

## 1 INTRODUCTION

### 1.1 Background to the proposed scheme

1.1.1 York Potash Limited (YPL) (a subsidiary of Sirius Minerals Limited) proposes to develop harbour facilities on Teesside for the export of polyhalite bulk fertiliser (the product). The proposed Harbour facilities, designed to export up to 13 million tonnes per annum (mtpa) of product, would comprise the following elements:

- A port terminal on the southern bank of the Tees estuary (with capital dredging of an associated berth pocket and approaches, a quay and ship loaders).
- A conveyor system to transfer product to the port terminal, from a Materials Handling Facility (MHF) at Wilton (the MHF at Wilton is the subject of a separate planning application and is not considered in this assessment, other than in the cumulative impact assessment).
- Product storage facilities adjacent to the port terminal, in the form of storage surge bins.
- Staff welfare and office facilities.

1.1.2 In this document, the Harbour facilities (comprising the port terminal, conveyor system, surge bins and related infrastructure) are referred to as the 'proposed scheme'.

1.1.3 The proposed volume of product that would be handled by the facilities exceeds the threshold set out in the Planning Act 2008 for the export of bulk material from harbour facilities (5mtpa). This means that the proposed harbour facilities constitute a Nationally Significant Infrastructure Project (NSIP), requiring a Development Consent Order (DCO) (see **Section 2**). The regulatory authority for a DCO is the Planning Inspectorate (PINS), with the consent issued by the Secretary of State.

### 1.2 The Environmental Statement

1.2.1 This document constitutes the Environmental Statement (ES) for the proposed scheme and presents the findings of the Environmental Impact Assessment (EIA) process.

1.2.2 It has been prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009, as amended by the Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012, and with reference to relevant guidance notes from the Planning Inspectorate.

1.2.3 The objectives of the EIA process are to ensure that environmental factors are considered throughout the project and the decision making process, and that significant environmental effects are identified and assessed (see **Section 4**). As a result of this assessment process, measures to avoid or minimise any adverse impacts (mitigation measures) have been identified.

1.2.4 The EIA process encompasses an assessment of temporary and permanent potential direct and indirect impacts during the construction, operation and decommissioning phases of the proposed scheme.

### 1.3 Outline of the wider York Potash Project

1.3.1 The proposed scheme forms one of four distinct project elements which together comprise the York Potash Project (YPP), namely:

- The winning (the process of gaining access to the mineral) and working (the process of extracting the mineral) of polyhalite (the Mine).
- A mineral transport system (MTS) for the removal and transfer of the resource.
- A MHF for processing the polyhalite into a granulated product.
- Harbour facilities to export the polyhalite (the subject of this ES).

