Report

Transport Statement (with Outline Construction Traffic Management Plan)

Proposed Battery Energy Storage System, Rigifa

Client: Field Rigifa Ltd

Reference: PC3506-RHD-07-XX-RP-Z-0009
Status: Final/01
Date: 26 September 2024

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Glossary of Acronyms

Acronym	Description
AADT	Annual Average Daily Traffic
AIL	Abnormal Indivisible Load
ATC	Automatic Traffic Count
BESS	Battery Energy Storage System
CTMP	Construction Traffic Management Plan
DfT	Department for Transport
ECU	Scottish Government Energy Consents Unit
EIA	Environmental Impact Assessment
HGV	Heavy Goods Vehicle
HIAB	Hydraliska Industri AB (crane loader)
HV	High Voltage
LDP	Local Development Plan
LGV	Light Goods Vehicle
LV	Low Voltage
MV	Medium Voltage
OCTMP	Outline Construction Traffic Management Plan
PCS	Power Conversion Systems
RED	Renewable Energy Development
THC	The Highland Council
TS	Transport Statement

Glossary of Terms

Term	Description
BESS Compound	The parcel of land to the south of the site which comprises the battery storage units, skids, PCS units, transformer, low voltage cabinets, auxiliary transformers and underground ducting and cabling.
Heavy Goods Vehicle	HGV refers to any vehicle with a Gross Weight over 3.5 tonnes. This is also used as a proxy for HGVs and buses/ coaches recognising the similar size and environmental characteristics of the respective vehicle types.
HIAB	A type of crane truck with modified chassis on which a crane is loaded, used for the transportation of construction materials.
Interface Substation Compound	A 132kV interface substation located halfway along the underground grid connection cabling route between the BESS and substation compound and Gills Bay substation. The interface substation is located on the parcel of land west of

Term	Description
	Philips Mains Private Access Road to the north of the BESS and substation compound.
Light Vehicle	The term 'light vehicle' is used to describe the range of vehicles that would be used by construction employees, i.e. vans, pick-ups, minibuses, etc.
Preliminary Access Drawings	Proposed access arrangement drawings for information and not suitable for design purposes.
Planning Boundary	Total area within the redline boundary which includes all infrastructure components, but also the entire consented Gills Bay substation site to ensure appropriate flexibility is provided for the point of connection
Substation Compound	132kV substation and operations and maintenance compound is located on a parcel of land adjacent to BESS compound, and accommodates the HV transformers, switchgear, control room, switch room and welfare facilities.
Vehicle trips	A two-way trip (i.e. the arrival and departure from site) for the transfer of goods or employees.

1 Introduction

1.1 Background

This Transport Statement (TS) with Outline Construction Traffic Management Plan (OCTMP) has been prepared by Royal HaskoningDHV (RHDHV) on behalf of Field Rigifa Ltd (Field). The TS relates to the construction and operation of a Battery Energy Storage System (BESS) with a capacity of up to 200 megawatts (MW) and includes rows of battery units, medium and low voltage equipment, high-voltage grid transformers, buried cables, a substation building, an interface substation, security fencing, landscaping and drainage. The Proposed Development is located approximately 2 kilometres (km) southwest of the settlement of Rigifa, Thurso in Caithness, Scotland.

This TS is submitted as part of a planning application to the Scottish Government Energy Consents Unit (ECU). The Highland Council (THC) is the local planning and roads authority.

A scoping meeting was undertaken with THC on Thursday 7th March 2024, where the scope of transport and highways information required to inform the planning application was defined. Minutes of this meeting are located at **Appendix A.** This TS with OCTMP has been prepared in line with the agreed scope set out during this meeting. Pre-application advice was provided by THC on 12 June 2024 (reference number: 24/00186/PREMA) to Field for the Proposed Development. Comments related to Transport and Wider Access were considered when preparing this TS and OCTMP, including provision of routes for construction access, baseline traffic flows, development related traffic flows and cumulative impact of construction traffic with other developments.

This TS has been prepared in line with the principles of local policy and provides a high-level assessment of the quantum of anticipated traffic associated with the Proposed Development. The OCTMP included within the TS considers measures to mitigate construction traffic impacts. This TS should be read in conjunction with other supporting documents submitted as part of the planning application.

1.2 Report Scope

Following this introductory section, the structure of the TS is as follows:

- Section 2 reviews relevant policy;
- Section 3 provides details of the location of the Proposed Development, and provides a description of the surrounding highway network and details of accessibility by all modes of travel;
- Section 4 details the Proposed Development including vehicular and servicing access arrangements; an active and sustainable travel strategy, and a car and cycle parking strategy for construction and operational vehicles;
- Section 5 provides details of the forecast traffic generation during construction and operational stages of the Proposed Development;
- Section 6 provides a summary of the proposed and consented developments in the wider local area which will have a cumulative impact on the Proposed Development;
- Section 7 provides an OCTMP which comprises the anticipated construction traffic generated by the Proposed Development; delivery routes, management plan and mitigation measures; and
- Section 8 summarises and concludes the report.

2 Local Policy

2.1 Highland Council: Roads and Transport Guidelines for New Developments (May 2013)

This document sets out THC's overall transport requirements for new developments and sets out the requirement that prior to the construction of any new road, the developer should obtain both Planning Permission and Road Construction Consent (obtained with detailed planning permission).

Table 2.1 of the guidance provides a summary of the planning application supporting documentation required for inclusion in a Transport Statement. The elements of work required comprise:

- A site location plan;
- A site layout plan showing access arrangements (minimum scale 1:1,250);
- Access arrangement plans showing details of the access onto the public road including carriageway width, bell mouth radii and visibility splays;
- Details of proposed offsite mitigation including road widening and junction upgrades; and
- General arrangement layout plans of roads, bellmouths, turning heads, in-curtilage parking, service trips, cut and embankment slopes, and drainage.

Section 2.1.5.2 of the guidance sets out the main transport considerations to be addressed in a planning application. The main transportation considerations are associated with the accessibility to the site for all modes of travel, as well as the adequacy of the proposals including the impact of the development on the surrounding public roads. As such, THC would assess:

- the suitability of the access arrangements for all modes of travel to and within the development;
- the adequacy of the proposals in respect of all relevant modes of transport including the impact of the development on the surrounding public road network;
- the volume and type of vehicular traffic likely to be generated by the Proposed Development, together with its envisaged distribution and impact;
- the proposed access locations, with any restrictions on locations, junction types, sight distances and gradients;
- accessibility within the site for all relevant modes of transport;
- the layout design for new roads, including vertical profile and junction arrangements;
- the safety of the road network and any associated mitigation measures including Road Safety Audit Stage 1 or 2 Reports, as required by the Council;
- location of services, both overhead and underground; and
- flooding and drainage requirements.

Section 2.1.5.2 also considers transport matters external to the site, including construction related issues of routing, timing, volume and size, and any problems or restrictions that may be anticipated and the known requirements of any other affected bodies in relation to transport issues.

Section 5.27.4 considers general construction traffic; where developments are likely to generate significant levels of construction traffic, THC expects that these trips should be considered as part of the general design

process. Sites which present access issues should be agreed with THC, such as the use of haul roads and Temporary Traffic Regulation Orders. In such circumstances, THC expects that the developer should seek to mitigate the impact of the construction traffic.

The guidance indicates that a Transport Assessment (TA) is required for developments that have potentially significant impacts, and a TS is required for developments with a low impact. It is anticipated that the Proposed Development would have a low impact and as such a TS incorporating an OCTMP has been produced to consider the transport implications of the construction phase of the Proposed Development only. In line with THC: Roads and Transport guidance, this TS considers all transport elements set out in Table 2.1 and addresses the main transportation considerations including cumulative impacts, as set out in section 2.1.5.2.

It is anticipated that the highest level of traffic associated with the Proposed Development would be during the construction phase, and that operational trips would be negligible over the life span of the development. Given the low volumes of traffic associated with the operational phase, it is not anticipated that operational traffic would be in excess of daily traffic variation on the local road network and, as such, would have no significant impact. For this reason, the operational traffic has been scoped out of the assessment.

Activities and vehicle movements required during the decommissioning phase are unknown at the time of writing, and therefore have not been considered as part of this assessment. It is likely that vehicle movements during decommissioning would be equal or less than the construction phase, and a phase specific Traffic Management Plan will be compiled and submitted to THC prior to decommissioning taking place.

2.2 Highland-Wide Local Development Plan (April 2012)

The Local Development Plan (LDP) sets out a vision statement and spatial strategy for THC area, ensuring that development is "*directed to places with sufficient existing or planned infrastructure and facilities to support sustainable developments*".

Chapter 22 'Sustainable Development and Climate Change' notes that "*The Highland area has great potential for renewable energy production and to contribute towards meeting ambitious targets set internationally, nationally and regionally*". The LDP acknowledges that "*additional electricity transmission and distribution infrastructure will need to be developed in Highland in order to realise the region's potential contribution to renewable electricity generation, contributing to national requirements and in order to serve local needs*".

The Proposed Development would facilitate this potential for renewable energy production in the Highland area, which would have benefits in tackling climate change and increasing Scotland's energy security. This TS has been produced to ensure the transport impacts of the construction phase of the Proposed Development are minimised through appropriate mitigation measures.

3 Existing Situation

3.1 Site Location and Description

The site of the Proposed Development is located approximately 2 km south of the village of Mey and the trunk road A836, and approximately 1.9 km southwest of the settlement at Rigifa, Highland in Scotland. The site is a remote rural location, on a parcel of land to the south of the proposed Gills Bay substation.

A location plan, indicating the planning boundary within the wider local context and local road network is provided in **Figure 3.1**.

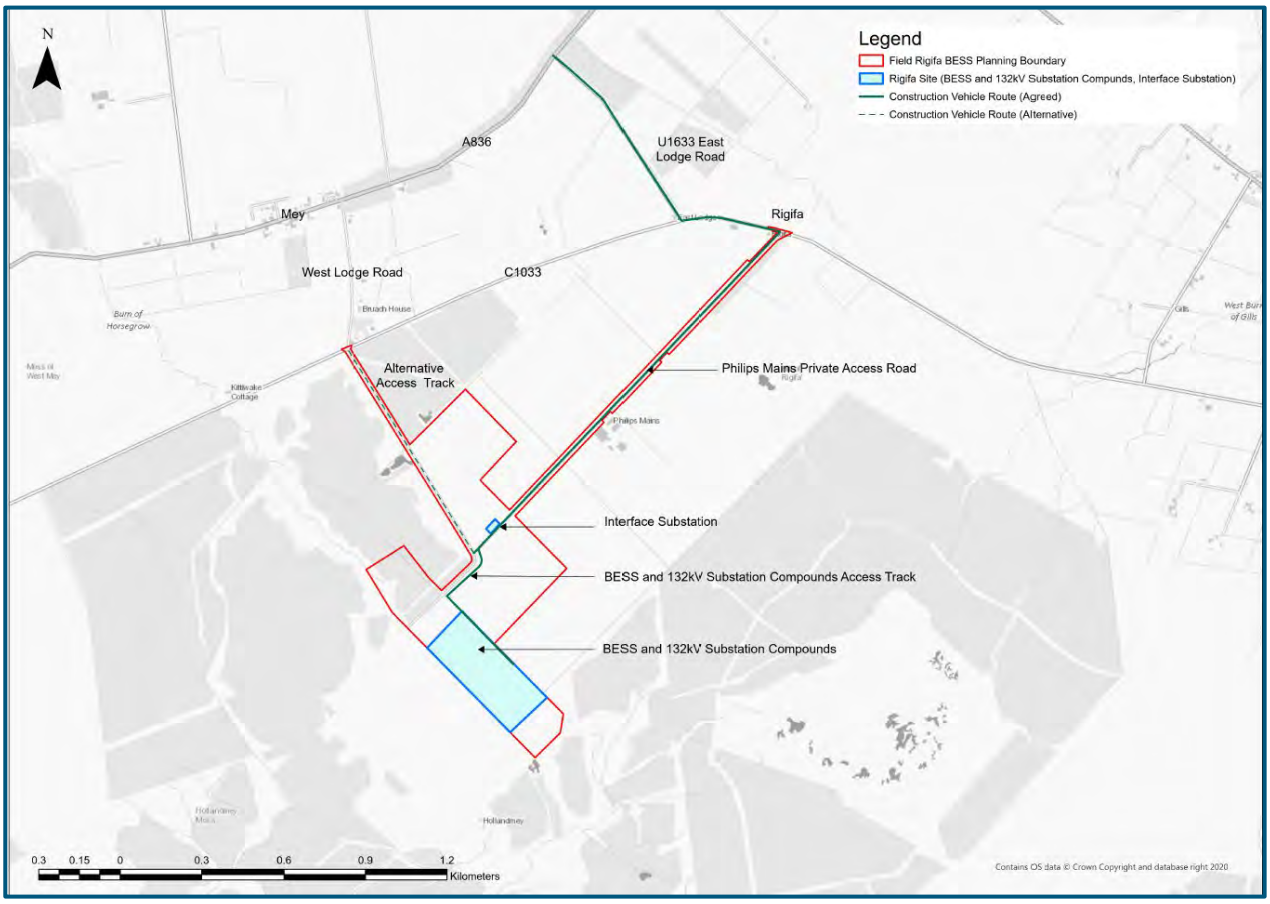

Figure 3.1: Location Plan

The site of the proposed BESS and substation compounds are located to the southern side of the planning boundary. The parcel of land on which the BESS and substation compounds would be located is currently used for agriculture, with a gentle gradient sloping towards the northwest as indicated in **Figure 3.2**.

Figure 3.2: Proposed Site for BESS and Substation Compounds

3.2 Existing Site Access

Existing vehicular access to the site is via agricultural tracks located off private access roads located to the north of the site. The primary access is via Philips Mains private access road which extends approximately 1.8 km northeast from the site to link with the C1033 (Everley-Crockster Toll Road) at a priority junction in the vicinity of the settlement of Rigifa. A secondary access track extends approximately 1.1 km to the northwest of the site, and links with the C1033 at a priority junction in the vicinity of Brauch House. In the vicinity of these two access junctions, the C1033 is an unmarked minor rural road with designated passing places at regular intervals along its length. The C1033 is maintained by THC. A more detailed description of the access route for vehicles travelling to and from the Proposed Development is provided in **Section 4.3**.

From the Philips Mains private access road junction (primary access to the Proposed Development), the C1033 extends approximately 375 m to the west to link with U1633 (East Lodge Road). The U1633 is an unclassified road which extends approximately 750 m to the northwest to link with the A836 at a priority junction. The A836 is a major distributor road in this area providing connections across the north coast as part of the North Coast 500 route. The A836 provides access to the village of Mey and the settlement of Whitebridge to the west, with links to the A9(T). To the east, the A836 provides access to the villages of East Mey and Gills, with links to the A99 at John O'Groats.

From the Philips Mains private access road, the C1033 extends 2.3 km to the east to provide access to the settlement at Upper Gills, and a further 5.5 km to link with the A99 at the settlement of Everley. The A99 is a 53 km route which extends to the north to link with the A836 at John O'Groats, and to the south to link with the A9 at Latheron.

