

SITE CONDITION REPORT

DB CARGO (UK) LIMITED

April 2023

Version 1.1

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	DB Cargo (UK) Limited
Activity address	Barking Eurohub Box Lane Renwick Road Barking IG11 0SQ
National grid reference	TQ 47550 83233

Document reference and dates for Site Condition Report at permit application and surrender	<p>Site Condition Report DBC_EUc25609scr dated September 2020. Version 1.0. This Site Condition Report (SCR) accompanies an application to vary Environmental Permit number EPR/GB3003GR (the permit) for the inert and excavation waste transfer station operated by DB Cargo (UK) Limited (DB Cargo) at the address above. The variation application includes the addition of an area of land comprising "Harry Sidings" to the existing permitted area. Whilst this SCR principally is relevant to Harry Sidings information also is presented for reference in relation to the "existing permitted area" as a SCR was not prepared when the permit was first issued in July 2018. For the purpose of this SCR the existing permitted area and Harry Sidings are referred to collectively as "the site". Harry Sidings is shown hatched in red and the existing permitted area is shown bordered in green on Figure 1 (Drawing reference DBC/EU/07-20/21895). The combined area comprising the site is shown on Figure 2 (Drawing reference DBC/EU/07-20/21896).</p> <p>Site Condition Report DBC_EUc29216scr dated April 2023. Version 1.1 (application to vary the bespoke permit to increase the permit boundary and broaden the List of Waste (LoW) types to include LoW codes 19 12 12 and 19 13 02, and a range of metal wastes specified under LoW Chapters 02, 12, 16, 17,19 and 20). See section 4 of the SCR for further details.</p>
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Document references for site plans (including location and boundaries)	<p>Report Reference DBC/EU/AW/5636/01 Figure 1 – drawing reference DBC/EU/07-20/21895.</p> <p>The area the subject of this SCR is hatched in red.</p>
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Note:

In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue

Environmental setting including:

- geology
- hydrogeology
- surface waters

Geology

The geology at the site is based on a review of the British Geological Survey (BGS) digital Geological Map of Great Britain 1:50000 scale and borehole logs accessed from the BGS website. According to information on the digital map the geology beneath the site comprises superficial Quaternary Alluvium deposits comprising clay, silt, sand and peat underlain by the London Clay Formation of the Thames Group. The London Clay Formation is underlain by the Harwich Formation underlain by the Lambeth Group which is in turn underlain by the Chalk Group. There are records of four boreholes located within the existing permitted area and four boreholes within the Harry Sidings area shown on Figure 1. Two boreholes referenced TQ48SE1211 and TQ48SE649 are located approximately in the centre of the existing permitted area. Made ground was recorded in the boreholes from ground level to approximately 3.45m below ground level (bgl) and 2.1mbgl generally comprising sand and gravel with ash and clinker. Superficial Alluvium deposits generally comprising clay, peat, sand and gravel were recorded at thicknesses of approximately 7.85m and 9.9m and the London Clay Formation generally comprising stiff brownish grey and dark grey silty and sandy clay was recorded at depths of approximately 11.3mbgl and 12.0mbgl respectively. The total thickness of the London Clay Formation was not proven in either borehole. A record of a borehole located in the west of the existing permitted area reference TQ48SE650 records made ground deposits comprising sand, gravel, ash and clinker from ground level to approximately 1.65mbgl. Superficial deposits of sand and gravel, silt and peat were recorded in the borehole to a depth of approximately 11.2mbgl. The superficial deposits are underlain by stiff dark grey silty clay described as the London Clay Formation. The total thickness of the London Clay Formation was not proven in the borehole. Records of a borehole located in the south east corner of the existing permitted area reference TQ48SE1233 records made ground generally comprising gravel, concrete, ash, clinker and brick from ground level to a depth of approximately 2.1mbgl. The made ground is underlain by Alluvium deposits comprising gravel, clay and peat to a depth of 11.2mbgl. The stiff brownish grey sandy fissured clay of the London Clay Formation is recorded from 11.2mbgl to 23.3mbgl and is underlain by dense brownish grey clay of the Harwich Formation to a depth of 24.8mbgl. The Harwich Formation is underlain by the Woolwich and Reading Beds (currently referred to as the Lambeth Group) generally comprising very stiff grey clay recorded to the base of the borehole at 30.15mbgl.

