

National Grid and Tata Steel UK Limited

Design Compliance Statement

Port Talbot Substation

July 2025

Turley

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01 Introduction

This Design Compliance Statement (DCS) has been prepared by Turley Design on behalf of National Grid and Tata Steel UK Limited ('Tata Steel') in support of a Reserved Matters planning application for a substation and preliminary works at the Application Site ('the Site') on land at Port Talbot Steelworks, Port Talbot.

The description of development is as follows:

"Application for the approval of reserved matters (appearance, scale and layout) pursuant to planning permission P2024/0711 for the development of preliminary works and a new substation compound. Works to include earthworks, construction of working platforms, surface water management and drainage infrastructure, new electrical infrastructure (including ducting), new and improved internal access roads, 4 no. transformers, 1 no. generator, GIS building, amenity/welfare facility, water tank, storage/workshop buildings, boundary treatments, lighting, CCTV, noise mitigation measures, parking, creation of hardstanding and associated engineering operations."

Purpose of the Document

The Reserved Matters ('RM') submission follows the granting of hybrid planning permission (LPA Ref: P2024/0711) application for the proposed Electric Arc Furnace (EAF) development on land at the Port Talbot steelworks site. All matters were reserved in the outline area except access and landscaping which were approved in detail.

This DCS demonstrates that the proposed development is in accordance with the parameters of the consented hybrid development and therefore will be responsive to its surrounding context and can be delivered in accordance with relevant design policies. The DCS should be read in conjunction with the full set of supporting documentation submitted as part of the RM application, together with the Design and Access Statement (DAS) prepared for the wider hybrid application.

Structure of the Statement

This DCS is structured as follows:

- **Site Context:** This chapter describes the spatial constraints which informs the Proposed Development.
- **The Proposals:** This chapter sets out the Proposed Development in terms of layout, scale and appearance, and how it complies with the outline application.
- **Summary and Conclusion:** A summary of the key findings established in this DAS.



Hybrid Development Summary

A hybrid planning application (P2024/0711) was submitted in November 2024 by Tata Steel for a new Electric Arc Furnace (EAF) based steel production facility and associated infrastructure within the existing Port Talbot Steelworks boundary, in Port Talbot. The wider development proposals form part of a £1.25bn investment that is the largest in South Wales industry for many decades. It will secure steelmaking in Port Talbot for the foreseeable future.

The outline element of the approved proposals, which forms the basis of this RM application, is as follows:

“Outline planning permission (with all matters reserved except for access and landscaping) for the construction of a scrap metal handling facility and associated scrap yards, scrap processing facility, new substation, underground and overground electrical infrastructure, and new and amended roads and rail lines, landscape and green infrastructure, lighting, hardstanding, CCTV, drainage and associated engineering operations.”

The proposals will create a high-tech, green future for Britain’s largest steel business and bolster UK steel security. It would cut the CO₂ emitted at the Site by about 90%, equivalent to 1.5% of the UK’s total direct emissions. 75% of raw materials will be sourced from the UK, up from 10% today helping to maintain the country’s self-sufficiency in steel making and ensuring Tata’s steel production is more resilient to adverse global events.

The application was approved by Neath Port Talbot Council (‘NPT’) on 7 March 2025.

Outline Parameters

The development forming part of the outline planning application is set out as follows:

- Scrap metal reception, handling and processing facilities and associated scrap yards
- New substation and underground and overground electrical infrastructure
- New and amended access roads and parking areas
- New and amended rail track and associated infrastructure
- Lighting
- Hardstanding
- CCTV.

The outline element of the hybrid planning application sets out minimum and maximum parameters for the quantum of built development proposed. This includes:

- The electrical cable connection, Port Talbot Substation and ancillary electrical equipment to be installed by NG at the Port Talbot site
- The upgrade and dualling of the railway line to ensure capacity for two trains to service the proposed scrap yard facility
- The scrap bays, acoustic barriers, hardstanding, processing equipment and transportation infrastructure in the main and overflow scrap yard facility.