The existing local road network is indicated in **Figure 3.1**, with the wider road network shown in **Figure 3.3.**

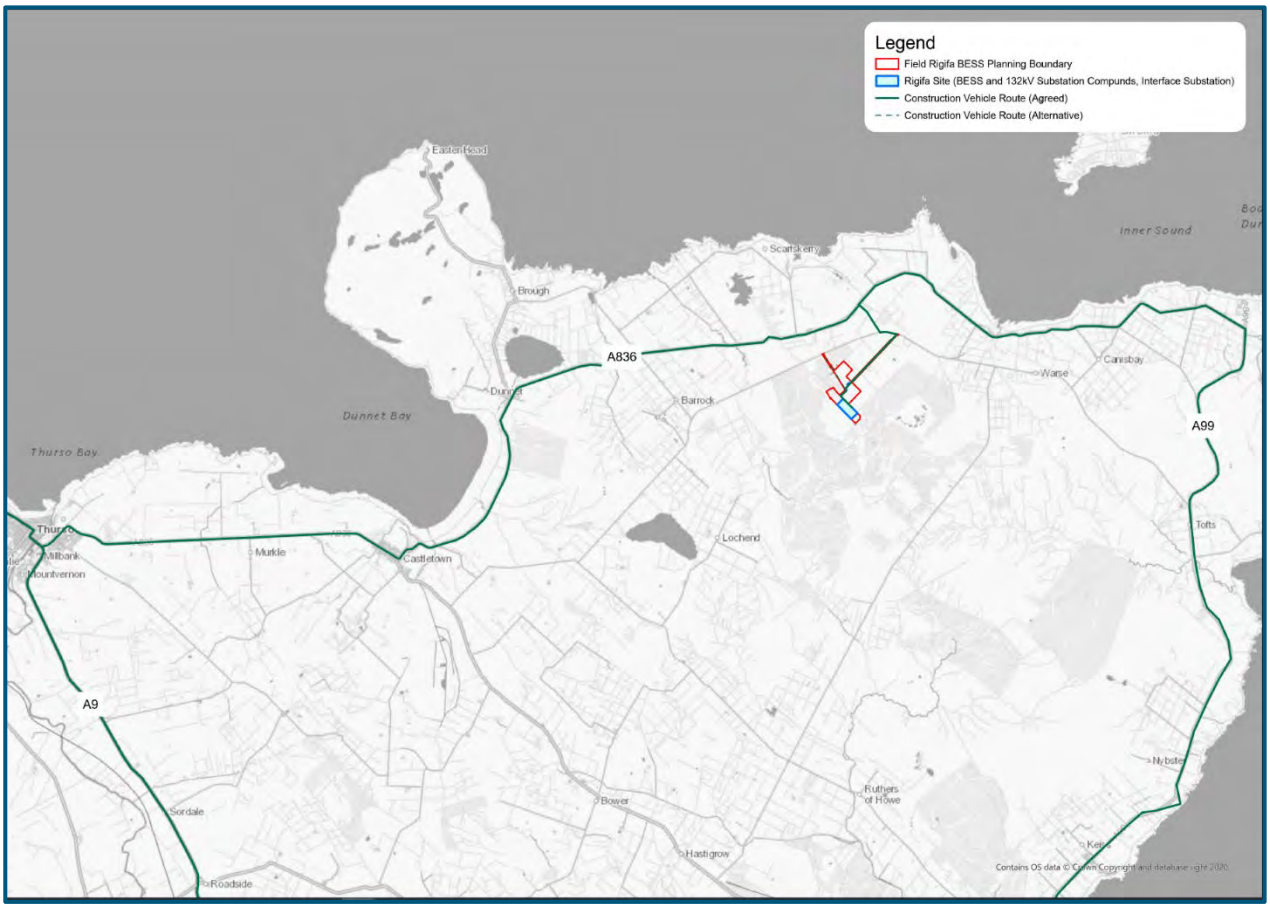

Figure 3.3: Regional Road Network

3.3 Baseline Traffic Conditions

Given the remote location of the site, the minor rural roads (C1033 and U1633) to the north of the Proposed Development are subject to very light levels of daily vehicular traffic as demonstrated below. The minor roads C1033 and U1633 are subject to the national speed limit.

Baseline traffic flows on the local road network have been extracted from planning applications for surrounding developments, including:

- Chapter 12 of the Hollandmey Environmental Impact Assessment (EIA) Report[1] associated with the Hollandmey Renewable Energy Development (ECU00003353); and
- Chapter 5 of the Transport Assessment (TA) associated with Gills Bay Radial 132kV[2] Overhead Transmission Line (OHL) (ECU00005260, permission granted, now lapsed).

The proposed Hollandmey Renewable Energy Development (RED) scheme is located on land surrounding the Proposed Development, with access via the private access track which extends along the northern and eastern boundary of the Field Rigifa BESS and substation compounds. The Gills Bay substation, and Gills Bay Radial 132kV Overhead Line (OHL) transmission are located to the northwest of the Proposed Development, with access via a private track which has been identified as an alternative delivery route, as

[1] *Hollandmey Renewable Energy Development EIA Report: Chapter 12 – Access, Traffic and Transport (November 2021)*
[2] *Gills Bay 132 kV Environmental Statement: Volume 4B: Technical Appendices: Traffic and Transport (WYG August 2015)*

shown in **Figure 3.3**. As such, baseline traffic data associated with the Hollandmey RED and the Gills Bay Radial 132kV OHL applications are considered relevant to inform the baseline traffic conditions for the Proposed Development.

The baseline traffic flows for the wider local road network set out in Chapter 12 of Hollandmey RED EIA were obtained from DfT count points (2019 data) and Automatic Traffic Counts (ATC) undertaken in October 2020 and September 2021. A growth factor of 1.008 was applied to the 2019 DfT traffic data to scale to 2020 traffic flows, and a factor of 1.024 was applied to all 2020 traffic data for an assumed construction year of 2024. The baseline Average Annual Daily Traffic (AADT) flows on the local road network are set out in Table 12.6 in the Hollandmey RED EIA Chapter 12, as shown in **Figure 3.4**.

Table 12.6: Baseline 2024 AADT

Count location	Source	Direction	Total	HGV	HGV%
A99 Cliff Road, Wick	DfT count	2-way	7982	220	2.8%
A99 Blackness	DfT count	2-way	2348	163	6.9%
A9 (T) Achavanich	DfT count	2-way	1058	155	14.6%
A9 (T) Banniskirk	DfT count	2-way	1539	97	6.3%
A9 (T) Sordale	DfT count	2-way	3581	311	8.7%
A9 (T) Thurso Centre	DfT count	2-way	14687	280	1.9%
A882 Haster	DfT count	2-way	2953	119	4.0%
A882 Oldhall	DfT count	2-way	1953	98	5.0%
A836	DfT count	2-way	3712	190	5.1%
C1033 Everley-Crockster Toll Road	ATC	2-way	84	32	38.0%
U1633 East Lodge Road	ATC	2-way	74	1	0.01
Charleston Farm Road	ATC	2-way	11	1	0.1

Figure 3.4: Baseline 2024 AADT **Error! Bookmark not defined.**

The 2018 baseline traffic flows for the wider local road network set out in Chapter 5 of the Gills Bay Radial 132kV OHL TA, were determined by applying National Road Traffic Forecast (NRTF) high growth factor of 1.0670 to surveyed traffic flows across the local road network. This methodology took account of a higher-than-average growth, and as such provided a robust assessment. The baseline weekday average two-way flows on the local road network are set out in Table 5.2 of the TA and are indicated in **Figure 3.5**.

Table 5.2: Base Traffic Conditions (Weekday Average Two Way Flows)

Survey Location	Time Period	Cars & Lights	HGV (OGV1 + OGV 2)	Total
A836 east of C1025	12 Hours	3925	19	3965
	24 Hours	4781	19	4815
A836 east of B876	12 Hours	1802	9	1823
	24 Hours	2146	9	2168
C1025 south of A836	12 Hours	2104	11	2118
	24 Hours	2827	17	2847
B876 south of A836	12 Hours	1652	15	1681
	24 Hours	2001	17	2029
B874 east of A9	12 Hours	195	6	203
	24 Hours	232	6	240
C1033 west of U1633	12 Hours	77	3	82
	24 Hours	104	3	108
U1727 north of B874	12 Hours	115	2	117
	24 Hours	142	2	145

Figure 3.5: 2018 Baseline Traffic Data (Weekday Average Two-Way Flows)[Error! Bookmark not defined.]

The results of the baseline traffic data set out in the Hollandmey RED EIA and the Gills Bay Radial 132kV OHL TA indicate low levels of AADT flow on the C1033 and the U1633. The AADT data for A836 is in line with expectations for a distributor route in this location.

3.4 Speed Data

Speed data for the wider local road network is set out in Chapter 5 of the Gills Bay Radial 132 kV OHL TA. The Automatic Traffic Count (ATC) surveys were undertaken at seven locations and the five-day two-way average and 85th percentile speeds were summarised in Section 5 of the Gills Bay Radial TA and indicated in **Figure 3.6**.

Table 5.3: Speed Summary (Average Two Way)

Survey Location	Average Speed (mph)	85th Percentile Speed	Speed Limit (mph)
A836 east of C1025	31.5	35.1	30
A836 east of B876	33.6	37.8	60
C1025 south of A836	23.1	27.6	30
B876 south of A836	32.7	37.8	30
B874 east of A9	42.4	47.0	60
C1033 west of U1633	41.7	N/A	60
U1727 north of B874	42.7	N/A	60

Figure 3.6: Speed Summary (Average Two-Way) **Error! Bookmark not defined.**

3.5 Personal Injury Collisions

A review of Personal Injury Collisions (PICs) using CrashMap[3] for all vehicle types over the latest five-year period (2018-2022) revealed that no PICs were recorded on the C1033 or U1633 in the vicinity of the site. PICs have been recorded on the A836 in the village of East Mey, approximately 1.2 km to the east of the A836/ U1633 junction, and 5.6 km west of the A836/ U1633 junction in the vicinity of the Corsback cemetery, as indicated in **Figure 3.7**.

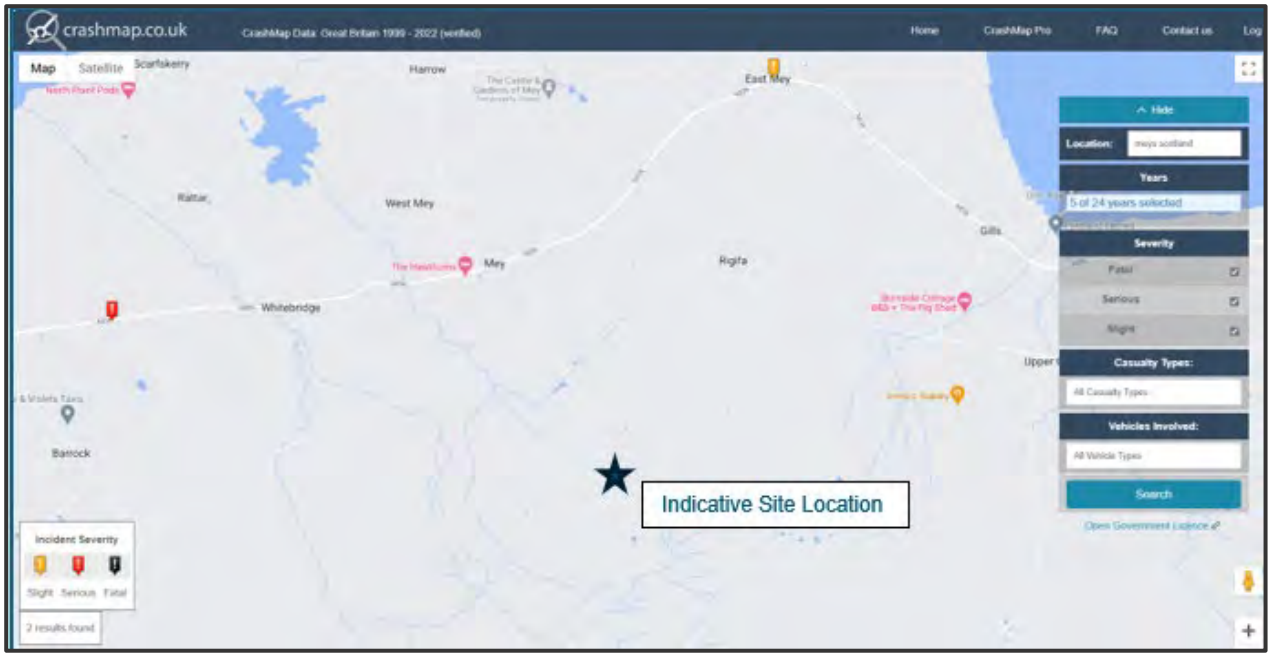

Figure 3.7: Personal Injury Collisions (PICs) 2018 – 2022

Source: https://www.crashmap.co.uk (Accessed 02.08.24)

[3] https://www.crashmap.co.uk

The full PIC reports are provided in **Appendix B**. Given the considerable distance of these PICs from the site, the absence of causal factors and the vehicle manoeuvres which resulted in the PICs, no analysis of these PICs has been undertaken. As a result of the low number of PICs on the wider road network, it is unlikely that existing road safety concerns would be exacerbated by the proposed construction or operational traffic at the site.

3.6 Site Visits

Site visits were undertaken by Field and RHDHV in February, April and May 2024. These site visits provided opportunity to understand conditions on the local road network and to take photographs of local access roads and key junctions in the vicinity of the site.

4 Proposals

4.1 Proposed Development

The Proposed Development comprises the installation of a BESS with up to 200 MW capacity with associated ancillary infrastructure and four new points of access off Philips Mains private access road into the Proposed Development, as described further in **Section 4.4**. The proposed new access junctions are designed to accommodate the largest vehicle requiring access to the Proposed Development during both the construction and operational phases.

The principal components of the Proposed Development comprise:

- A BESS compound comprising:
  - Individual battery storage units arranged into rows/ strings;
  - Medium voltage (MV) skids (i.e. one MV skid per battery string), each of which houses two power conversion system (PCS) units and one medium-voltage transformer; and
  - Ancillary infrastructure including low voltage (LV) cabinets, auxiliary transformers and underground ducting and cabling.
- A high voltage (HV) substation compound comprising:
  - Two HV grid transformers;
  - Auxiliary transformers;
  - An on-site substation building, comprising a control room, HV switch room and welfare facilities.
- An interface substation located between the batteries and the proposed Gills Bay substation;
- An underground 132kV grid connection cable between the HV substation and the proposed Gills Bay substation, via the interface substation;
- 3m high palisade security perimeter fencing, Cut and fill / earthworks and foundational civil structures to create level compounds upon which the batteries, substation and other ancillary structures will be located.
- Access arrangements, including two site access points along the site's eastern boundary, parking spaces and 5-metre-wide internal access tracks throughout the site.
- CCTV and lighting columns across the site.
- Drainage infrastructure, including an attenuation basin.
- Landscape and biodiversity mitigation and enhancement measures.

The Proposed Development's overall planning boundary (45.4ha) is larger than the anticipated development footprint (approximately 6.4 ha). The primary reason for this has been to incorporate the entire consented Gills Bay substation site into the planning boundary to ensure appropriate flexibility is provided for the point of connection. The planning boundary also includes land to the northwest and southeast of the development footprint which accommodate the cable route, access tracks and biodiversity enhancements.

Figure 4.1 shows the layout of the Proposed Development.