Borehole reference TQ48SE1351 is located in the Harry Sidings area. Made ground generally comprising tarmacadam, concrete, sand and gravel with brick, ash, glass and pottery is recorded between ground level and approximately 2.9mbgl. The made ground deposits are underlain by superficial deposits comprising firm to stiff

EA Template V2.0 4 August 2008

green grey and blue grey clay Alluvium to the base of the borehole at 3.0mbgl. Two boreholes referenced TQ48SE1354 and TQ48SE1213 are located in the centre of the Harry Sidings area. Made ground generally comprising tarmacadam, concrete, sand and gravel with brick, fibreglass, glass, ash, clinker, sandstone, mudstone and flint are recorded from ground level to depths of 2.4mbgl and 2.8mbgl respectively. Superficial deposits are recorded underlying the made ground comprising firm blue grey mottled black slightly sandy clay. Alluvium is recorded in borehole reference TQ48SE1354 to the base of the borehole at 4.0mbgl. Borehole reference TQ48SE1213 records superficial deposits underlying the made ground comprising clay and peat, Alluvium to 7.5mbgl, underlain by sand and gravel to a depth of 11.6mbgl. The superficial deposits are underlain by the London Clay Formation comprising stiff brownish grey slightly sandy clay to the base of the borehole at 15.0mbgl. The logs for borehole reference TQ48SE1267 located in the south east of the Harry Sidings area of the site records made ground comprising hardcore and clayey sandy gravel from ground level to approximately 1.8mbgl. The made ground is underlain by superficial deposits generally comprising clay and peat, Alluvium to 6.9mbgl underlain by gravel to a depth of 11.9mbgl. The gravel is underlain by the London Clay Formation comprising very stiff brownish grey and greyish brown sandy clay to a depth of approximately 19.2mbgl which in turn is underlain by the Harwich Formation comprising sand and limestone to a depth of 21.2mbgl. The Harwich Formation is underlain by the Lambeth Group generally comprising clay, sand and gravel to the base of the borehole at 36.0mbgl.

Hydrogeology

The superficial Alluvium deposits are classified as a Secondary (undifferentiated) aquifer. The London Clay Formation is classified as Unproductive Strata and has a low hydraulic conductivity generally. The Lambeth Group is classified as a Secondary A aquifer and the Chalk group as a Principal Aquifer. Groundwater level is recorded in boreholes TQ48SE649 and TQ48SE650 located in the existing permitted area. Groundwater was encountered at approximately 7.8mbgl and a resting groundwater level was recorded at approximately 2.95mbgl in TQ48SE649. Groundwater was encountered at approximately 7.05mbgl and a resting groundwater level was recorded at approximately 3.65mbgl in TQ48SE650. The ground level in metres Above Ordnance Datum (mAOD) was not recorded in either borehole. Groundwater levels were recorded in three boreholes in the Harry Sidings area: reference TQ48SE1351 at approximately 2.2mbgl, TQ48SE1213 at approximately 2.4mbgl and TQ48SE1267 at approximately 3.1mbgl. The groundwater elevations are between 0.55mAOD in the west of the Harry Sidings area and -1.28mAOD in the south east of the area.

The site is not located within a Source Protection Zone (SPZ). The nearest SPZ is an SPZ Zone 2 located approximately 2km north east of the site.