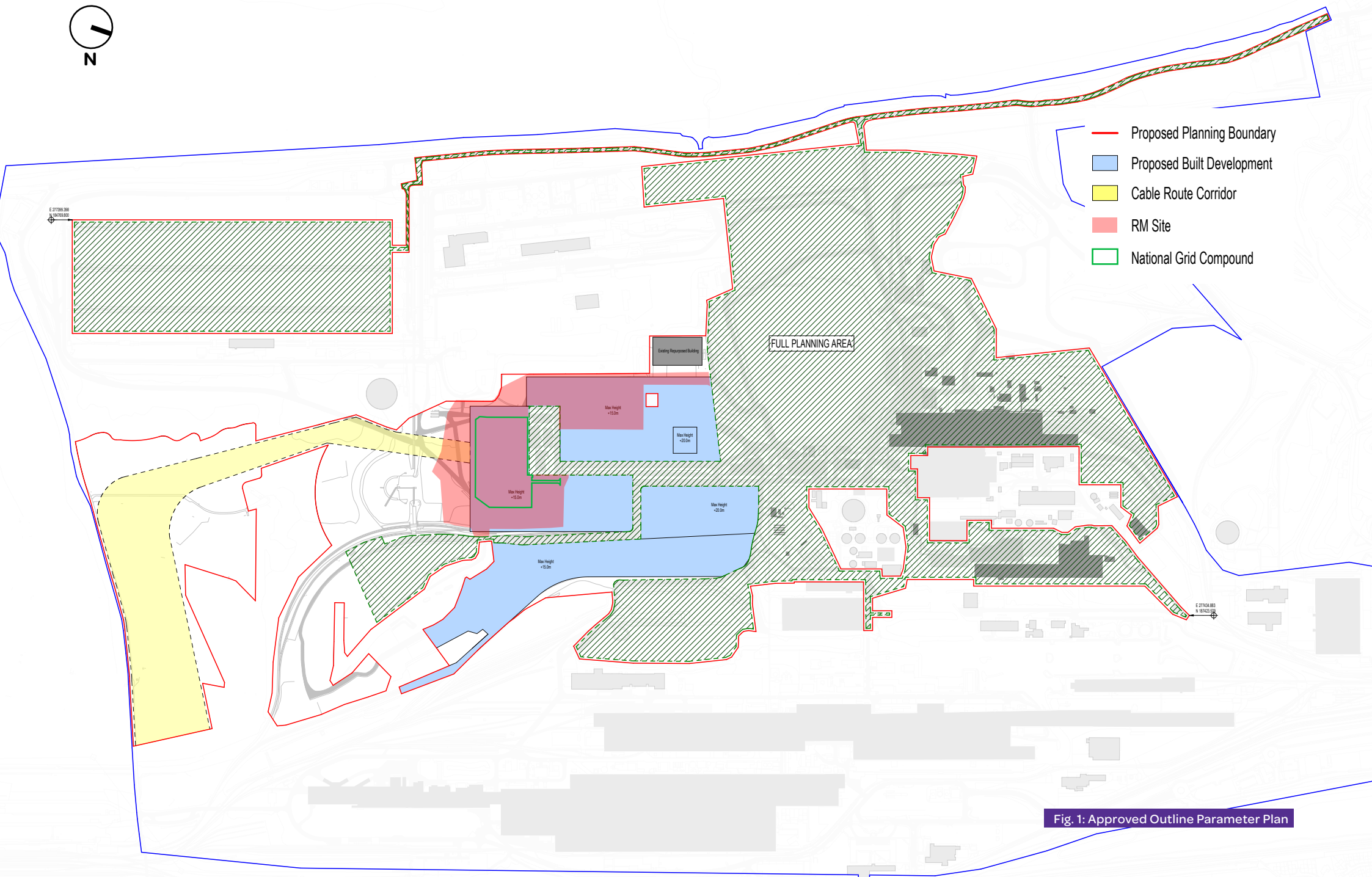
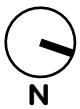


Fig. 1: Approved Outline Parameter Plan

02 Site Context

Wider Context

Port Talbot is located in the County Borough of Neath Port Talbot, Wales. The Port Talbot Steelworks is located wholly within the county. It comprises major buildings accommodating key components of the steel making process, together with associated ancillary structures and infrastructure.

Port Talbot is well connected to the wider South Wales region, principally via the M4 motorway and the South Wales Mainline railway.

The steelworks lie approximately 1.75km to the south east of Port Talbot town centre and approximately 650m south of Margam Wharf. The area is characterised by a heavily industrialised built environment which dominates the southern end of Port Talbot.