Figure 4.1: Site Location and Layout Plan

Source: Field Detailed Location Plan Rigifa Drawing No. 005.4 Rev 06 (24.09.24)

4.2 Vehicle Access Requirements

The highest volume of traffic and the largest vehicles requiring access to the Proposed Development would be associated with the construction phase. As such, access arrangements have been designed to accommodate an Abnormal Indivisible Load (AIL) which would be required to deliver the transformers to the site during the construction phase. In the unlikely event that a transformer would require replacement, it is anticipated that the AIL would be the largest vehicle to require access to the site during the operational phase.

Other vehicles likely to require access to the Proposed Development during the construction phase include:

- Staff transport, either cars or light vehicles (LVs);
- 400T crane;
- construction plant such as excavators and tipper trucks for the delivery of stone and building materials; and
- maximum length articulated vehicles for the delivery of battery storage units and generators.

The construction phase is estimated to extend over a 24-month period, and details of the final phasing of the construction period would be provided prior to commencement.

4.3 Vehicle Access Route

The Proposed Development would be accessed from the A836, U1633 (East Lodge Road), C1033 (Everley-Crockster Toll Road) and Philips Mains private access road. The access route for construction vehicles was agreed during the scoping meeting with THC, and indicated in **Figure 4.2**.

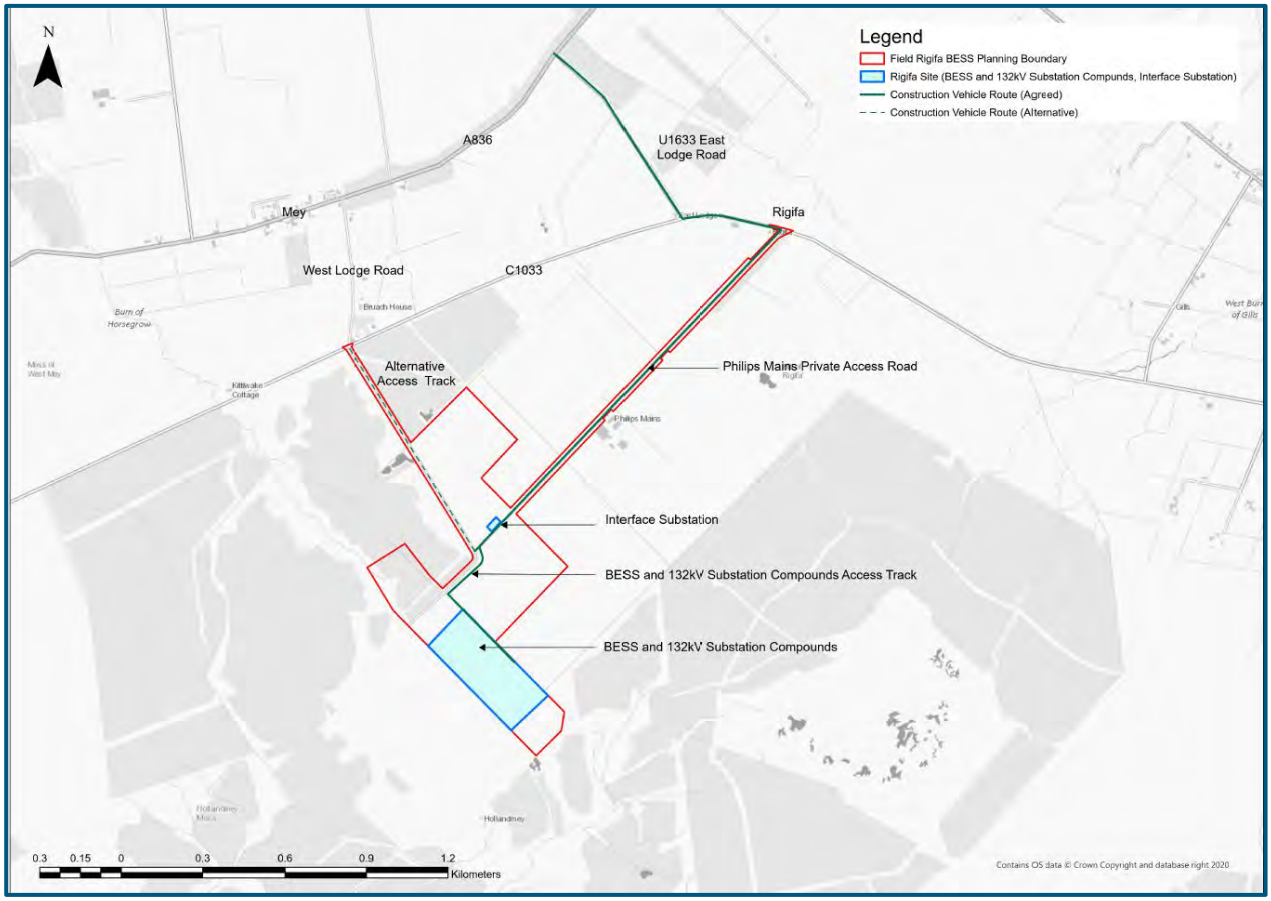

Figure 4.2: Proposed Access and Construction Vehicle Routing

Given the intensification of use, THC require visibility splays at the C1033/ Philips Mains private access road junction. In the vicinity of the Philips Mains private access road junction, the C1033 is subject to the national speed limit and visibility splays of 4.5 m x 215 m are required in line with Design Manual for Roads and Bridges (DMRB).

A site visit in February 2024 identified a low boundary wall and well-established tree belt located on third party land which restricts visibility to the southeast of the junction. A low boundary wall, private residential access and vegetation located on the verge restrict visibility to the northwest of the junction, as indicated in **Figure 4.3**.

Figure 4.3: Visibility to the Southeast and Northwest at C1033/ Philips Mains Private Access Road Junction

Given the constraints to visibility at this junction, as well as the low recorded speeds on the C1033 in the vicinity of this junction, reduced visibility splays are provided. Although below THC standards, visibility splays of 2.4 m x 120 m are in line with the recorded speed on C1033 and are proportionate to the temporary nature of the construction phase and scale of the Proposed Development, whilst balancing highway safety and environmental impact.

Drawings located at **Appendix C** indicate that visibility of 2.4 m x 120 m can be achieved at the C1033/ Philips Mains private access road junction on land within the public highway or over which Field has right of access.

4.4 Proposed Site Access Junctions

The Proposed Development comprises four new vehicular access junctions off the Philips Mains private access track: two new junctions would provide access to the BESS compound (junction 7 and junction 8 in **Figure 4.4**), one new junction would provide access to the substation compound (junction 6 in **Figure 4.4**) and one new junction would provide access to the interface substation (junction 3 in **Figure 4.4**). These are described in more detail in **Section 4.4.1**. It is proposed that these new access junctions would be located off the existing access track which extends along the northeastern boundary of the compounds, as indicated in **Figure 4.5**.

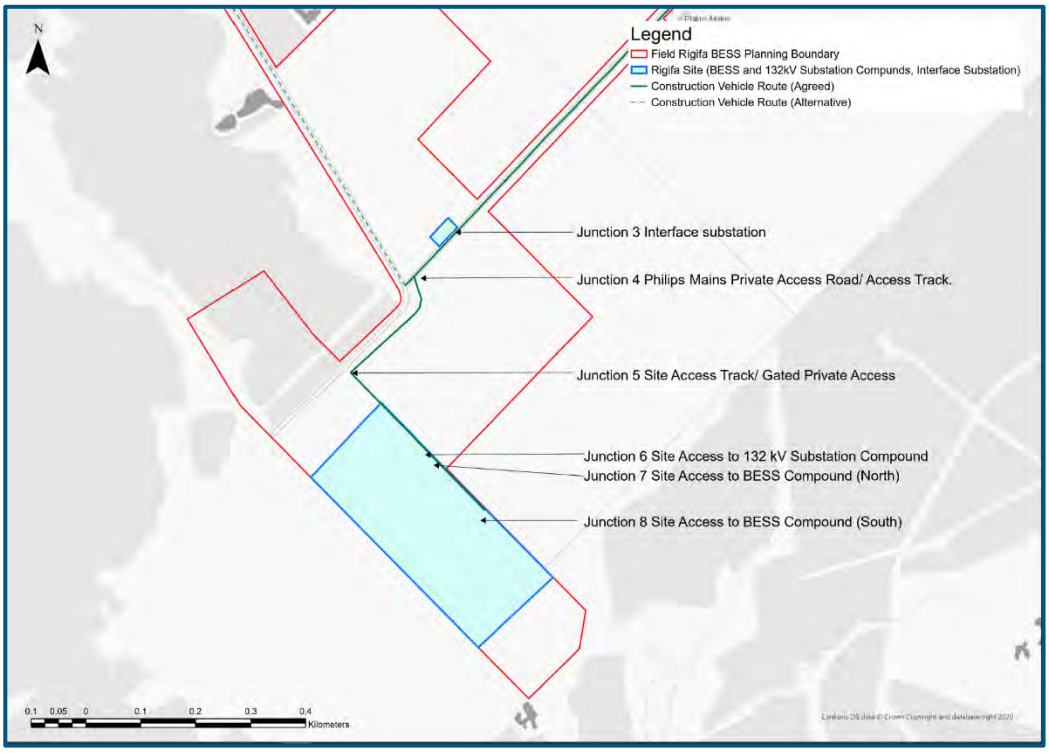

Figure 4.4: Access Junctions to BESS Compound, Substation Compound and Interface Substation Compound

Figure 4.5: Existing Access Track for the BESS and Substation Compounds Extending Along Northeastern Boundary of Site (Facing Northwest)

The new site access junctions to the BESS and substation compounds link to single lane access tracks within the site which have been designed to accommodate a maximum legal length articulated HGV 16.5m in length, required to deliver the batteries to the site.

4.4.1 Interface Substation

It is proposed that a new vehicular access junction on the Philips Mains private access road would provide access to the interface substation, as shown in **Figure 4.6**.

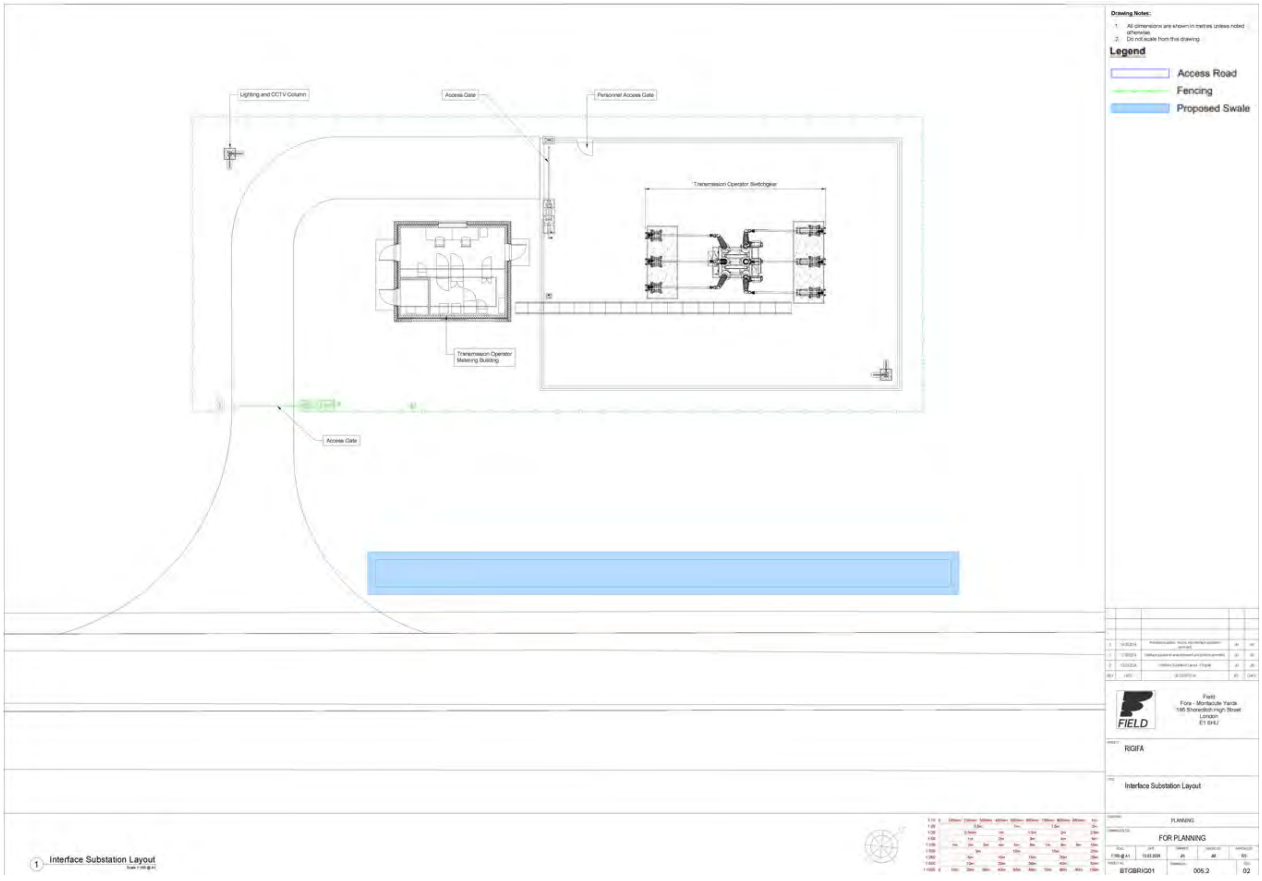

Figure 4.6: Proposed New Access to the Interface Substation

Source: Field Interface Substation Layout Drawing No. 005.2 Rev02 (18.09.24)

4.4.2 Access Track and Junctions

The Proposed Development comprises upgrading the Philips Mains private access road to accommodate a 400T crane (as a worst-case scenario) and maximum legal length articulated HGV (16.5m in length). The upgrades include localised widening and construction of seven new passing places along the length of the Philips Mains private access track, south of the C1033 junction. The access proposals also include the construction of a small section of new access road running to the east of the existing Philips Mains private access track between the proposed interface substation and the BESS and substation compounds. This is the link of road between junction 4 and junction 5 in **Figure 4.4**.

The small section of new private access track, junctions and passing places have been designed to accommodate maximum legal length articulated HGVs and a limited number of AIL deliveries which are

required during the construction phase. Preliminary access design drawings for BESS and substation compound, and the interface substation, together with the upgrades to Philips Mains private access track, are located at **Appendix D**.

The specification details for AIL deliveries is set out in an accompanying AIL report for the Proposed Development, undertaken by Wynns on behalf of Field and a copy of the AIL report is located at **Appendix E**. Details regarding AILs would be provided in a separate AIL Construction Traffic Management Plan (CTMP) prior to construction.

Details of service and delivery vehicles which would require access to the site on a regular basis have been provided by Field. Swept path analysis of key manoeuvres relevant to the proposed access junctions and internal road layout were undertaken for a maximum legal length articulated vehicle 16.5 m in length, a rigid vehicle 12 m in length, a fire tender, and a 400T crane 16 m in length. The swept path analysis drawings indicate that large vehicles can be accommodated entering and exiting the site in forward gear on an unconstrained site at the start of the construction phase. As batteries are delivered and associated components located on the site, manoeuvrability may become constrained. At this point, vehicles will reverse onto the site with the assistance of banksmen and exit the site in forward gear.

Swept path analysis drawings are located at **Appendix F**.

4.5 Walking, Cycling and Public Transport Strategy

A review of THC Core Path maps[4] indicates that Core Path CA05.16 is located approximately 1.2 km to the northwest of the Proposed Development linking the C1033 and the A836, as indicated in **Figure 4.7**.