	<p>According to the Envirocheck database there are no groundwater abstractions within 1km of the site. There is a groundwater abstraction located approximately 1.5km south west of the site. The operator is The Green Electrician Group Limited and the use is recorded as 'Other Industrial/Commercial/Public Services: Heat Pump'. The abstraction rate is not given.</p> <p>Hydrology</p> <p>There are two unnamed drains in close proximity to the site. The drains are located adjacent to the northern boundary of the site and 150m to the south of the site. Both drains discharge into a watercourse named The Gores which is located approximately 130m south of the site at the closest point. The Gores flows generally south and discharges to the River Thames approximately 900m south of the site. The River Thames is located approximately 600m south of the site at the closest point.</p> <p>Based on the Flood Map for Planning on the gov.uk website the site is located in Flood Zone 3 although it is shown as benefitting from flood defences. Flood Zone 3 is defined as land assessed as having a 1 in 100 or greater annual probability of river flooding.</p> <p>According to the Envirocheck database there is a surface water abstraction located approximately 185m south east of the site. The operator is Barking Riverside Limited and the use is recorded as 'Environmental: Non-remedial River/Wetland Support: Make-Up or Top Up Water'. The abstraction rate is not given. There are a further three surface water and tidal water abstractions within 2km of the site.</p>
<p>Pollution history including:</p> <ul style="list-style-type: none"> • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures 	<p>Information in respect of the potential pollution history at the site has been assessed from information in the Envirocheck report including historical maps.</p> <p>The map from 1875 shows the site as open fields and farmland approximately 750m south east from a small hamlet named "Rippleside" with the London, Tilbury & Southend railway line within its southern boundary. The site remained the same in 1898 being surrounded by relatively undisturbed fields and farmland and the railway line. The map from 1920-1921 again shows the site as relatively undisturbed fields and farmland with the "Rippleside" hamlet to the north west increasing slightly in size compared to the map from 1875. Between 1920-1921 and 1938 large scale urban development took place approximately 500m north of the site. Some small-scale development approximately 200m north east of the site is also evident on the map from 1938, however the site itself and its surroundings to the south remain relatively undisturbed. The railway structure expanded with the introduction of "Ripple Lane Sidings" shown to the west of the site on the map from 1950 and the large-scale urban development approximately 500m to the north was established further increasing in density. The site in 1950 remained much the same as it was in 1875 according to the historical map with the London, Tilbury & Southend railway line within its southern boundary and a network of</p>

	<p>fields across the rest of the extent. The map from 1962 showed large-scale development on and surrounding the site, with the extent of the site now wholly taken up by the greatly expanded railway network named “Ripple Lane Sidings” and the previously undisturbed fields are shown as developed up to the edge of the site. The map from 1969 confirms the site as encompassing a small section of the “Ripple Lane Sidings”. At some point between 1969 and 1973 a container depot was established approximately 80m to the east of the existing permitted area and the existing permitted area was no longer part of the railway network. This is confirmed on the map from 1975 which labels the site as a “Depot” with another “Depot” structure approximately 80m to the east and the railway lines diverted approximately 100m to the south and adjacent to the boundary of Harry Sidings in the north. The site and surrounding area remain largely unchanged on the map from 1984, although the existing permitted area is now specifically labelled as a “Freighter Terminal”.</p> <p>The historical maps show that the land-use over the last century and a half has been mainly associated with locomotive transport and its associated activities, particularly since 1962 when “Ripple Lane Sidings” was first recorded as being present.</p>
<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p>	<p>According to the Envirocheck database, there are no Contaminated Land Register Entries and Notices within 1km of the existing permitted area.</p> <p>The Envirocheck report records no pollution incidents at the site and one pollution incident within 500m of Harry Sidings which was categorised as a Category 3 “minor incident” occurring in 1991.</p> <p>There are 2 substantiated pollution incidents within 250m of Harry Sidings. In November 2014 a Category 2 Significant water impact incident for a pollutant identified as “sewage materials: grey water” was recorded at a location just outside the northern boundary of Harry Sidings. In November 2001 a substantiated pollution incident classified as a Category 2 Significant air impact and a Category 3 Minor water impact was recorded approximately 140m north west of Harry Sidings for two pollutants identified as “smoke” and “firefighting runoff”.</p> <p>The Envirocheck report identifies discharge consent reference Canm.1093 issued to both Biffa Waste Services Ltd and Parkdale Investments Ltd on the same date in 2006 for a location adjacent to the northern boundary of Harry Sidings. The discharge type is identified as “trade effluent discharge – site drainage” to “Freshwater stream/river” with the receiving water identified as “Mogs Farm Sewer”. The status of discharge consent reference Canm.1093 is identified as “New Consent” hence it is assumed to be active.</p> <p>There are eight discharge consents within approximately 500m of the site for which the receiving water is identified as The Ship and Shovel Sewer (4 consents) or Gores Brook (4 consents). Three of the consents for The Ship and Shovel are identified as revoked and the operator for the</p>

