single grain	n	n	I	3b

Location	Depth	Texture	Colour	HCl (R.)	Stones %	Roots	Consistency	Structure	Mottling	SPL	Probable WC	Probable Grade
TPD15	1.2	cS	7.5YR2.5/1	0	12	none	loose	single grain	cfd	n		DR
TPD15	1.5	mS+C	10YR5/6	0	1	none	friable	fab	cfd	n		
TPD16	0.2	LmS	10YR2/1	0	10	rare, f	firm then loose	fab	n	n	I	3a/3b DR
TPD16	0.5	fS	10YR5/4	0	10	rare, f	loose	crumb	n	n		
TPD16	1.2	fS	10YR5/6	0	1	rare, f	loose	single grain	n	n		
TPD17	0.2	LmS	10YR3/3	0	5	none	loose	single grain	n	n	I	3b DR
TPD17	0.6	mS	10YR5/8	0	0	none	loose	single grain	n	n		
TPD17	1.5	C+S	5Y6/1	0	0	none	soft	no	ccd	y		
TPD18	0.2	LmS	10YR2/1	0	5	rare, f	loose	crumb	n	n	I	3b DR
TPD18	0.6	fS	10YR5/6	0	2	rare, f	loose	crumb	n	n		

Abbreviations

DR	Droughtiness limitation
HCl (R)	Reaction to Hydrochloric acid
SPL	Slowly permeable layer
WC	Wetness Class
WE	Wetness limitation

Textures		Colours	Structure		Mottling					
					Abundance		Size		Contrast	
C	Clay	Code refers to the Munsell Soil Colour Book – for example 10YR4/1 10YR is the hue 4/ is the value /1 is the chroma	F, m, c sab	Fine, medium or coarse subangular blocky	f	Few	f	Fine	f	Faint
SC	Sandy clay				c	Common	m	Medium	d	Distinct
hCL	Heavy clay loam				m	Many	c	Coarse	p	Prominent
mCL	Medium clay loam		F, m c ab	Fine, medium or coarse angular blocky						
SCL	Sandy clay loam									
mSL	Medium sandy loam									
LmS	Loamy medium sand									
LcS	Loamy coarse sand									
fS	Fine sand									
mS	Medium sand									
cS	Coarse sand									

Annex B: Photographs

Sand soil type

Clay soil type

Intermediate soil type

Topic glossary

Acronym/Abbreviation	Definition
ALC	Agricultural Land Classification
DOL	Draft Order Limits
EIA	Environmental Impact Assessment
ES	Environmental Statement
GI	Ground Investigations
PEIR	Preliminary Environmental Information Report
WC	Wetness Class
WC I	Wetness Class I - Well drained
WC II	Wetness Class II - Moderately well drained
WC III	Wetness Class III - Imperfectly drained
WC IV	Wetness Class IV - Poorly drained
WC V	Wetness Class V - Very poorly drained

References

Ref 1 LionLink Environmental Impact Assessment Scoping Report 2024. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020033-000046-LION%20-%20Scoping%20Report%20-%20Main%20Text.pdf (accessed 17/05/2025)

Ref 2 Planning Inspectorate Scoping Opinion. Proposed LionLink Multi-purpose interconnector. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020033-000103-LION%20-%20Scoping%20Opinion.pdf (accessed 17/05/2025)

Ref 3 National Grid 2025. Sea Link, Volume 6: Environmental Statement Document: 6.3.2.6.A, Part 2 Suffolk, Chapter 6 Appendix A, Predictive Agricultural Land Classification Report – Suffolk. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020026-000299-6.3.2.6.A%20ES%20Appendix%202.6.A%20Predictive%20Agricultural%20Land%20Classification%20Report%20-%20Suffolk.pdf (accessed 17/05/2025)

Ref 4 National Grid 2025. Sea Link, Volume 6: Environmental Statement Document: 6.4.2.6, Part 2 Suffolk, Chapter 6 Agriculture and Soils – Figures. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020026-000460-6.4.2.6%20ES%20Figures%20Suffolk%20Agriculture%20and%20Soils.pdf (accessed 17/05/2025)

Ref 5 Ministry of Agriculture, Fisheries and Food (1988). Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land.

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