[4] https://highland.maps.arcgis.com/apps/webappviewer/index.html?id=2fd3fc9c72d545f7bcf1b43bf5c8445f

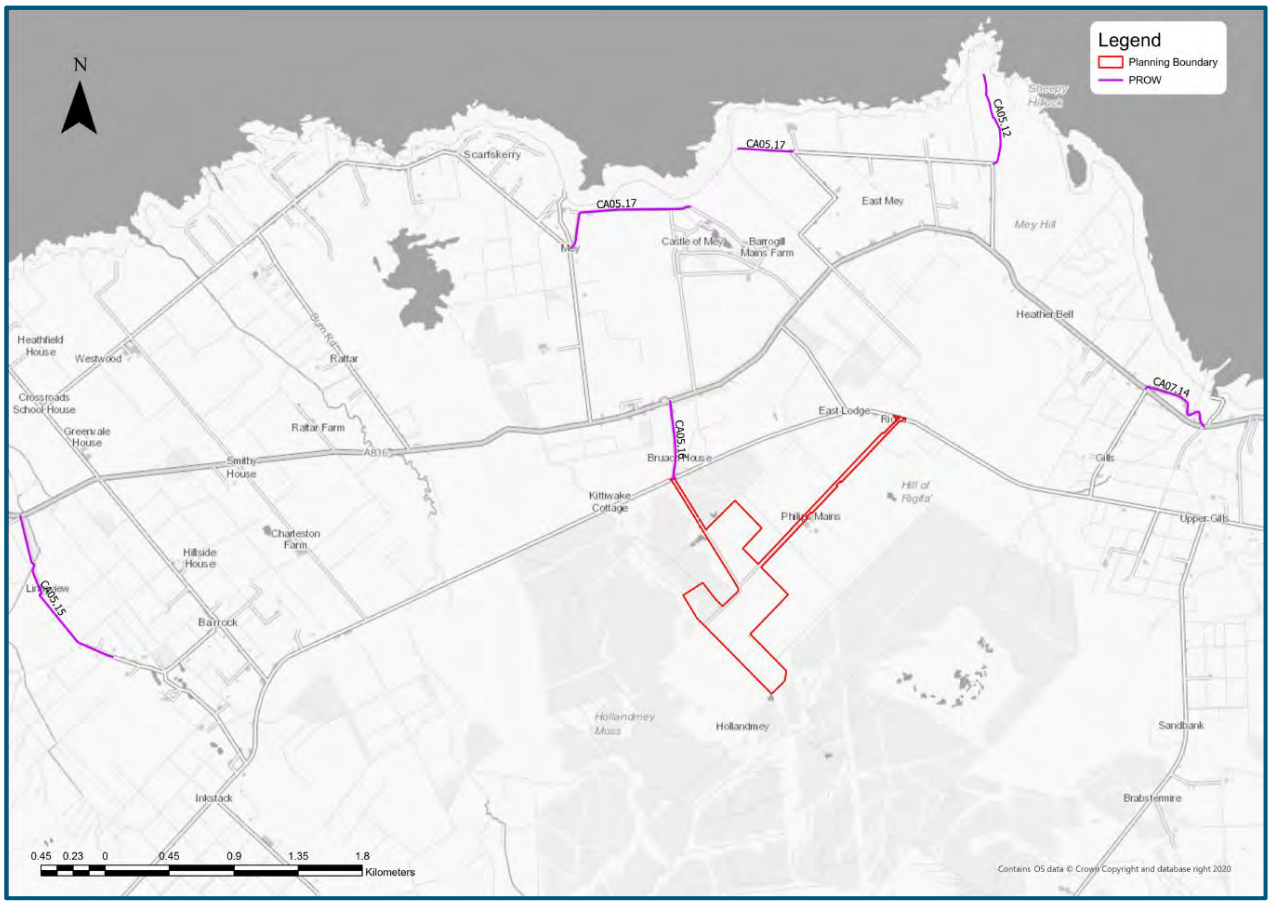

Figure 4.7: Location of Core Paths in the Vicinity of the Proposed Development

As it is proposed that construction and delivery vehicles utilise the A836 and U1633 (East Lodge Road) to access the site, the proposed construction traffic and delivery route to and from the site would not impact users of the Core Path CA05.16.

Due to the remote rural location of the site, it is not anticipated that pedestrians would access the site. Should pedestrians require access to the site, access would be available via the wider road network, Philips Mains private access road and proposed new points of access to the BESS, substation and interface substation compounds.

The National Cycle Routes (NCR) map[5] indicates that the C1033 forms part of the Sustrans Inverness to John O'Groats Cycle Route (NCR1). Approximately 370 m of this route located to the west of the C1033/ Philips Mains private access road junction, forms part of the delivery route associated with the Proposed Development. As such, cyclists and HGVs will share the carriageway making use of the designated passing places and several property accesses, if required.

There are no public transport services provided within a one-mile radius of the site. As such, it is not anticipated that visitors or staff would access the site via public transport.

[5] https://explore.osmaps.com/?lat=58.633822&lon=-3.213919&zoom=13.2819&style=Standard&type=2d&overlays=os-ncn-layer

4.6 Parking Strategy

The site layout plan, located in **Figure 4.1**, indicates twelve car parking spaces located on the substation compound: six car parking spaces are located in the vicinity of the welfare building and a further six car parking spaces located in the northeast side of the site, in the vicinity of the new access junction.

During the construction phase, visitors will be directed to designated car parking located in the vicinity of the welfare compound. Operational staff will park across the site, as appropriate. Secure staff cycle parking would be accommodated within the welfare compound, as required. Due to the infrequent operational trips to the site, very limited car and cycle parking will be required.

5 Construction Traffic

5.1 Construction Traffic Demand

It is anticipated that the highest level of traffic would be generated during the construction period. The construction phase of the Proposed Development would occur over a 24-month period:

- Year 1
  - Site establishment;
  - Groundworks; and
  - Main civils work (including stone and battery delivery).
- Year 2
  - Electrical installations and cabling;
  - Commissioning, testing and acceptance;
  - Demobilisation; and
  - Landscaping.

The quantum of anticipated deliveries associated with the construction phase has been derived from information provided by Field, as well as material quantities set out on the Site Finished Levels Plan 005.7 located in **Appendix G**. Assumptions which inform this OCTMP are based on construction traffic and operations from similar sites. A final construction programme which accurately reflects the schedule of deliveries associated with the construction phase would be derived prior to the commencement of activities at the site and included in a final CTMP.

The typical operating hours of the site during the construction phase (24-month period) would be 07:00 – 19:00 Monday to Friday and 07:00 – 13:00 on Saturdays. It is anticipated that daily deliveries to the site would peak in Year 1 during the establishment of the site, which include the groundwork and main civils work associated with the construction of the access road and stone platforms on which the batteries would be situated.

HGV traffic on weekdays would peak at a maximum of three per hour for stone deliveries, which equates to six two-way trips per hour, and a daily total of 36 HGV deliveries (72 two-way trips) per weekday. HGV traffic on Saturdays would peak at a maximum of 36 two-way trips. Deliveries of stone would typically be undertaken using 10 m long, eight-wheeled tipper trucks. It is estimated that approximately 1,620 vehicle loads of stone would be required to create the access road and platforms. As such, it is estimated that a total of 3,240 HGV two-way vehicle trips would be associated with stone deliveries over an approximate nine-week period during Year 1.

It is anticipated that towards the end of Year 1 or early in Year 2, following the completion of the stone platform, maximum length articulated HGVs would deliver the batteries to the BESS compound. Battery construction information has been provided by Field. The Proposed Development has been designed to accommodate a range of battery systems from different suppliers who will be selected against a performance specification in a final procurement activity prior to commencement of work. The site layout plan (**Figure 4.1**) shows that a total of 4,800 battery units arranged in 200 strings (each comprising 24 battery units) would be located on the BESS compound. It is anticipated that during the construction phase, a total of 800 HGV trips would be generated to deliver battery units. It is assumed that the batteries would be delivered by HGV in skids of six batteries, with details to be confirmed subject to confirmation of supplier.

During the construction phase, it is anticipated that weekday HGV traffic would peak at a maximum of four loads of battery deliveries per day. At this rate, a total of 200 weekdays (40 weeks) are required for this phase of construction. It is anticipated that the batteries would be delivered at the end of Year 1/ beginning of Year 2.

It is anticipated that only small volumes of material from the earthworks would be removed from the interface substation, with the majority of material being utilised for on-site fill and a landscaping bund.

Notably, whilst a maximum of 36 deliveries per day could be expected at peak periods, there would be an average of just under five daily deliveries over the course of the construction programme.

The total estimated traffic associated with the 24-month construction period is set out in **Table 5.1**.

Material, including top soil, removed would predominantly be stored on-site or utilised for landscaping. As a worst-case scenario, the trip generation estimated in **Table 5.1** is based on the assumption that 10 m tipper trucks would be required for the removal of material off the Site. There is the potential that larger tipper trucks may be required which would reduce the estimated quantum of trips.

AILs associated with the delivery of the transformers are anticipated during Year 1 of the construction phase. It is anticipated that requirements relating to the transportation and delivery of AILs would be addressed through a specific AIL-CTMP, which would be produced post planning consent.

It is not anticipated that street furniture or lining would be installed or removed during the construction phase for access to the site, and any road signs temporarily erected on the public roads would accord with the Traffic Signs Manual.

Due to the scale of the Proposed Development, on-site car parking for construction staff has been included within the site compounds. Car parking spaces would likely relocate across the site as construction phases progress.

Table 5.1: Estimated Trip Generation During Construction Phase (Years 1 and 2) Rigifa Site

Phase	Task	Vehicle Type	Total Trips	Two-Way Vehicle Trips	Duration (weeks)*
Site Establishment	Site offices at BESS and substation compound	Maximum legal length articulated HGV	3	6	2
	Site office at interface substation compound		3	6	2
	Equipment and furniture for site offices	Small van deliveries	4	8	2
Main Construction: BESS and substation compound Groundworks, civil works associated with access junctions, access road and platforms	Upgrading Philips Mains private access road, site accesses and construction of the internal access tracks	Excavator	1	2	8
	Stone deliveries to BESS and substation compounds	10m^3 rigid tipper truck	1,620	3,240	9
	Delivery of battery and storage units (inverter/ transformer skids) to BESS compound	Maximum legal length articulated HGV/ Low loader	800	1,600	40
	Placement of batteries on BESS compound	400T crane	1	2	35
	Delivery of MV skids (nos. 55)	Maximum legal length articulated HGV	50	100	30

Phase	Task	Vehicle Type	Total Trips	Two-Way Vehicle Trips	Duration (weeks)*
	Delivery of standby generator	Maximum legal length articulated HGV	1	2	1
	Delivery of grid transformers (nos. 2)	Abnormal indivisible load	2	4	3
	Delivery of auxiliary (nos. 2) and voltage transformers (nos. 3) and air insulated switch gear	Maximum legal length articulated HGV	7	14	4
	Delivery of cable sealing ends and circuit breakers	Maximum legal length articulated HGV	1	2	1
Main Construction: Interface substation compound Groundworks, civil works associated with access junction, access road and platforms	Removal of material (including top soil) from interface substation compound	$10m^3$ rigid tipper truck	3	6	6
	Stone deliveries to interface substation	$10m^3$ rigid tipper truck	34	68	6
	Delivery of cable sealing ends and circuit breakers to interface substation compound	Maximum legal length articulated HGV	1	2	1
	Delivery of generator to interface substation	Maximum legal length articulated HGV	1	2	2
Electrical installations	Electrical installations and cabling	Maximum legal length articulated HGV	10	20	24

Phase	Task	Vehicle Type	Total Trips	Two-Way Vehicle Trips	Duration (weeks)*
Commissioning, testing and acceptance	Testing	Small van and private cars	10	20	6
Demobilisation	Removal of equipment from site	Maximum legal length articulated HGV	10	20	3
Landscaping	Deliveries	Small delivery van	2	4	8
Total Estimated Trips During Construction Phase			**2,564**	**5,128**	**104**
Average Deliveries per day			**4.9**	**9.9**	
* Includes contingency to allow for statutory public holidays and unforeseen circumstances (e.g., inclement weather)					

5.2 Construction Vehicle Routing

There are two existing routes providing access to the site, as described in **Section 3.2**.

It is proposed that all HGV deliveries and construction vehicles associated with the Proposed Development would utilise the Philips Mains private access road to link with C1033 at Rigifa. Vehicles would then route to the A836 via the U1633, as indicated in **Figure 3.1** .

The distance from the site access to the junction of the private access track and C1033 is approximately 1.9 km (1.2 miles). HGVs travelling at an average speed of 20 mph would cover this distance in approximately 5-6 minutes. The average duration of stone deliveries whilst at the site is 15 - 20 minutes. As such, it is anticipated that in order to mitigate two-way HGV traffic on the private access track, the maximum number of HGVs would be limited to three deliveries per hour, as set out in **Section 5.1**.

The proposed delivery route between the A836 and the BESS and substation compounds has been discussed and agreed during consultation with THC's Roads Operations (Caithness and Sutherland) team, as set out in the minutes located at **Appendix A**.

From the U1633/ A836 junction, it is anticipated that HGVs, construction and delivery vehicles associated with the Proposed Development would utilise A routes: the A9(T) to the west and A99 at John O' Groats to the east. It likely that the majority of construction vehicles would approach the Proposed Development from Thurso due to the anticipated locations of site personnel, construction staff and the potential sourcing of stone and material from quarries located in Ruther, Spittal and Bower. However, it is also possible that Wick, to the southeast of the site, could function as a key location for the transport of resources and materials by sea. As such, it is anticipated that the A99 between Wick and John O'Groats, or the A882 between Wick and Georgemas, then via A9 and Thurso would be utilised by HGVs. The final HGV routing would be confirmed in the final CTMP, subject to agreement and confirmation of suppliers.

5.3 Operational Traffic Demand

It is anticipated that operational traffic associated with the Proposed Development would be very low and as a result the impact on the local road network would be negligible. It is estimated that one Light Goods Vehicle (LGV) would require access to the site per month for routine checks and maintenance, and an occasional HGV would require access to replace batteries, as required. During the operational phase, abnormal loads associated with the incidental removal and replacement of the transformers may be required. Refurbishment and replacement of batteries would be limited to specific time periods as required, resulting in a small increase in the number of maintenance vehicles and a HIAB for a limited period.

It is reasonable to assume a slight increase in the number of LGV and HGV trips during the decommissioning stage, which would be managed within similar methods to construction of the site.

6 Cumulative Development

Five proposed developments in the wider local area have been identified to have a potential cumulative traffic impact with the Proposed Development. All of the potential developments are located within a 1 km radius of the Proposed Development, as indicated in **Figure 6.1**.