	<p>one new (assumed active) consent is Thames Water Utilities Limited for Storm Sewage Overflow. Two of the consents for discharge to the Gores Brook are identified as surrendered and two are new (assumed active) consents registered to Nuttall Wayss & Freytag Kier Jv and Ctrl (UK) Limited.</p> <p>There is 1 Licensed Waste Management Facility identified in the Envirocheck report on the site which comprises the existing permitted area operated by DB Cargo and a further 2 facilities both operated by Biffa Waste Services Limited are located within 250m of Harry Sidings. Maybell Farm Asbestos Waste Transfer Station (permit issued to September 2018) is located approximately 60m north of Harry Sidings and Maybell Farm Household, Commercial and Industrial Transfer Station (permit issued 1994, last modified 2011) is located approximately 100m north of Harry Sidings.</p> <p>The Envirocheck report identifies 2 historical landfill sites within 500m of Harry Sidings. A historical landfill named “Barking Power Station” that “Deposited Waste Including Industrial Waste” is identified approximately 220m south of the existing permitted area. Waste is identified as first input in 1968. A historical landfill identified as Renwick Road Landfill Site which was authorised to deposit inert, industrial, commercial, household and special waste deposited between 1977 and 1993 is located approximately 230m south east of the existing permitted area.</p> <p>In addition to the Licensed Waste Management Facilities the Envirocheck report identifies 5 Registered Waste Transfer Sites within 500m of Harry Sidings all of which are located in the industrial estate to the north and north west of Harry Sidings.</p> <p>There is 1 Registered Waste Treatment or Disposal Site within 1km of the site. Located at “Maybells Farm” approximately 150m north west of Harry Sidings the licence is held by L Watkinson & Sons Limited and categorised as a “Scrapyard – with Transfer Station”. The license status is recorded as superseded according to the Envirocheck report.</p> <p>The closest Local Authority Pollution Prevention and Control Permit (LAPPC) is located approximately 30m north of Harry Sidings at “Unit 9 Maybells Industrial Estate” which is for PG6/34 (respraying of road vehicles) by Commercial Psv Painters Limited. Approximately 25m south of Harry Sidings an LAPPC registered to Railfreight Distribution described as “PG3/16” (mobile screening and crushing process) is held at Box Lane, Barking. The status is recorded in the Envirocheck report as “Application exempt from APC”.</p>
Baseline soil and groundwater reference data	With the exception of the records of the borehole logs accessed from the BGS Digital Geology of Britain Viewer described in the geology section earlier in this SCR, here is no baseline soil and groundwater reference data.

Supporting information	<p>Envirocheck Report number 240639358_1_1 dated 7 April 2020 with historical maps supplied by the Landmark Information Group.</p> <ul style="list-style-type: none"> • Source information identifying environmental setting and pollution incidents (Envirocheck report) • Historical maps (Envirocheck report) • A copy of the Envirocheck Report is presented at Annex A to this SCR. • Copies of Figure 1 (drawing reference DBC/EU/07-20/21895) and Figure 2 (drawing reference DBC/EU/07-20/21896) are presented at Annex B to this SCR.
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3.0 Permitted activities	
Permitted activities	<p>Environmental Permit number EPR/GB3003GR – inert and excavation waste transfer station</p> <p>Treatment consisting only of manual sorting or separation of waste into different components for disposal or recovery.</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>D14: Repackaging prior to submission to any of the operations numbered D1 to 13</p> <p>D9: Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R5: Recycling/reclamation of other inorganic materials</p>
Non-permitted activities undertaken	There are no non-permitted activities undertaken.
Document references for:	<p>Site location and permit boundary Figure 1 (drawing reference DBC/EU/07-20/21895) and Figure 2 (drawing reference DBC/EU/07-20/21896).</p> <p>Environmental Risk Assessment report reference DBC/EU/AW/5636/01/ERA dated September 2020.</p>
<ul style="list-style-type: none"> • plan showing activity layout; and • environmental assessment. 	<p>risk</p>