The steelworks lie to the south of the River Afan, which cuts through Port Talbot town centre, and extends south towards the Eglwys Nunydd Reservoir. The industrialised area runs parallel to the M4 and is highly prominent on the approaches to Port Talbot from the south and east.

Further information on the local context is contained within the DAS for the approved hybrid planning application.

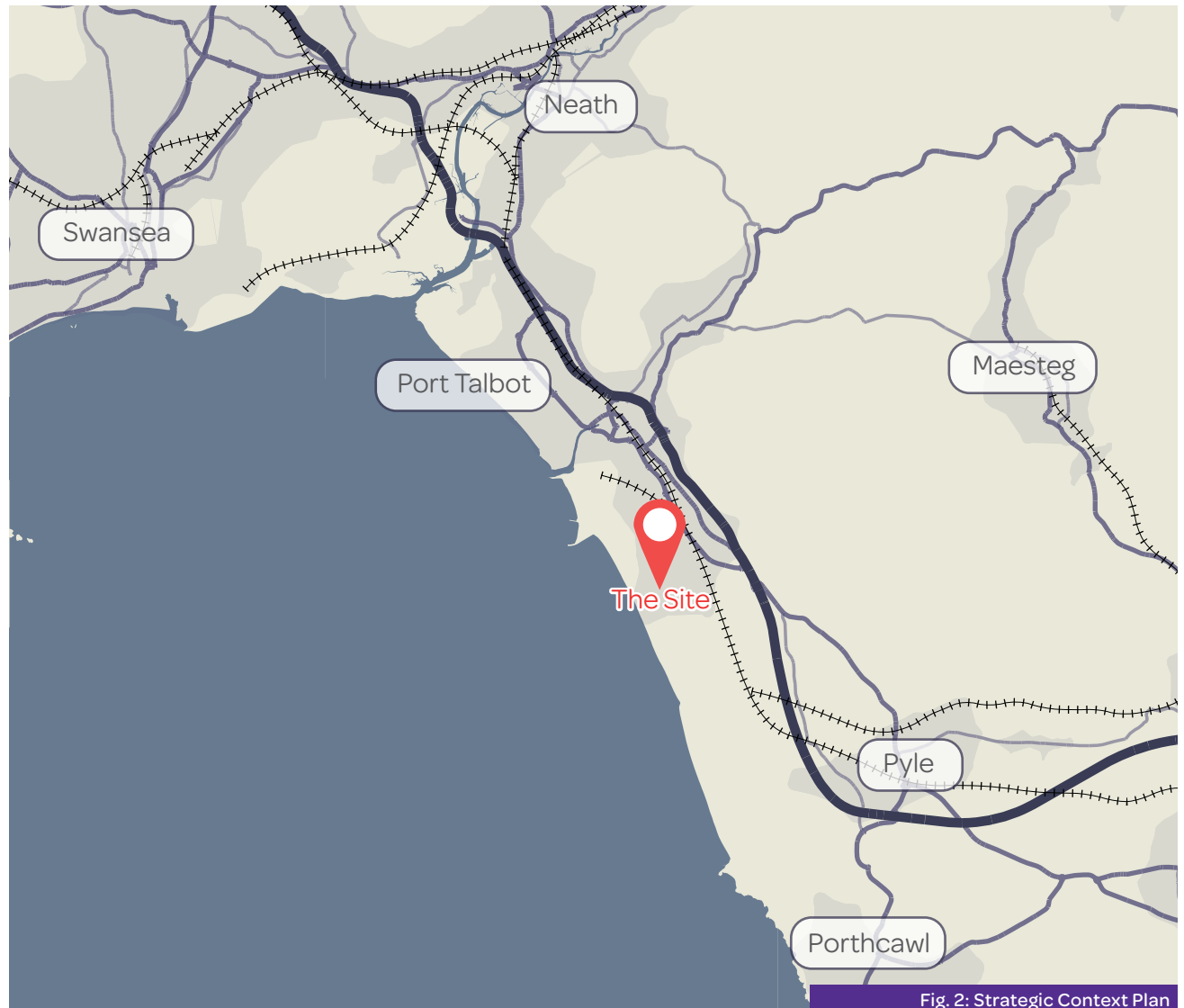


Fig. 2: Strategic Context Plan



Steelworks
Blast Furnaces

Port Talbot

M4

Railway

Swansea Bay

Eglwys Nynydd
Reservoir

KEY



Approved hybrid application
site boundary (P2024/0711)



RM application site boundary

Fig. 3: Site Location Plan

Site Appraisal

Overview

The RM Site extends to approximately 10 hectares (ha) and is located towards the southern extent of the approved hybrid planning application boundary, located wholly within it. The RM boundary is irregular in shape and is currently occupied by scrap yard operations and unused industrial land.