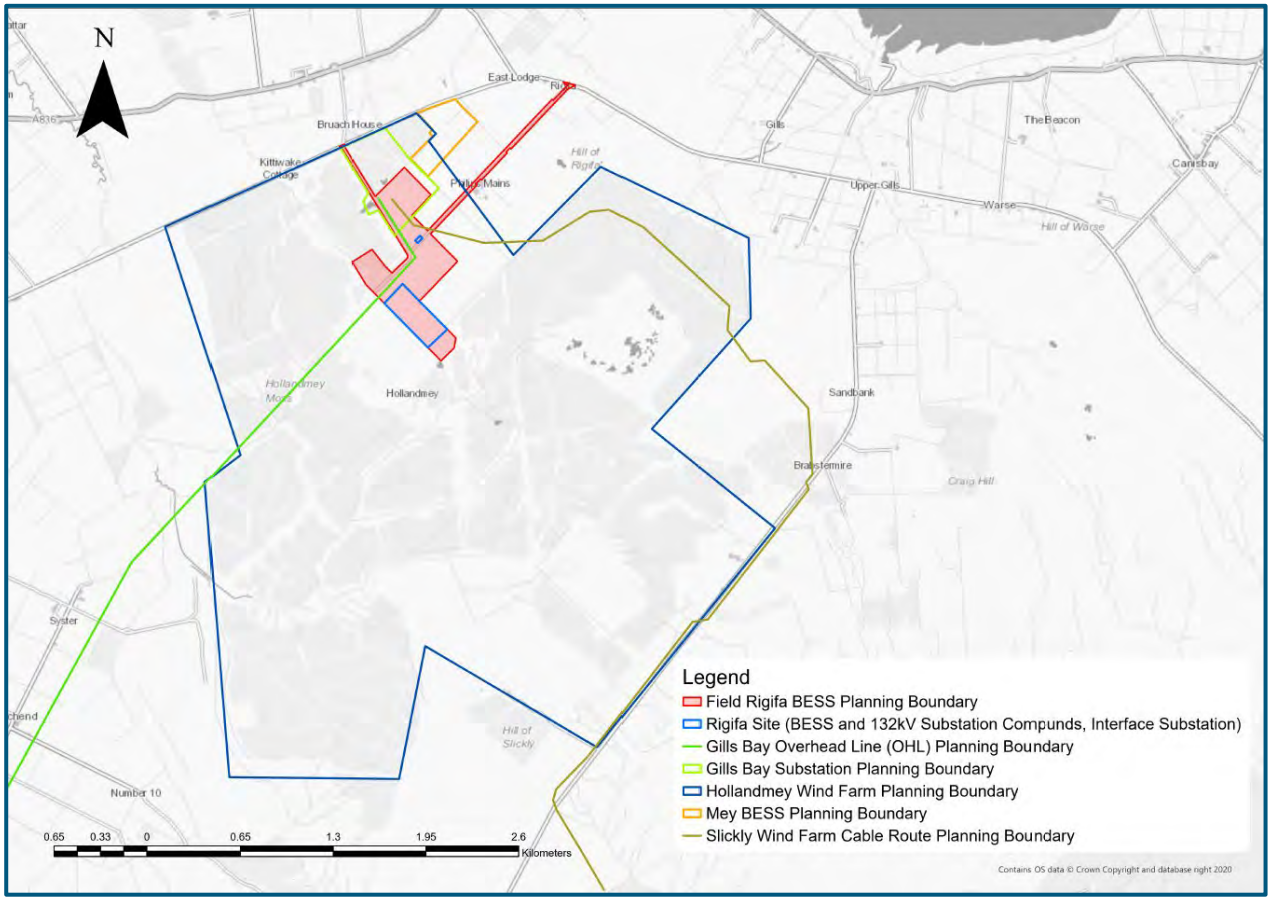

Figure 6.1: Location of Proposed Developments in Close Proximity to the BESS, Substation and Interface Substation Compounds

6.1 Gills Bay Substation

Planning permission (Ref. 21/05536/FUL) has been granted by THC for the construction and operation of Gills Bay substation. The proposed scheme is a 132 kilovolt (kV) switching station and associated infrastructure located at Philips Mains Farm, comprises an area of approximately 10.66 ha. The Gills Bay substation is located to the northeast of the Proposed Development and will connect the Proposed Development to the 132 kV transmission network. The Gills Bay substation location is indicated in **Figure 6.2**.

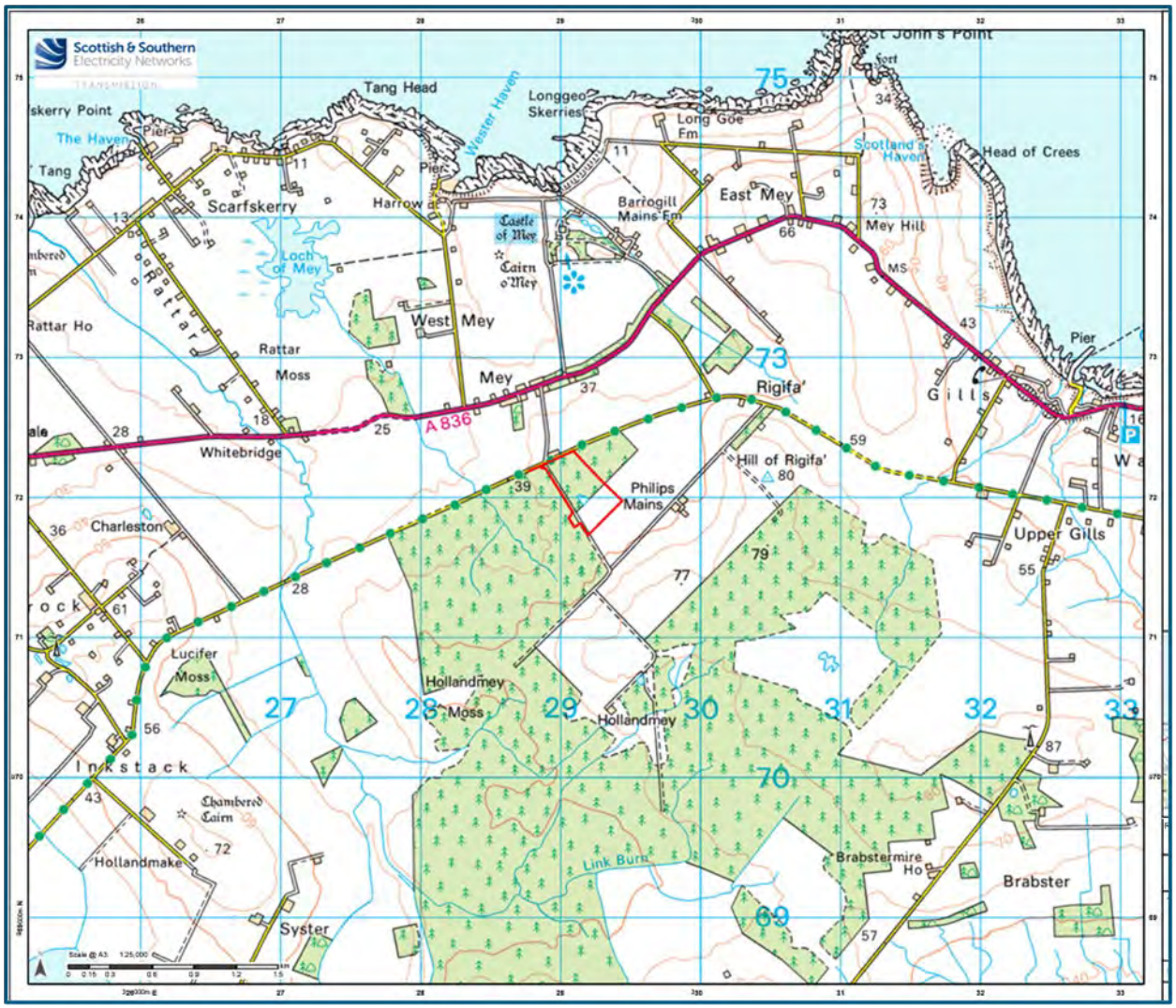

Figure 6.2: Location of Gills Bay Substation

As part of the original planning application (Ref 15/03392/FUL), the proposed construction access route plan indicated that HGV and delivery vehicles associated with the Gills Bay substation extends along the A836, U1633, C1033 and a private access track in the vicinity of Brauch House. The proposed construction access routes are indicated in **Figure 6.3**.

Figure 6.3: Proposed Construction Access Routes for Gills Bay Substation

Access to the site would be via a private access track located to the south-west of the site, which links to the C1033 in the vicinity of Brauch House, as indicated in **Figure 6.4**.

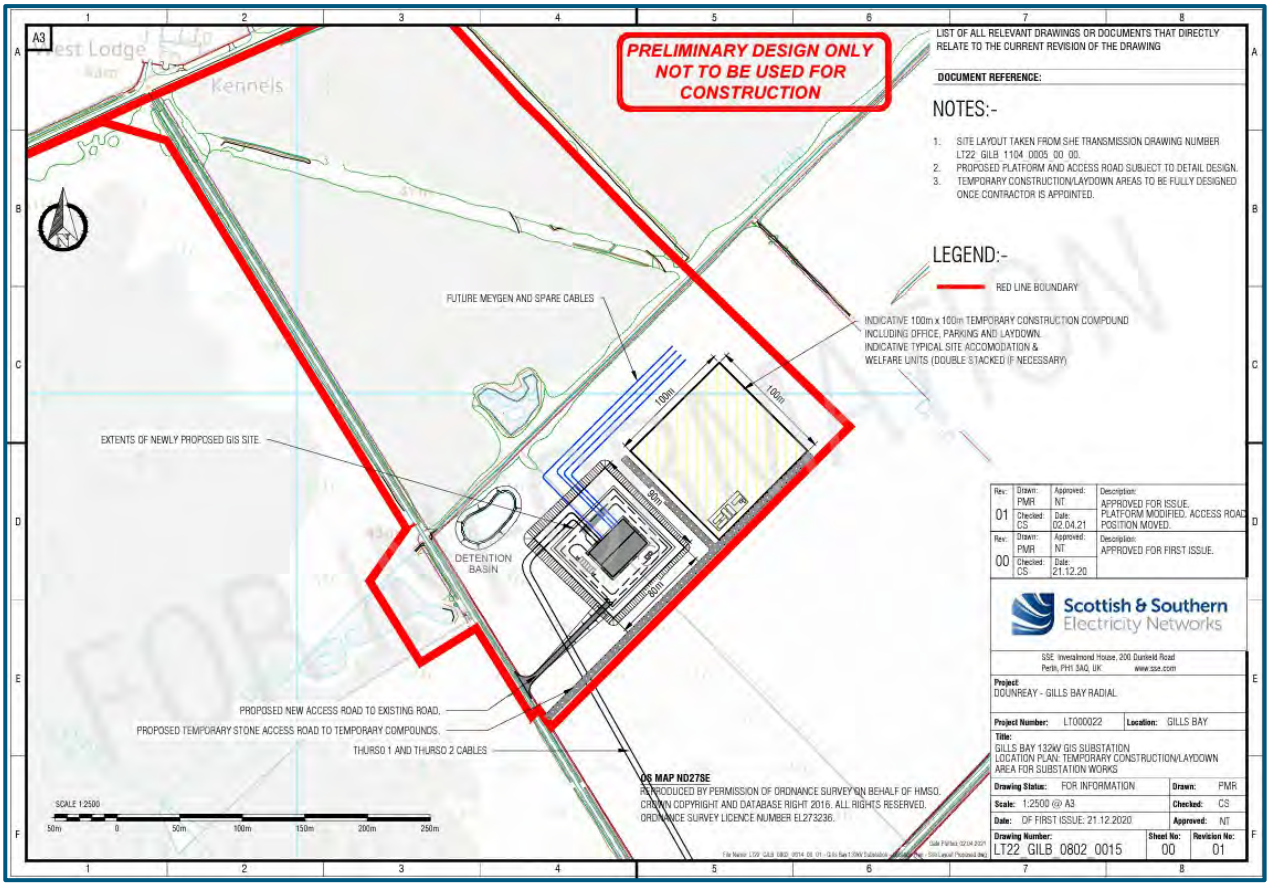

Figure 6.4: Access Arrangements for Gills Bay Substation

The Gills Bay substation scheme would lead to increased traffic volumes on the local road network during the construction phase only. The Transport Planning response to the original application [6] (Ref 15/03392/FUL) requires a CTMP provide details of anticipated traffic, visibility splays and construction traffic mitigation measures, and would require approval by THC prior to commencing construction. Conditions 3 and 4 of this planning application require road access upgrades at U1633 and C1033. Planning application Ref 15/03392/FUL lapsed in 2022.

In July 2022, permission was granted for planning application Ref. 21/05536/FUL to construct and operate a 132 kV switching station and associated infrastructure on land west of Philips Mains, Mey with the following conditions:

- Condition 9 requires a CTMP to ensure adequate raod safety measures are in place including measures to minimise conflict with other road users; and
- Condition 10 requires an AIL-CTMP to ensure abnormal loads access the site in a safe manner.

6.2 Gills Bay 132kV Overhead Transmission Line

Planning permission (Ref EC00005260) was granted in July 2019 for the Gills Bay Radial 132 kV OHL located between Thurso substation and Gills Bay substation. This consented scheme comprises approximately 13 km of 132 kV alternate current double-circuit overhead transmission lines (OHL) carried on approximately nos. 52 steel-lattice towers between a proposed sealing end compound at Weydale, Caithness and a proposed sealing end compound at Reaster, Caithness. An ancillary development includes

[6] *Development and Infrastructure: Transport Planning (October 2015)*

approximately 10 km of underground cables, access works including new tracks and junctions and temporary protection measures at road sand water crossings during construction.

Permission for this consented scheme lapsed on 22 July 2024; however, it is understood that SSE intend to seek re-consent for this development as this development is critical for the Gills Bay substation.

The main access routes for the scheme extend along the A9, A836, U1633 and C1033 as indicated in **Figure 6.5**.

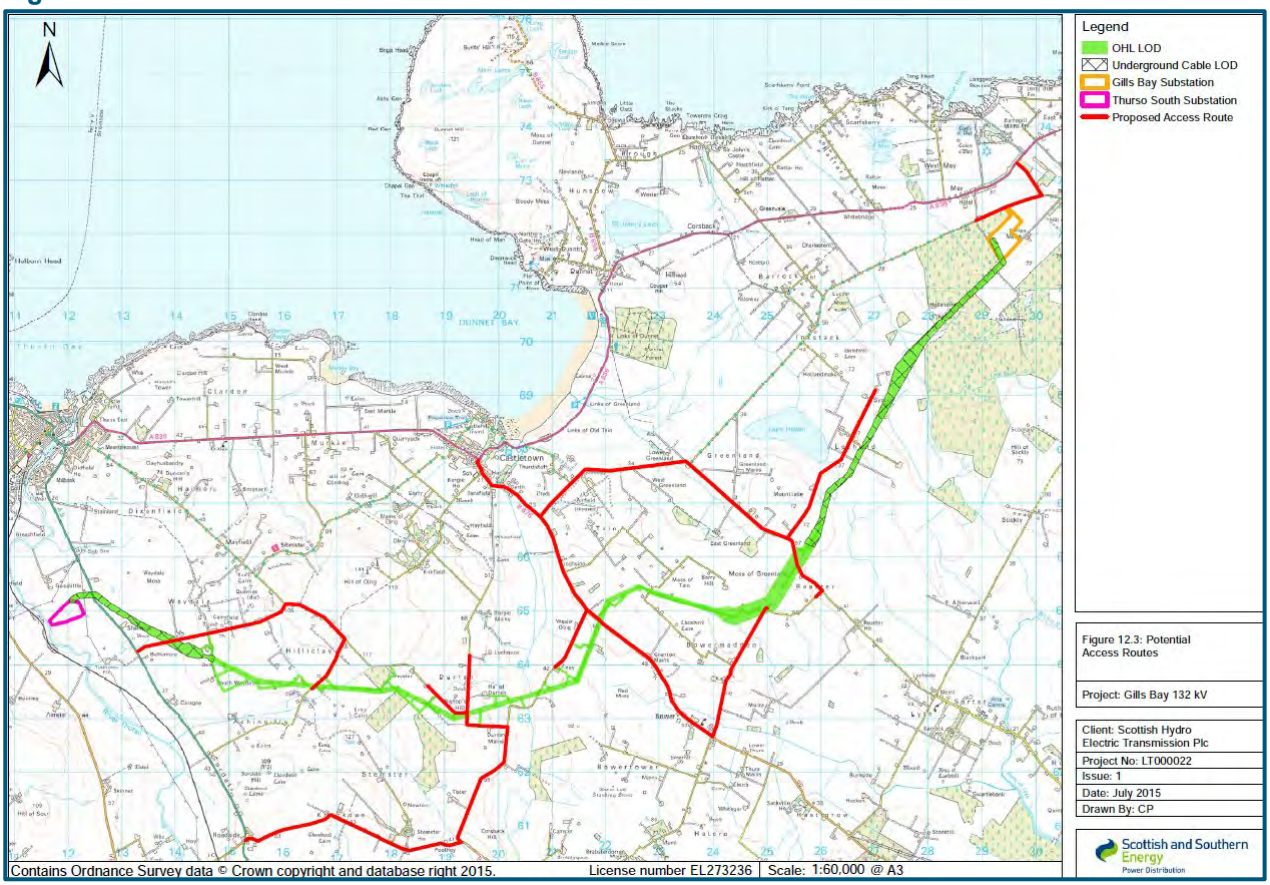

Figure 6.5: Potential Access Routes Associated with the Gills Bay Overhead Transmission Line

The TA[7] identified the greatest traffic volumes would be HGVs associated with the construction phase. Vehicles accessing the site during the operational phases would be restricted to maintenance checks and would generate much lower volumes of traffic not considered to be in excess of daily traffic variation on the local road network. As such, traffic movements during the operational phase would have no significant impact and were scoped out of the assessment. The TA focused on the construction phase of the project only, during which impacts were expected to be low and temporary.