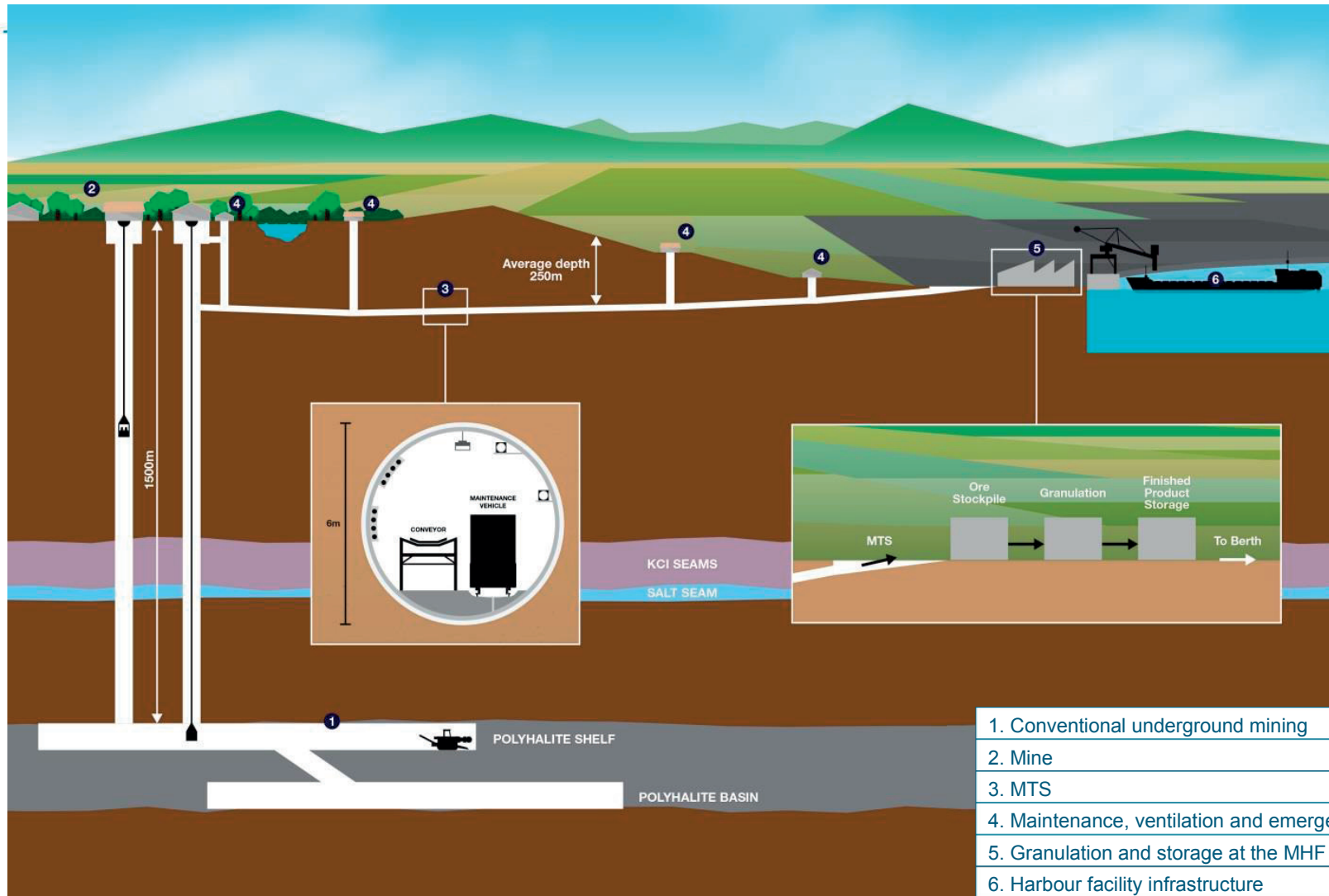
1.3.2 YPL proposes to win and work product from two deep polyhalite seams which lie beneath the North York Moors National Park, one of which extends eastwards beneath the North Sea. A marine licence for working this area of mineral has already been granted by the Marine Management Organisation (MMO). Once extracted, the dry product would be crushed, loaded onto hoppers, and transported to the MHF at Wilton through the underground MTS. The product would be granulated within the MHF in preparation for onward distribution via the port terminal. A proportion of the product would be distributed within the UK from the Wilton site (up to 150,000 tonnes of product, per annum, may be exported by road). This process is represented visually in **Figure 1-1**.

1.3.3 The overall YPP has four main geographical locations and the following consenting routes:

- The Mine and other ancillary facilities for the mine are proposed to be located at Dove's Nest Farm, near Whitby, with a proposed Construction Village and Park and Ride (P&R) to be located approximately 1.6km to the south of Whitby (although the Construction Village remains an option only). Operational phase P&R facilities would be located 2km to the east of Whitby (at Cross Butts roundabout).
- The MTS would extend approximately 36.7km from Dove's Nest Farm (where the MTS access shaft would be located) to the MTS Portal and MHF at Wilton. The MTS would include three intermediate shafts installed along its route, located approximately 8km, 24km and 29.5km from the Mine.
- A straddling application has been made to the North York Moors National Park Authority (NYMNPA) and Redcar and Cleveland Borough Council (RCBC) for the Mine and MTS. A separate application has been made to RCBC for the MHF at Wilton; and to Scarborough Borough Council for the Construction Village and P&R facilities. North Yorkshire County Council (NYCC) has also submitted an application to NYMNPA for P&R facilities to meet YPL's operational needs.
- The Harbour facilities would be located adjacent to the Port of Teesside, on the River Tees and joined to the MHF by conveyors. As set out above, the harbour facilities require a DCO from the Secretary of State.