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	<p>An application was submitted to the Environment Agency (EA) in January 2022 to vary the bespoke permit to add a range of new List of Waste (LoW) codes to the permit. During the Duly Making stage of the application (in April 2023) the operator informed the EA of proposals to extend the permit boundary to the west.</p> <p>The extended permit boundary is presented on Figure 1 (drawing reference DBC/EU/12-21/22895revA).</p>
Have there been any changes to the permitted activities?	The List of Waste (LoW) table has been broadened to include LoW codes 19 12 12 and 19 13 02, and a range of metal wastes specified under LoW Chapters 02, 12, 16, 17, 19 and 20.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	No
Checklist supporting information	<ul style="list-style-type: none"> Plan showing any changes to the boundary (where relevant) <i>The Environmental Permit boundary and activity areas - Figure 1 (drawing reference DBC/EU/12-21/22895revA) is presented at Annex C to this SCR.</i> Description of the changes to the permitted activities (where relevant) <i>Variation application report reference DBC/EU/AW/5671/01 dated January 2022 including Environmental Risk Assessment (ERA) report reference DBC/EU/AW/5671/01/ERA Version 1.1 dated April 2023.</i>

5.0 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist supporting information	<ul style="list-style-type: none"> Inspection records and summary of findings of inspections for all pollution prevention measures Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation

Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.

Checklist supporting information	of	<ul style="list-style-type: none">• Records of pollution incidents that may have impacted on land• Records of their investigation and remediation
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7.0 Soil gas and water quality monitoring (where undertaken)

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

Checklist
supporting
information

of

- Description of soil gas and/or water monitoring undertaken
- Monitoring results (including graphs)

8.0 Decommissioning and removal of pollution risk

Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.

Checklist of supporting information	<ul style="list-style-type: none">• Site closure plan• List of potential sources of pollution risk• Investigation and remediation reports (where relevant)
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9.0 Reference data and remediation (where relevant)

Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated.

If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.

Checklist of supporting information	<ul style="list-style-type: none">• Land and/or groundwater data collected at application (if collected)• Land and/or groundwater data collected at surrender (where needed)• Assessment of satisfactory state• Remediation and verification reports (where undertaken)
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10.0 Statement of site condition

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.

Annex A

**Envirocheck Report number 240639358_1_1 dated 7 April 2020 with historical maps supplied by the
Landmark Information Group**