The TA identifies that the maximum traffic impact associated with the construction of the proposed development is predicted to occur in months 2 and 3 of the programme which corresponds with the enabling works, and specifically the delivery of materials to enable the construction of the access tracks associated with the OHL section of the route. It is likely that the greatest impact in terms of overall traffic impact is felt on the minor C and U Class roads that will provide access to the individual tower locations. A summary of predicted construction traffic generated by this scheme is summarised in Table 6.2 of the TA, as indicated in **Figure 6.6**.

[7] *WYG (2015) located in Gills Bay 132 kV Environmental Statement: Volume 4B: Technical Appendix 12: Traffic and Transport*

Table 6.2: Summary of Predicted Construction Traffic Generation

Phase	Car & Lights	OGV 1	OGV 2	Total
Overhead Line				
Phase 1: Distribution network alterations – NOT part of Section 37 application				
Phase 2: Enabling Works	60	210	8115	8385
Phase 3: Installation of Foundations	58	408	122	588
Phase 4 : Installation of Towers	65	234	117	416
Phase 5 : Conductor Stringing	64	174	126	364
Phase 6 : OHL Commissioning	30	0	0	30
Phase 7 : Reinstatement	0	55	0	55
Underground Cable				
Phase 1 : Enabling Works (including access track construction)	1647	108	252	2007
Phase 2 : Construction	9283	2868	16315	28466

Figure 6.6: Summary of Predicted Construction Traffic Generated by Gills Bay OHL

The indicative construction phasing detailed in the TA was used to convert the total movements for each trip type to average monthly traffic flows. To enable comparison of the estimated baseline traffic flows with total volumes including predicted construction traffic, the monthly data was converted to average daily flows for each month and the peak period for construction traffic determined. The maximum traffic impact associated with the construction of the proposed development is predicted to occur during months 2 and 3 with an average of 158 vehicle movements per eight-hour working day, with the greatest impact on the A836 east of the C1025 within Thurso.

It was assumed that all materials and plant will originate from the south along the A9, with construction traffic access to the various sections of the proposed development likely to be distributed mainly via the A9/ A836/ B974 and B876. It is anticipated that 10% of all trips would access the site via A9/ A836/ U1633.

The TA concluded that the construction traffic during the most intensive phase of the construction programme would be temporary, and given the low background traffic flows, no significant capacity issues are anticipated on any roads within the study area due to the additional construction traffic movements associated with the proposed development. A CTMP is required to control construction traffic to ensure road safety and efficiency.

6.3 Mey BESS

Mey Energy Storage Limited has submitted an application to the ECU (Ref. ECU00004838) for the construction and operation of a BESS at land on Philips Mains Farm, southeast of Mey in Caithness. The installed capacity of the proposed BESS would be up to 300 MW. The proposed scheme would also

comprise ancillary infrastructure including access tracks, underground cables, an on-site substation and ancillary electrical infrastructure, security fencing and on-site car parking.

The site covers an area of 10 ha on land currently used as arable land. It is proposed that the BESS would be accessed via a new site access junction off the C1033, approximately 125 m southwest of the U1633 junction and 500 m to the west of the Philips Mains private access road junction. The new access junction has been designed to accommodate the proposed construction traffic deliveries and would provide construction and operational access to the proposed scheme.

The Mey BESS development would lead to increased traffic volumes on the local road network during the construction phase only. The impact of this proposed scheme on the wider road network during the operational phase would be negligible and limited to occasional maintenance vehicles. At the decommissioning phase, the removal of structures and on-site equipment and the reinstatement of disturbed ground would be undertaken, with mitigation measures similar to that required at the construction stage.

6.4 Hollandmey Renewable Energy Development

A Section 36 ECU planning application (Ref ECU00003353) has been approved for the construction and operation of a renewable energy development known as Hollandmey Renewable Energy Development (RED), at land at Hollandmey, in Caithness. The proposed scheme comprises a generating station with an installed capacity of up to 65 MW, 10 wind turbines with a ground to blade tip height of 149.9 m and a generating capacity of approximately 50 MW. The proposed development also includes 15 MW of ground mounted solar arrays and approximately 15 MW of battery energy storage.

The application boundary of the Hollandmey RED encompasses the boundary of the Proposed Development. The solar area would be situated to the north-west of the proposed substation compound, and turbines would be located to the south and south-west.

Following an objection from THC, the planning application was referred to Public Inquiry in 2023. A report was submitted to Scottish Ministers for decision on 16th February 2024. Section 36 consent for the development was approved on 16th September 2024.

Chapter 12 of the Hollandmey EIA[8] assesses the potential transport impacts of the Hollandmey RED on the local road network. The proposed scheme includes widening and upgrading existing access tracks to the site, including the track located to the north-west of the proposed BESS and substation compounds, as well as the associated junction with the C1033. In addition, it is proposed that localised widening of the C1033 would take place to accommodate the delivery of wind turbines and construction materials. The anticipated traffic impacts during the construction phase were considered to be the worst-case scenario.

6.5 Slickly Wind Farm Overhead Line Connection

It is the intention that a Section 37 application be made to the ECU (Ref. ECU00005075) for permission to connect the Slickly Wind Farm into the electricity transmission network along a length of approximately 8.5 km between the proposed Slickly Wind Farm and the consented Gills Bay Switching Station (described in **Section 6.1**).

Chapter 10 of the EIA Scoping Report[9] for the Slickly Wind Farm OHL connection set out the potential effects of traffic related to the construction phase of the proposed scheme. The impact of HGVs and LGVs movements during the construction phase of the proposed development, as well as baseline conditions on

[8] *Hollandmey Renewable Energy Development: EIA Report Chapter 12: Traffic and Transport*
[9] *Environmental Impact Assessment Scoping Report Slickly Wind Farm 132 kV Overhead Line Grid Connection (March 2023)*

the A9/ A836 corridor were considered. The report identified that the main potential impact of the Slickly Wind Farm OHL Connection will be increased traffic flows and changes to the traffic composition as a result of traffic movements during the construction phase, affecting existing road users and residents along the road corridors. Changes to the transport and traffic were temporary and as such, construction traffic, operational traffic and decommissioning were scoped out of the traffic and transport chapter as part of the EIAR.

The ECU Scoping Opinion was issued on 18 June 2024 in response to the EIA Scoping Report. In the absence of comment by THC transport planning team, the ECU Scoping Opinion set out that a TS would be required to identify the number of type of vehicles generated during the operational and construction of the development, and where appropriate the TS should consider and propose measures necessary to mitigate the impact of development traffic. The cumulative impact with other operational or committed developments should be included in the TS, along with access arrangements, visibility splays and swept path analysis assessments.

The Council's public road network is considered sensitive, and where traffic flows are predicted to increase by 10% or more, the High National Road Traffic Forecast should be used when assessing the public road network. The public roads in the wider local area are influenced by tourist traffic during the summer months and this should be recognised in the assessment. The TS should comply with the requirements of the Transport Scotland Transport Assessment Guidance.

The Scoping Opinion also required the preparation of a framework Travel Plan (TP) to encourage sustainable travel to and from the site, as well as a framework CTMP within the TS. The framework CTMP would be developed into a full CTMP by the contractor, once appointed, and should include measures to ensure that construction traffic adheres to the approved routes and propose measures to mitigate the impact of such traffic. Stakeholder consultation and local community engagement is subject to the level of traffic generated.

The Scoping Opinion required abnormal loads associated with the proposed development to be identified, along with routes and swept path analysis. Any proposed changes to the trunk road network should be discussed and approved with Transport Scotland. To protect the interests of the Council, a Section 96 agreement is required. Site compound access, the removal of redundant infrastructure and waste management should be provided in accordance with the Council's supplementary planning guidance.

6.6 Approach to Cumulative Development

It is proposed that potential cumulative traffic impacts of the Proposed Development would be considered at the pre-construction stage, in liaison with the other schemes in the wider local area and THC. This approach allows the impacts to be determined accurately, and appropriate mitigation to be established once detailed information is available to all parties. This approach is consistent with the approach identified for other potential developments in the wider local area.

The anticipated construction traffic demand associated with the Proposed Development shows that the majority of deliveries would be within an eight-week period, largely associated with the delivery of stone for the construction of the platform on the site. In the event of an overlap in the construction works with other infrastructure schemes in the wider local area, consultation with other parties would be undertaken to avoid simultaneous intensive delivery periods, where practicable.

The delivery routes, access arrangements and construction traffic demand associated with the proposed and consented developments in the wider local area have been reviewed, and the anticipated cumulative construction traffic impact assessed. It is concluded that the cumulative traffic impact is low given the

temporal overlap with other developments, and would be effectively managed through the implementation of mitigation measures set out in **Section 7** of this report.

7 Outline Construction Traffic Management Plan

This section of the TS sets out the anticipated traffic associated with the construction phase of the Proposed Development; the measures proposed to mitigate the impact of the Proposed Development on the local road network (such as construction vehicle routing and delivery schedules) and sets out the roles and responsibilities of the Logistics Manager.

7.1 Construction Traffic Management

Traffic management works would comply with the provisions of the Traffic Signs Manual Chapter 8: Traffic Safety Measures and Signs for Road Works.

It is proposed that the Logistics Manager appointed by the Contractor would be responsible for the provision of traffic management at the site and would coordinate and manage construction traffic and deliveries arriving at and departing from the site during the construction phase of the Proposed Development. The Logistics Manager would set out the arrival time of deliveries at the site, the anticipated duration of stay and departure time. Deliveries would be scheduled throughout the day to reduce the potential “bunching” of trips associated with deliveries to the site during peak construction periods. This would ensure that deliveries are limited to a maximum of three deliveries per hour, providing sufficient time for the stone to be removed from the vehicles and placed before the next delivery arrives.

The existing road network in the vicinity of the site comprises single track rural roads with passing places. The distance from the BESS and substation compound accesses to the A836 is approximately 3 km (1.9 miles) which would take an HGV travelling at 20 mph approximately 9 minutes to cover this distance. To mitigate potential conflicts as a result of two-way HGV movements on Philips Mains private access road and the public highway between the access junction and the A836, , the Logistics Manager would schedule deliveries and hold outbound vehicles on the site to allow inbound HGVs access to the site. The scheduling of HGVs and management of deliveries would seek to avoid HGVs passing each other on these narrow rural roads and make use of several new passing places on Philips Mains private access road, all known designated passing places on the C1033, as well as laybys, holding areas or rest stops on the A836, where available. Inbound HGV drivers would be expected to stop at the available passing places on the private access track and C1033 and contact the Logistics Manager to confirm it was safe to proceed to the site. Drawings indicating the proposed location of new passing places on the private access track are located in **Appendix H**.

Access for emergency vehicles would be well maintained at all times. Should an emergency vehicle require access to the site, the Logistics Manager would be responsible for redirecting incoming HGVs to the laybys located on the A836, designated passing places on the U1633 and C1033, as well as the new passing places on Philips Mains private access road. This arrangement would restrict the number of HGVs on the site during an emergency.

As set out in **Section 5** of this TS, a part of the traffic management associated with the construction phase at the site comprises the potential cumulative development traffic impacts which would be considered at the pre-construction stage. The contractor would liaise with other schemes and THC to allow the impacts to be determined accurately, and appropriate mitigation to be established once detailed information is available to all parties. In the unlikely event that there is an overlap in peak construction traffic with other developments, the contractor would coordinate construction traffic deliveries in consultation with other developments and THC, if required.

Furthermore, the local community would receive prior notification of the commencement of construction works at the site, and ongoing community engagement throughout the construction phase is set out in **Section 7.2** of this TS.

7.2 Engagement with Local Residents

The Logistics Manager would be responsible for briefing local residents and businesses prior to the commencement of construction work at the site. Notifications relating to the construction phase would comprise:

- the estimated commencement date;
- estimated duration of works;
- anticipated stone delivery schedule;
- operational hours;
- estimated delivery trip schedule; and
- anticipated end date.

The Logistics Manager appointed by the contractor would engage with local residents throughout the pre-construction and construction phase, and should complaints or concerns arise during the construction phase, the Logistics Manager would engage with stakeholders and implement appropriate mitigation as soon as practicable. Further details relating to the roles and responsibilities of the Logistics Manager are set out in **Section 7.4** of this report.

7.3 Maintenance and Repair of Public Roads

The contractor is responsible for any damage to the local road network caused by activities associated with the construction of the Proposed Development. The contractor would comply with the agreed road maintenance regime in the vicinity of the site access and on local roads. As part of the Roads (Scotland) Act 1984, a “Wear and Tear” Agreement between the contractor and THC would be established. Any damage to the existing road network as a consequence of construction activities associated with the Proposed Development would be repaired by the contactor or a financial contribution made to the roads authority to cover the cost of remedial works.

A Coarse Visual Inspection (CVI) would be undertaken prior to the commencement of construction works to establish the current condition of the public roads. A further CVI would be undertaken following the completion of the construction phase to determine the impact of the construction vehicles on the local roads. THC would be given sufficient written notice of the intended timing of the CVIs, to facilitate a representative attending, if required.

Before commencing works on the access arrangements via the private access road which links to the public road approximately 1 km north of the site, the contractor would obtain the consent of THC as the road authority, in line with Section 56 of the Roads (Scotland) Act 1984.

Temporary signage and damage to the local road network as a result of construction activities associated with the Proposed Development would be addressed in line with the Roads (Scotland Act 1984) and would be removed and repaired by the contractor.