1.3.4 A separate ES has been prepared for the Mine, MTS and MHF applications (inclusive of the MTS access shaft at Dove's Nest Farm and the MTS Portal at Wilton).

Figure 1-1 Overview of the key elements of the YPP



## 1.4 The study area for the proposed scheme

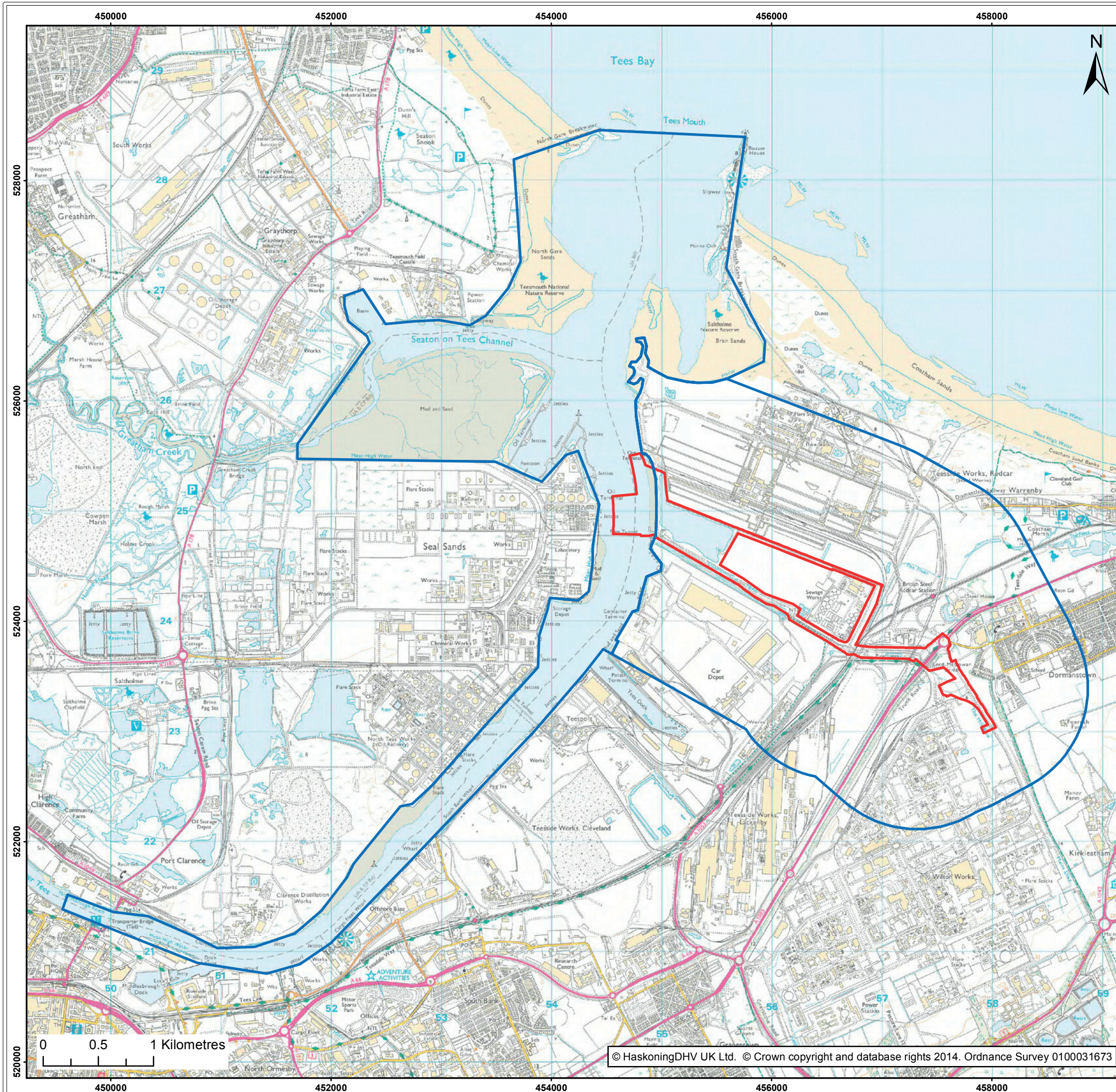
- 1.4.1 The study area is the area over which the direct and indirect potential impacts of the proposed scheme may be detected during the construction, operational and decommissioning phases. It includes the Tees estuary and the adjacent land on the south bank of the Tees estuary; as illustrated on **Figure 1-2**. **Figure 1-3** illustrates the location of a number of parcels of land and features which have been referred to throughout this report.
- 1.4.2 The Tees estuary is located on the north-east coast of England and lies between the towns of Stockton-on-Tees, Hartlepool, Redcar, Middlesbrough and Billingham. The Tees Valley has a long standing industrial heritage and remains one of the UK's main manufacturing regions.
- 1.4.3 The study area for the landside elements of the scheme comprises land to the south of the Tees estuary, extending eastwards to Dormanstown, northwards to Bran Sands steel works and southwards to Tees Dock. This boundary covers the area which has the potential to be directly and indirectly affected by the proposed scheme.
- 1.4.4 For the marine elements, the study area comprises the likely maximum extent over which potentially significant environmental impacts of the scheme may occur. The maximum extent of the potential impact has been determined to be the area over which the potential effects of the proposed scheme on tidal currents and sediment transport may occur. Such effects have the potential to affect other parameters, such as marine ecology, waterbird populations and water quality.