Topography

The Site is lowest in the south, with ground levels typically between 5-6mAOD. Highest ground levels are located in the east of the Site along an existing site track, adjacent to existing railway infrastructure. The existing site road in the west of the Site is highest in the north at approximately 8.24mAOD, with ground levels sloping in a general southerly direction.

Flood Risk

The Site is located within Flood Zone 1 of the Flood Map for Planning for Rivers. Flood Zone 1 represents areas which have less than a 0.1% AEP (1 in 1000) chance of flooding in any given year, including climate change. All forms of development are acceptable, in principle, within Flood Zone 1.

The Site is located within Flood Zone 1 of the Flood Map for Planning for the Sea. Flood Zone 1 indicates that there is a less than 0.1% AEP (1 in 1000) chance of flooding from tidal sources in any given year, including climate change. All forms of development are acceptable, in principle, within Flood Zone 1.

The Site is predominantly located within Flood Zone 1 of the Flood Map for Planning for Surface Water and Small Watercourses. Flood Zone 1 indicates that there is a less than 0.1% AEP (1 in 1000) chance of flooding from these sources in any given year, including climate change.

There are localised areas shown to be located within Flood Zones 2 and 3, which are at risk from surface water flooding. Additionally, an existing Ordinary Watercourse flows through the southern vicinity of the site boundary and therefore areas within the immediate vicinity of this channel are shown to be located within Flood Zones 2 and 3.

Flood Zone 2 indicates areas that have between a 1% and 0.1% AEP (1 in 100 – 1 in 1000) chance of flooding from surface water and small watercourses in any given year, including an allowance for climate change.

Flood Zone 3 represents areas that have a greater than 1% AEP chance of flooding in any given year, including an allowance for climate change.

Areas shown to be at risk of surface water flooding are associated with small, localised areas of ponding.