Not included with Version 1.1 April 2023

**This document was provided previously to the Environment Agency with Version 1.0 in September
2020**

Annex B

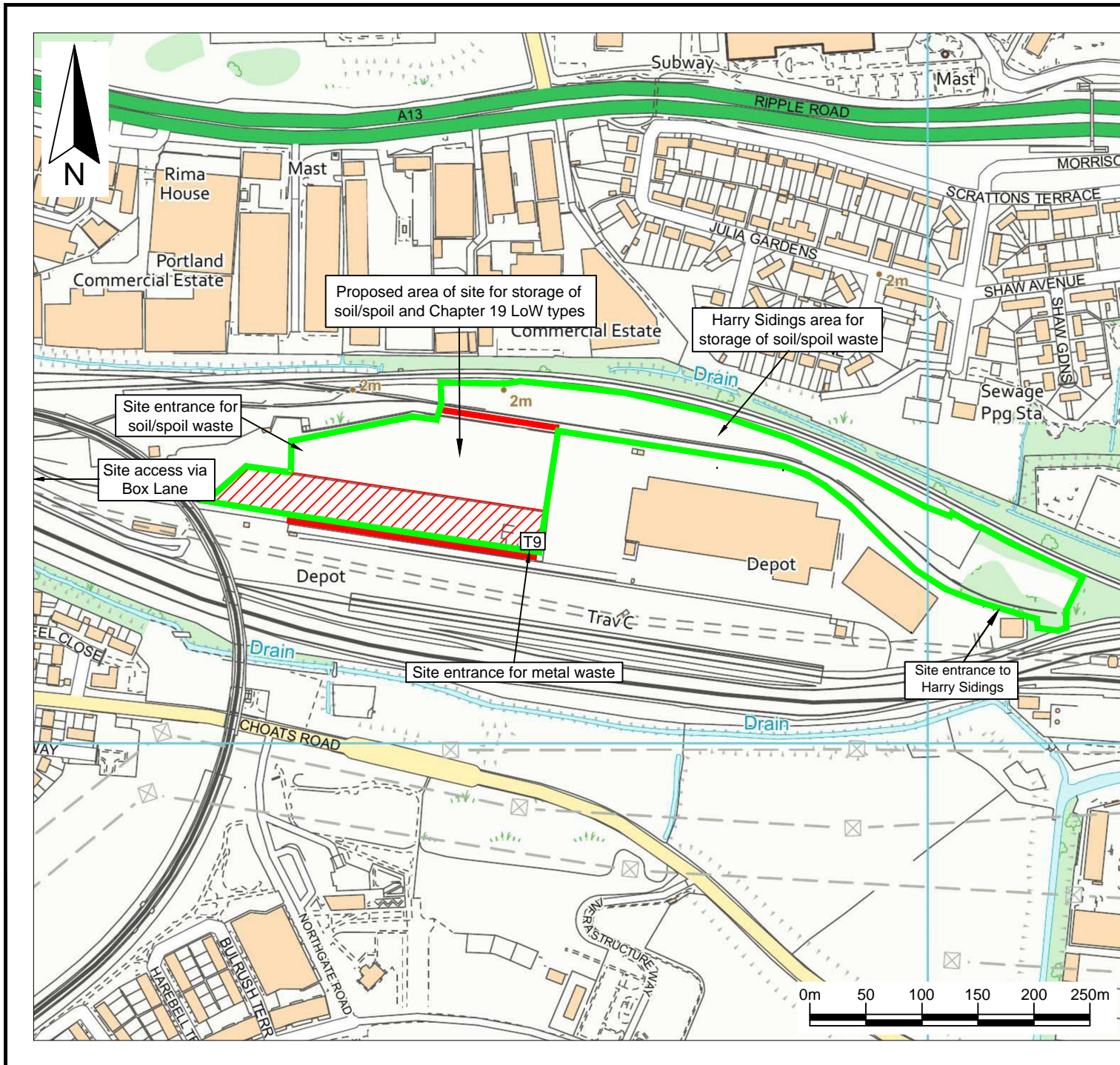
Figure 1 (drawing reference DBC/EU/07-20/21895) and Figure 2 (drawing reference DBC/EU/07-20/21896)

Not included with Version 1.1 April 2023

These drawings, which were provided previously to the Environment Agency with Version 1.0 in September 2020 have been superseded by the drawing presented at Annex C

Annex C

**The Environmental Permit boundary and activity areas
Figure 1 (drawing reference DBC/EU/12-21/22895revA)**



Key / Notes

- Environmental Permit boundary
- Proposed area of site for storage of metal wastes
- T9 Location of currently registered T9 waste exemption
- Train loading area

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	21/04/23
A	Minor amendments	KR	AW	LH	18/04/23
	Draft	KR	AW	AW	07/01/22

Site
EUROHUB BARKING

Client
DB Cargo (UK) Limited

Title
The Environmental Permit boundary and activity areas

Figure 1 Scale
1:5,000@A4

Drawing Ref
DBC/EU/12-21/22895revA

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