- 1.4.5 The proposed port terminal site comprises a grassed man-made embankment with access road and associated river frontage on the south bank of the Tees estuary, to the immediate south of the SSI Steel Works. The footprint of the proposed port terminal is backed by an artificial lagoon (Bran Sands lagoon) and raised landforms. The proposed conveyor corridors comprise grassland with occasional shrub to boundaries within the Wilton MHF site, semi-mature tree and shrub cover along the A1085 road corridor and coarse grassland with occasional regenerating scrub along the proposed conveyor routes. Typically, the conveyor routes follow existing industrial pipelines and access corridors. Topography within the quay site and along the conveyor routes is flat at between 5 to 10m above Ordnance Datum but is often surrounded or interrupted by higher man-made ground and embankments, including road and rail access corridors and a raised landfill site.
- 1.4.6 As illustrated on **Drawing PB1586-SK90** (included below), the proposed order limits fall within the administrative boundaries of both RCBC and Stockton-on-Tees Borough Council (SBC).

## 1.5 Report structure

- 1.5.1 Following this introduction, **Section 2** describes the relevant legislative and regulatory regime in the context of the EIA for the proposed harbour facilities. Section 3 presents a description of the proposed scheme and Section 4 describes the approach taken to the EIA (and the Cumulative Impact Assessment (CIA), Habitats Regulations Assessment (HRA) and Water Framework Directive (WFD) compliance assessment).
- 1.5.2 **Sections 5 to 21** set out the environmental assessment of the proposed scheme. These sections describe the nature of the existing (baseline) environment for the various environmental topics

considered during the EIA process. Potential impacts that could arise during the construction, operational and decommissioning phases of the harbour facilities with respect to each of these topics are then identified and assessed and, where appropriate, mitigation measures are defined. The predicted residual impacts (those potential impacts remaining assuming that the recommended mitigation measures are implemented) are then set out. **Section 22** lists the references cited within this ES.