7.4 Monitoring, Enforcement and Governance

The implementation of the CTMP would be managed by the appointed contractor. The Logistics Manager, appointed by the contractor, would be responsible for the day-to-day organisation and monitoring of construction logistics and traffic management for the site for the duration of the construction phase.

The Logistics Manager’s role and responsibilities would comprise:

- Regular liaison with key personnel at THC local residents and businesses;
- Undertake ongoing monitoring at the site, including the collection of data relating to the number of vehicle movements to and from the site on a daily basis;
- CTMP breaches and complaints; and
- Safety (logistics) related incidents.

The Logistics Manager would be appointed prior to the commencement of construction works, and their contact details provided to THC and the local community. The role of the Logistics Manager and their relationship with stakeholders is indicated in **Figure 7.1**.

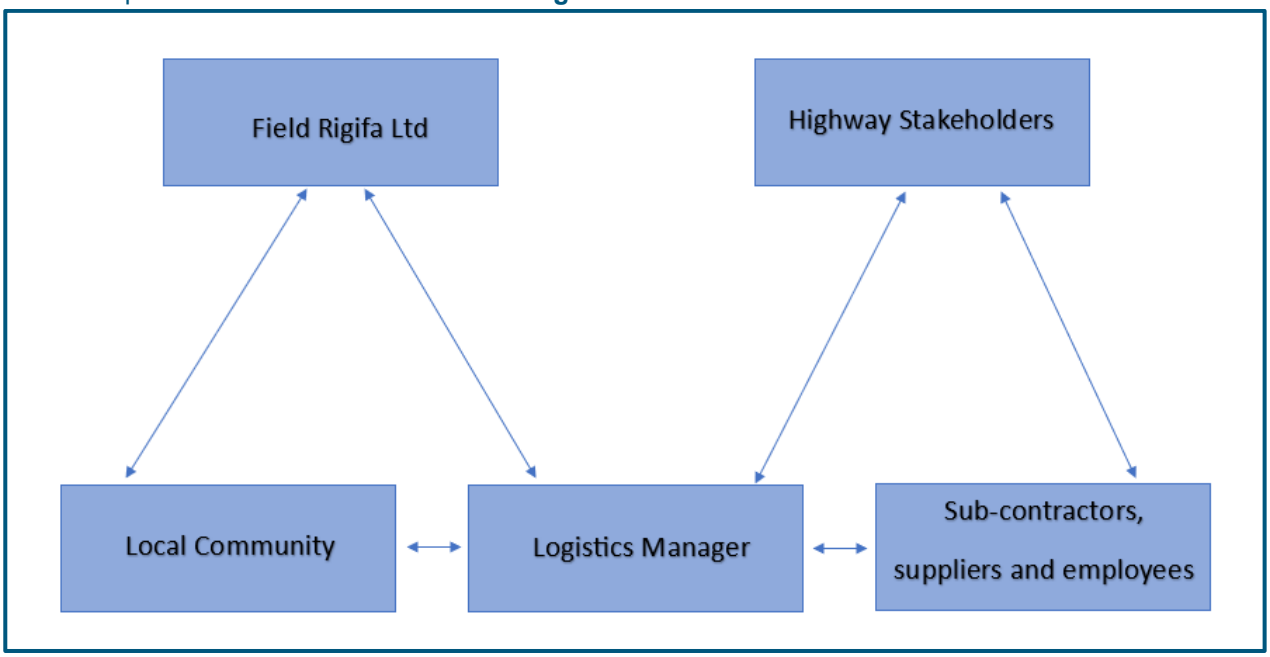

Figure 7.1: Role of Logistics Manager

To ensure that the CTMP is effectively enforced, it is essential to define what constitutes a "breach". For the construction works, the following actions would constitute a breach of the CTMP and require the implementation of mitigation and/or corrective measures:

- Construction workers overspill parking on public roads;
- Construction HGVs not adhering to agreed routes and arrival/ departure times; and
- Construction vehicles being driven inappropriately (e.g., speeding).

Upon receipt of notification of a breach, the Logistics Manager would investigate the circumstances thoroughly and compile a report which would be issued to THC as the local roads authority. The roads authority would review the report and request further information or clarification, if required, in order to determine whether a material breach has indeed occurred. The outcome of the review would be communicated to the Logistics Manager. It is the responsibility of the Logistics Manager to report all breach investigations to the road authority.

Should the road authority determine that a material breach has occurred, the following three-stage process would be implemented:

- Stage One – the roads authority highlights a potential breach and requests the Logistics Manger review the data and concerns. The Logistics Manager would then agree the extent of the breach of controls were indeed 'material' and agree an appropriate mitigation or action.
- Stage Two – should a further material breach be identified, the contractor/ supplier would be given a warning and required to provide an action plan to outline an appropriate course of action to rectify the matter, and implement additional mitigation measures, as required.
- Stage Three – should further breaches occur, the contractor/ supplier would be required to remove the offender from the site, and the contractor/ supplier would receive a formal warning. Any further breaches by individuals associated with the contractor/ supplier may result in the implementation of formal dispute procedures set out in the contract.

7.5 Safety and Environmental Standards

This section of the report outlines the measures that would be adopted to maintain high standards of construction safety and limit the disruption to other motorists, local residents and businesses.

7.5.1 Construction Logistics and Community Safety (CLOCS)

The CLOCS Guide[10] draws together evolving and applied best practice drawn from several individual standards, policies and codes of practice to form a single road risk standard. This guidance would be implemented and consistently adhered to by the contractor, suppliers, sub-contractors and fleet operators.

The CLOCS Standard[11] defines the primary requirements on all stakeholders associated with a construction project, to control the construction site and the entire supply chain including the operator of any vehicles servicing the site. CLOCS brings these stakeholders together to work collaboratively to maximise the many commercial and social benefits associated with safer, leaner and greener construction logistics. The CLOCS Standard aims to reduce the risk of harm to the local environment and community from construction vehicle journeys, and would be adhered to by the contractor, suppliers, sub-contractors and fleet operators.

The Logistics Manager is responsible for developing, monitoring and implementing a final CTMP. The contractor shall demonstrate that local community considerations have been considered within the CTMP, and that community engagement is ongoing throughout the construction phase. The final CTMP shall:

- Provide input from operators;
- Have considered, agreed and committed to planned measures where practical;
- Have risk-assessed and specified the safest vehicle routes and identified acceptable reasons for deviation;
- Define 'last mile' vehicle routes to and from the site, if required;
- Require use of a delivery management system;
- Require competent site access traffic marshals, if required; and
- Maintain the CTMP as a 'live' document.

The contractor shall include CLOCS requirements in:

- The procurement strategy;
- Core tender documentation;

[10] *Construction Logistics and Community Safety Guide: Managing work related road risk Version 1.2 (February 2016)*
[11] *CLOCS Standard Version 4 (August 2022): Ensuring the safest, leanest, and greenest construction vehicle journeys https://www.clocs.org.uk/page/clocs-standard*

- Contracts and/ or purchase order;
- Conditions of contract or equivalent; and
- Site management documentation.

The Logistics Manager's responsibility is to ensure the compliance of operations against the CLOCS Standard and providing monthly reports on the performance of fleet and site operations, and where non-compliance is identified, provide a remedial action plan to address all key issues.

7.5.2 Fleet Operator Recognition Scheme (FORS)

FORS is a voluntary fleet accreditation scheme designed to improve fleet operator performance in key areas such as environmental performance, safety and operation efficiency. The purpose is to improve the quality of fleet operations and to recognise those operators that achieve environmental, safety and efficiency requirements of the FORS standard[12]. FORS membership would be promoted as part of the procurement process associated with construction vehicle operators, without being mandated.

7.5.3 Vehicle Maintenance

All construction vehicles would be required to be fully serviced and maintained to avoid fuel and oil leaks. All vehicle maintenance would be conducted off-site.

7.6 Site Specific Measures

This section of the report sets out a series of specific traffic mitigation measures that would be implemented by the contractor before works commence, in line with best practice. These measures aim to mitigate the potential impacts of construction traffic associated with the development.

7.6.1 Hours of Operation

The site would operate between:

- 07:00 – 17:00 Monday to Friday; and
- 07:00 – 13:00 Saturday.

No construction work or deliveries to site would be undertaken on Sundays and/ or Bank Holidays.

7.6.2 Construction Worker Travel and Parking

Core construction staff would be encouraged to car share to the site. Sub-contractors would be encouraged to travel to the site in groups. All staff parking would be accommodated at the site.

7.6.3 Non-Motorised Access

Due to the remote rural location of the site, it is not anticipated that pedestrians or cyclists would access the site; however, secure staff cycle parking would be accommodated within the substation building's welfare area, as required. Should pedestrians require access to the site, access would be available through the vehicular access, with appropriate safe pedestrian routes identified and segregated from site traffic and construction vehicles where required.

Cyclists requiring access to the site would utilise the existing highway network and access the site through the vehicular access.

[12] *https://www.fors-online.org.uk/cms/new-standard/*

8 Summary and Conclusion

This Transport Statement (with OCTMP) has been prepared on behalf of Field, in association with a planning application for the construction and operation of a Battery Energy Storage System with a capacity of up to 200 MW, to the south of the village of Mey in Caithness, Scotland. The Proposed Development includes associated infrastructure (including cable route to proposed Gills Bay substation), access and ancillary works (landscaping and biodiversity enhancement).

The scope of this Transport Statement (with OCTMP) was agreed with THC at a scoping meeting held on 11th March 2024, and minutes of this meeting are appended to this report.

The Proposed Development includes four new points of access: three access junctions are located on the BESS and substation access road and one access junction is located on Philips Mains private access road. Philips Mains private access road links to the public road C1033 in the vicinity of the settlement of Rigifa, approximately 2 kilometres north of the site. Due to the remote location of the site, recent site visits have confirmed a very low level of traffic on Philips Mains private access road, as well as the C1033 and wider local rural road network. A review of PICs on the wider road network indicates that there are no recorded PICs on the C1033 or U1633 in the vicinity of the Proposed Development, and as such there are no existing road safety concerns that would potentially be exacerbated by the proposed construction traffic associated with the Proposed Development.

Five potential developments in the wider local area could potentially result in cumulative traffic impacts with the Proposed Development were identified. The potential cumulative traffic impacts would be detailed at the pre-construction stage, in liaison with the other schemes and THC. This approach provides opportunity for more detailed information to be available to all parties, and a more accurate assessment of potential impacts and required mitigation.

This Transport Statement (with OCTMP) addresses the anticipated construction and operational traffic generated by the Proposed Development. The preliminary access design drawings provided indicate that the proposed new points of access can accommodate a maximum length articulated HGV as required to deliver the batteries to the site. The access junctions have also been designed to accommodate a limited number of Abnormal Indivisible Loads to the site. An Abnormal Indivisible Load report has been appended to this Transport Statement (with OCTMP) and further details regarding the Abnormal Indivisible Loads would be provided in a separate construction Traffic Management Report which would be issued to THC prior to construction.

Visibility splays of 2.4 m x 120m are proportionate with the low level of traffic on the C1033, the scale of the Proposed Development and the temporary nature of the construction phase. Drawings appended to this Transport Statement indicate that visibility splays of 2.4 m x 120 m can be achieved to the east and west of the C1033/ Philips Mains private access road junction, located approximately 2 kilometres to the northeast of the Proposed Development. Forward visibility on the Philips Mains private access road is good, and the proposed localised widening and new passing places along the length of Philips Mains private access road would facilitate two-way movement of vehicles on this road.

Swept Path Analysis drawings indicate that on an unconstrained site, maximum legal length articulated vehicles can enter and leave the BESS and substation compounds in forward gear. As the site becomes constrained, HGVs reverse onto the BESS and substation and interface substation compounds with assistance of banksmen, and leave in forward gear. The new access junctions have also been designed to accommodate the occasional Abnormal Indivisible Load requiring access for the delivery of the transformers.

Existing traffic conditions on the wider road network, as set out in Section 3, have been used as a baseline in a preliminary assessment of the potential impact of traffic associated with the Proposed Development on the local road network.

The highest quantum of trips associated with the Proposed Development would be generated during the construction phase. Vehicle trips associated with the construction phase are based on operations at similar sites operated by the client and details of construction traffic demand is set out in **Section 5.1** and summarised in **Table 5.1**. It is estimated that a total of 5,128 two-way Heavy Goods Vehicle trips will be associated with the Proposed Development over a 24-month period. A maximum of 36 HGV deliveries (72 two-way trips) per day would be expected, with peak trips during the importation of stone to the BESS compound. This phase of the construction would take place over approximately a nine-week period. Over the two year construction programme there would be an average of five deliveries per day.

Operational traffic generated by the Proposed Development is nominal and based on operations at similar sites operated by the client. Estimated operational traffic demand is set out in **Section 5.3** and as such, this low quantum of operational trips would not have a detrimental impact on the local road network.

Given that the highest number of anticipated vehicle trips are associated with the construction phase, Section 7 of this Transport Statement comprises the OCTMP for the Proposed Development. The proposed quantum of HGV movements would not have a significant impact on the local road network, and to mitigate the impact of the construction traffic, **Section 4.3** provides details of delivery routes to access the site. As agreed in scoping with THC, HGVs associated with the construction phase will utilise A-roads to access the U1633 (East Lodge Road) and C1033 in the vicinity of the settlement of Rigifa. A final routing plan would be confirmed subject to confirmation of suppliers.

The temporary impact of construction traffic associated with the Proposed Development will be mitigated by the measures set out in **Section 7**. The OCTMP also addresses:

- the roles and responsibilities of the Logistics Manager, appointed by the contractor;
- the monitoring, enforcement and governance of HGVs accessing the site;
- a strategy to maintain and repair public roads, if required;
- public engagement measures;
- environmental standards; and
- site specific mitigation measures.

The measures that would be adopted to maintain high standards of construction safety and limit the disruption to other motorists, local residents and business are set out in Section 7.6. These measures include compliance with Construction Logistics and Community Safety requirements, Fleet Operator Recognition Scheme and vehicle maintenance. A final Construction Traffic Management Plan would be provided post-planning consent and before commencement of construction.

Given the low quantum of operational traffic generated by the Proposed Development, it is concluded that operational HGV traffic associated with the ongoing routine maintenance at the site would not have a detrimental impact on the local highway network.

Appendix H: Proposed Location of Passing Places

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Minutes

HaskoningDHV UK Ltd.
Mobility & Infrastructure

Present:	Jonathan Gunn (Highland Council) Phil Marshall, Sandra Holmes (RHDHV) James Mummery (Field DevCo Ltd)
Apologies:	Elizabeth Whittall (RHDHV) Anthony Pollifrone (Field DevCo Ltd)
From:	Sandra Holmes
Date:	11 March 2024
Location:	Online
Copy:	Joe Parsons
Our reference:	PC3506-RHD-07-XX-MI-Z-0001
Classification:	Confidential
Enclosures:	Click to enter "Enclosures"

Subject: **Minutes of Meeting (Thursday 7 March 2024) with Highland Council - access for Rigifa Site**

Number	Details	Action
1	Meeting held on Thursday 7th March 2024, commencing 14:00 Introductions – all on the call. SH set out the purpose of meeting, namely: To determine the scope of transport and highways input required to accompany a planning application for a proposed battery site located on a site in Rigifa, south of Mey and A836. PM and JM provided background and context to the self-contained nature and scale of proposed operations at this site. PM noted that once operational the site would attract very few maintenance trips; the most intense traffic related to the haulage of stone during the construction of the facility; the exact quantum of trips is subject to geology. Batteries would arrive at the site on articulated HGVs. Very limited traffic would be associated with the operation of the site (limited to one or two maintenance and inspections per month). PM indicated that it was proposed to use existing tracks to access the site, with limited upgrades where necessary. Two potential access options were discussed, to connect with the existing rural road network off the A836: ■ Private access track to the northwest of the site, past the site associated with the consented Gill's Bay Sub-Station; or ■ Private access track to the northeast of the site, past a farmhouse and ancillary buildings. Both private access tracks link to an access track directly into the site.	