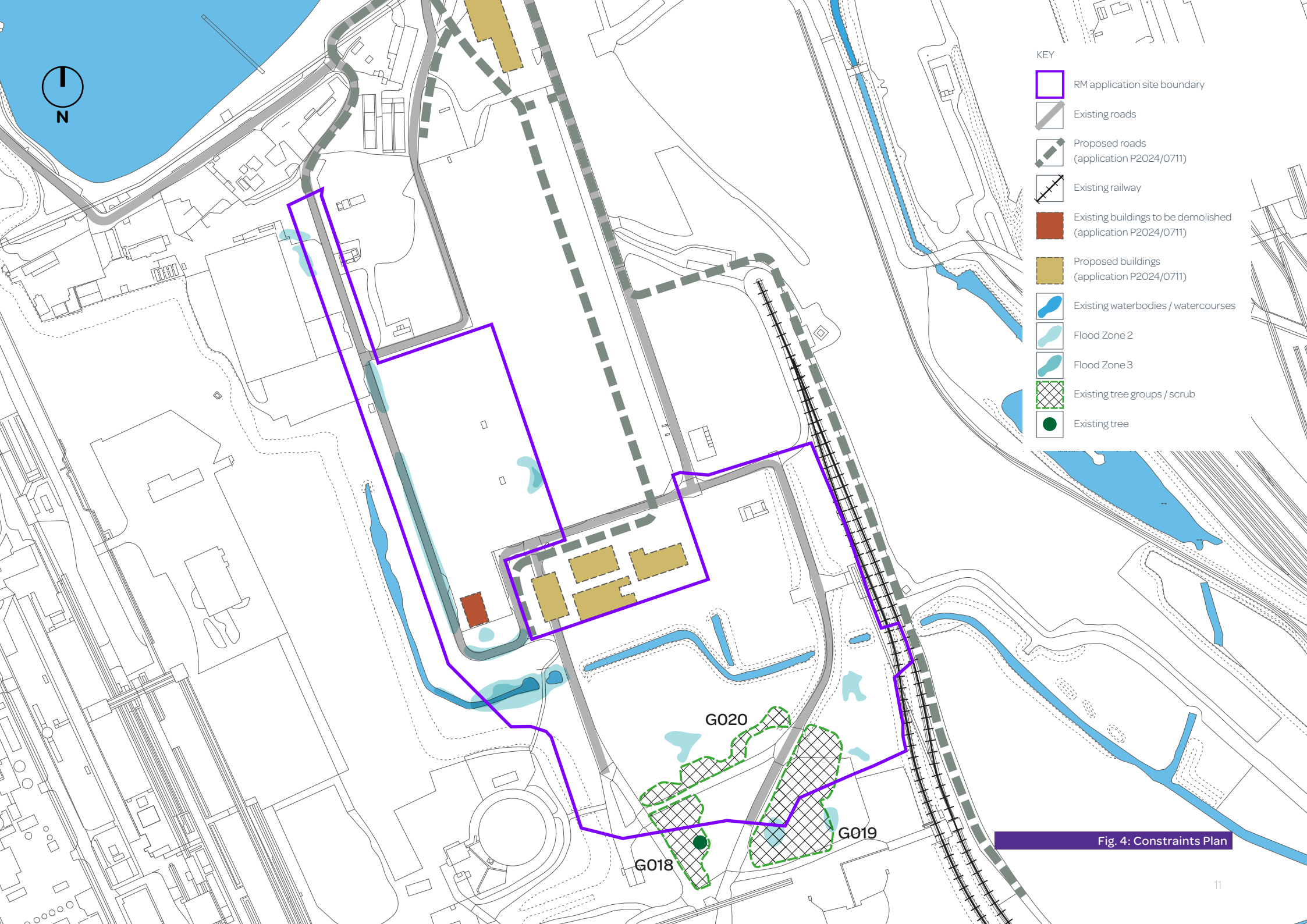
Trees

There are three existing tree groups located in the southern part of the Site. These have all been identified as Category C (low value).

Group G018 lies partially within the Site. It comprises of willow - an intermittent scrub group with one larger willow on raised ground (south of southern Site boundary).

Group G019 lies partially within the Site. A dense mixed species group of mainly willow and scrub surrounding. It is visible from a distance.

Group G020 lies wholly within the Site. It is an intermittent group of dense low level willow with sections of scrub.



03 The Proposals

The proposed development will establish a new 33kV connection to Tata Steel UK from a new 275/33kV substation.

Preliminary Works

A detailed overview of the proposed preliminary works is provided below:

- Construction of electrical ducts to feed proposed hot briquetted iron receipt area (as approved under full element of application ref: P2024/0711)
- Construction of ducts between National Grid lay down area and National Grid substation site
- Re-alignment, re-surfacing and re-construction of existing roads
- Creation of new access roads and tracks
- Construction of new road drainage and drainage connection to serve National Grid lay down area
- Construction of new culvert below existing railway tracks to replace existing culvert
- Construction of perimeter drainage to National Grid substation area
- Diversion of an existing drainage ditch and removal of existing culvert
- Earthworks to include infilling and levelling and construction of 2 no. working platforms for National Grid lay down area and substation area
- Creation of hardstanding.

National Grid Substation

A detailed overview of the proposed works associated with the National Grid substation compound is listed below:

- Construction of a 275/33kV substation
- GIS building with adjoining annex to house 275kV electrical switchgear and ancillary equipment
- Four 275/33kV transformers 180MVA SGTs
- 275kV outdoor gas insulated bus bars
- 33kV air insulated electrical equipment
- Amenity building comprising office, meeting room and welfare
- Workshop and Storage buildings
- Freestanding diesel generator with acoustic enclosure
- Security fencing
- Surface water management and drainage infrastructure including internal drainage systems
- Water storage tank
- CCTV
- Creation of designated car parking area (four standards spaces and two accessible)
- Installation of noise mitigation measures
- Associated civil works.

Earthworks will be required to create a platform level for the Proposed Development. The final platform level will be circa. 7 m Above Ordnance Datum (AOD) and has been designed to minimise cut and fill volumes. Planning Drawing MARPT-BHK-02-XX-DG-S-162302 depict the existing and proposed Site levels.