BLANK PAGE



Legend:  
 DCO Order Limits  
 Study Area

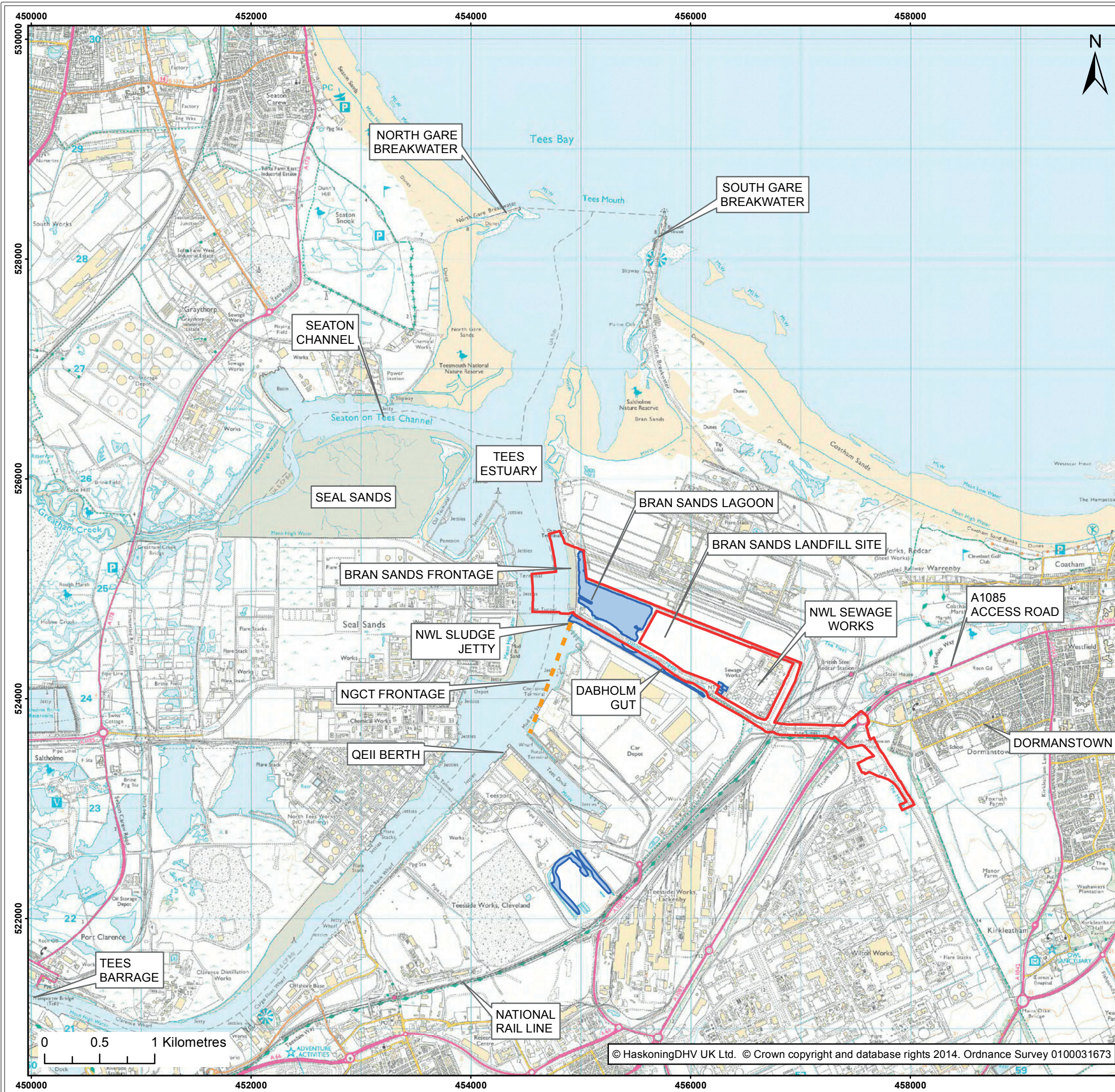
DCO Order Limits as of 24/02/15  
 Client: York Potash Limited  
 Project: York Potash Project Harbour Facilities

Title: Environmental Statement: Study Area

Part:	HF	Figure:	1.2	Drawing No:	9Y0989-HF-1-001
Rev:	Date:	Drawn:	Checked:	Size:	Scale:
1	03/03/2015	GC	SR	A3	1:35,000
0	09/12/2014	GC	SR	A3	1:35,000

Co-ordinate system: British National Grid

**ROYAL HASKONINGDHV**  
 INDUSTRY, ENERGY & MINING  
 RIGHTWELL HOUSE  
 BRETTON  
 PETERBOROUGH  
 PE3 8DW  
 +44 (0)1733 33 44 55  
 www.royalhaskoningdhv.com



- Legend:
- DCO Order Limits
  - Waterbody Areas
  - NGCT Frontage

DCO Order Limits as of 24/02/15

Client: York Potash Limited	Project: York Potash Project Harbour Facilities
--------------------------------	---

Title:  
Environmental Statement: Parcels of Land  
Referred to Within the Environmental Statement

Part:	HF	Figure:	1.3	Drawing No:	9Y0989-HF-1-002
Rev:	Date:	Drawn:	Checked:	Size:	Scale:
1	03/03/2015	GC	SR	A3	1:35,000
0	09/12/2014	GC	SR	A3	1:35,000

Co-ordinate system: British National Grid



**Royal HaskoningDHV**  
Enhancing Society Together

**ROYAL HASKONINGDHV**  
INDUSTRY, ENERGY & MINING  
RIGHTWELL HOUSE  
BRETTON  
PETERBOROUGH  
PE3 8DW  
+44 (0)1733 33 44 55  
www.royalhaskoningdhv.com






**LEGEND**

- ORDER LIMITS
- MATERIALS HANDLING FACILITY
- ADMINISTRATIVE BOUNDARY

REV	DATE	DESCRIPTION	BY	CHK	APP
7	19/03/19	PLANNING ISSUE	CH	RWP	RWP
6	18/03/19	UPDATED RLB	TF	RWP	RWP
5	12/12/14	PLANNING ISSUE	TF	RWP	RWP
4	9/12/14	PLANNING ISSUE	TF	RWP	RWP
3	21/04/14	UPDATED RLB	TF	RWP	RWP
2	11/04/14	UPDATED RLB	TF	RWP	RWP
1	24/11/14	DRAFT FOR CONSULTATION	GIC	CJ	RWP
0	20/08/14	DRAFT FOR CONSULTATION	IT	TJR	TJR

**REVISIONS**



**YORKPOTASH**  
A Sirius Minerals Project

**PROJECT**

YORK POTASH

**TITLE**

THE YORK POTASH  
HARBOUR FACILITIES ORDER 201X  
LOCATION PLAN  
REGULATION 5 (2)(o)  
DOCUMENT 3.1



**Royal HaskoningDHV**  
Engineering. Building. Together.

HASKONINGDHV UK LTD  
MARITIME & WATERWAYS  
Marborough House  
Newcastle upon Tyne NE1 4EE  
+44 (0) 191 211 1300 Telephone  
+44 (0) 191 211 1313 Fax  
info@newcastle.royalhaskoningdhv.com E-mail  
www.royalhaskoningdhv.com Internet

DRAWN	GIC	CHECKED	PASSED
DATE	JULY '14	CLIENT'S REF.	
SCALE	AT A1 1:20000	AUTOCAD REF.	PB1586-SK90

DRAWING No. **PB1586-SK90** REVISION **7**

BLANK PAGE