Number	Details	Action
	JG noted that the route to the north west would be unsuitable for HGV/ construction traffic as it passes over peat, and there were concerns over the durability of the road. JG indicated that the route to the northeast, past the farmhouse would be acceptable, then routing west and then north to the A836. A review of the route should be undertaken to identify pinch points and that the highway width (at laybys) would accommodate two-way movements of HGVS. JM and PM noted that the north western route may be upgraded to facilitate construction of Gill's Bay Sub-Station. It was proposed to include the private section of the route within the development red line to allow the potential to use the route were it upgraded. However the independent north eastern route would be the main focus of the CTMP. PM indicated that the CTMP would comprise a programme/ scheduling of construction vehicles, and hold HGVS at the laybys, if required, to mitigate conflict and reduce the impacts of trips associated with deliveries at the site. This would essentially remove the need for additional laybys or improvements to existing laybys along this section of the haulage route. JG agreed that the provision of additional laybys would be disproportionate to the proposed quantum of trips associated with the construction phase of the development. PM indicated that anticipated improvements on the private access track comprised improved surfacing and laybys at appropriate locations with good forward visibility. JG agreed this approach was practical and acceptable. JG queried tonnage, and PM and JM indicated that GI was completed last week and subject to the GI findings, RHDHV would determine loads, duration and quantum of trips. No AILs would be associated with the proposed scheme. JG set out the preferred routing: A836 – rural roads – access track – site. JG confirmed that the public highway started at the junction with the private access track. JG would confirm the names of the adopted roads. JG noted that the Highland Council would require approximately 10m of hard standing at the access road junction to mitigate the transfer of stone and mud onto the public highway. PM confirmed that a draft CTMP would be provided suitable for submission of the planning application, showing principles that will be adopted for mitigation of construction phase, proposed scheduling of deliveries to the site, and routing of access track (options) between the rural road and site.	Field to provide update on GI results in due course. JG to provide names for rural roads between A836 and site

Number	Details	Action
	JG noted colleagues covering Caithness and Sutherland had been on annual leave, but queried whether had contacted SH.	
	SH had not managed to contact JG's colleagues yet, and would appreciate if he could encourage them to do so.	JG to confirm contact details for colleagues
	Meeting ended at 14:30	

Appendix B: Personal Injury Collision (PIC) Reports

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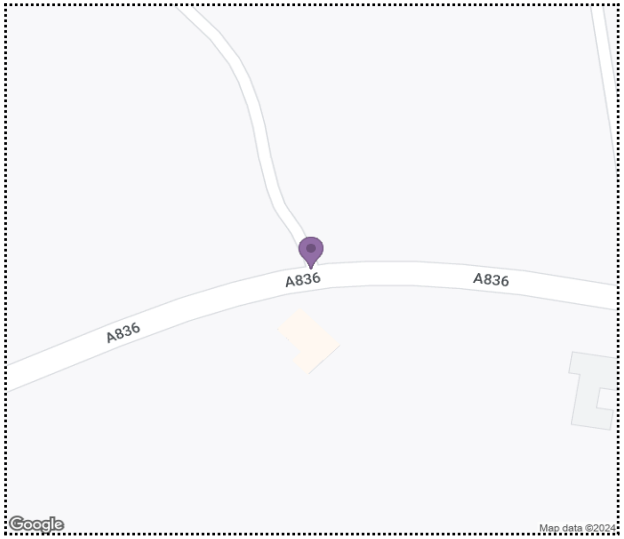
crashmap.co.uk

Validated Data

Crash Date:	Monday, August 6, 2018	**Time of Crash:**	08:40:00	**Crash Reference:**	201891SNJ0754
Highest Injury Severity:	Slight	**Road Number:**	A836	**Casualties:**	2
Highway Authority:	Highland			**Vehicles:**	2
Local Authority:	Highland			**OS Grid Reference:**	330637 974008
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

powered by agilysis

Crash Date: Monday, August 6, 2018 **Time of Crash:** 08:40:00 **Crash Reference:** 201891SNJ0754

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	7	Male	26 - 35	Vehicle is in the act of turning right	Front	Journey as part of work	None	None
2	Car (excluding private hire)	8	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Commuting to/from work	None	None

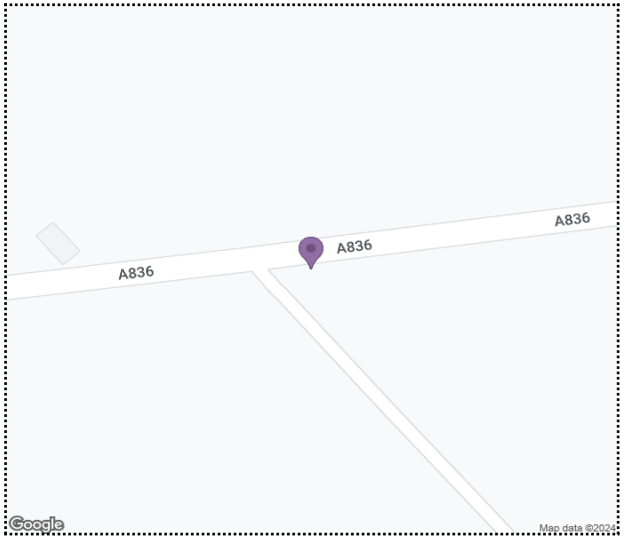
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Tuesday, August 6, 2019	**Time of Crash:**	16:55:00	**Crash Reference:**	2019910865695
Highest Injury Severity:	Serious	**Road Number:**	A836	**Casualties:**	1
Highway Authority:	Highland			**Vehicles:**	1
Local Authority:	Highland			**OS Grid Reference:**	325834 972351
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Crossroads				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date: Tuesday, August 6, 2019 **Time of Crash:** 16:55:00 **Crash Reference:** 2019910865695

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	1	Female	21 - 25	Vehicle is slowing down or stopping	Front	Unknown	None	Other permanent object

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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Appendix C: Visibility Splays (C1033/ Philips Main Private Access Road Junction)

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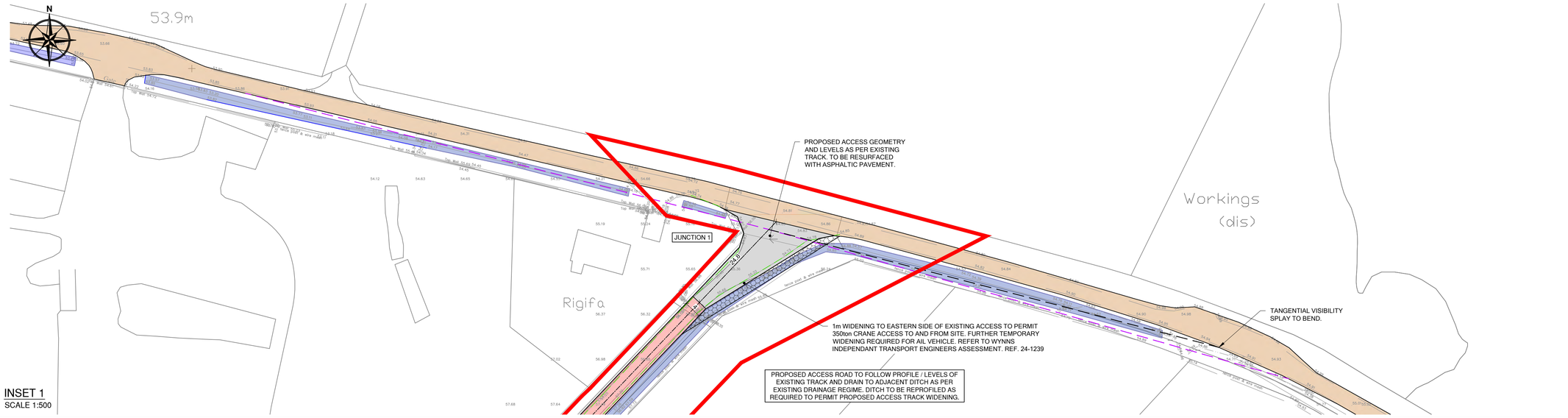

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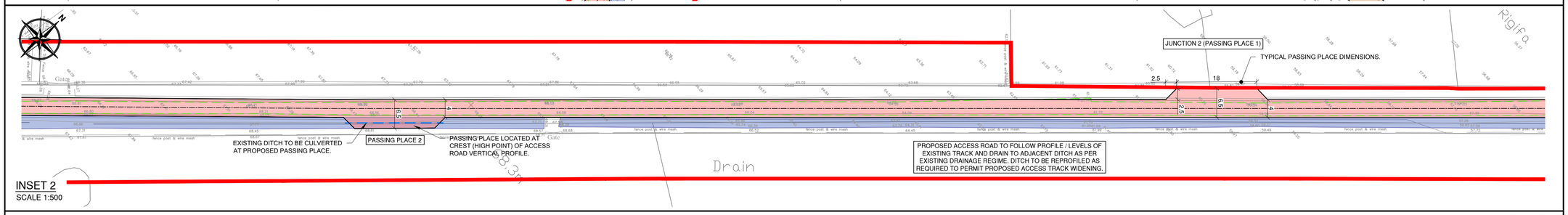

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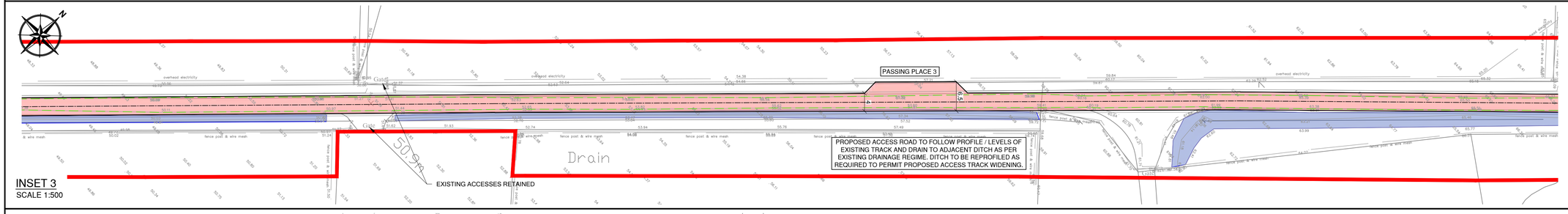

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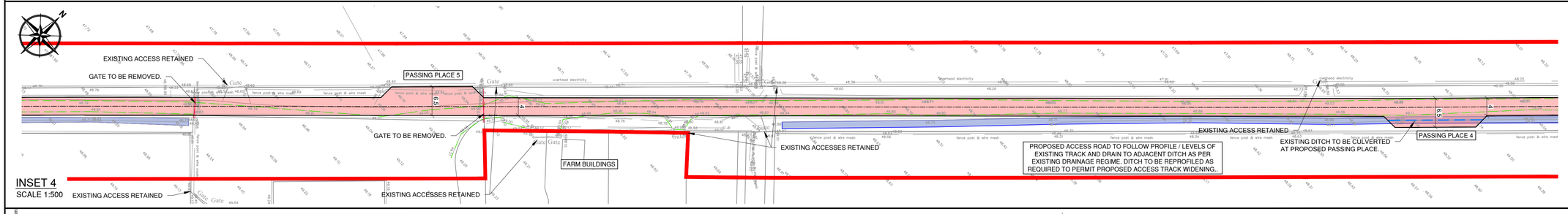

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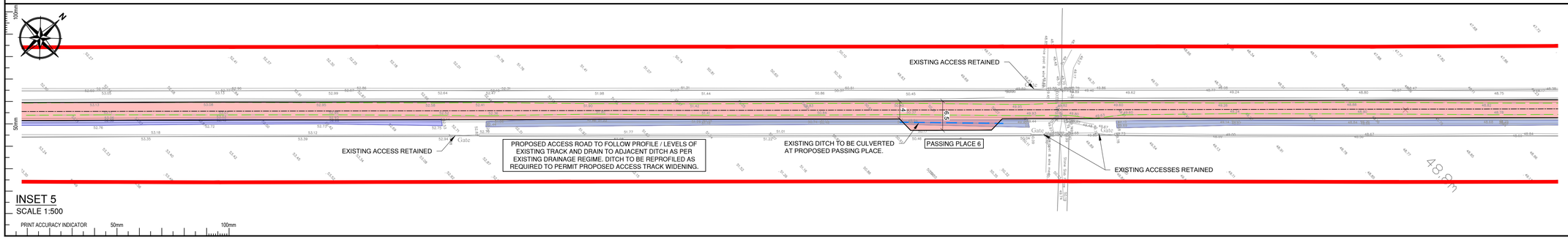

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PRINT ACCURACY INDICATOR 50mm 100mm

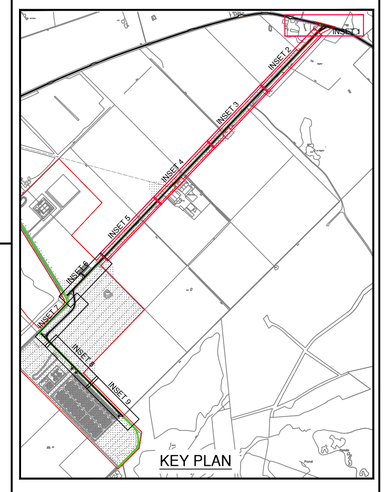
NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.
2. SITE LAYOUT BASED ON FIELD ENERGY SITE LAYOUT PLAN, DRAWING REF. BTGBRIG01-001.1 REV. 6, DATED 23/07/2024 .
3. SITE ACCESS LEVELS AND ALIGNMENT BASE ON TOPOGRAPHICAL SURVEY FROM HIGHLAND SURVEYORS LTD, DRAWING REF. 23066, UNDERTAKEN NOVEMBER 2023.
4. PROPOSED ACCESS DESIGNED IN ACCORDANCE WITH THE HIGHLAND COUNCIL 'ROADS AND TRANSPORT GUIDELINES FOR NEW DEVELOPMENTS'.
5. AIL OVER-RUN EXTENTS BASED ON WYNNS INDEPENDANT TRANSPORT ENGINEERS SWEPT PATH ANALYSIS ASSESSMENT. REF. 24-1239, DATED 31/07/2024.

KEY

- EXTENT OF EXISTING ACCESS ROAD
- EXTENT OF EXISTING DITCH
- EXTENT OF PROPOSED ASPHALTIC CONSTRUCTION
- EXTENT OF PROPOSED UNBOUND SURFACING
- EXTENT OF AIL RUN-OVER AREA
- 2.4m x 43m VISIBILITY SPLAY
- 2.4m x 120m VISIBILITY SPLAY
- PLANNING BOUNDARY
- PROPOSED CULVERT
- EXISTING TRACK
- EXISTING WALL TO BE REMOVED

DRAWING FOR APPROVAL
NOT FOR CONSTRUCTION



Rev'n	Date	Description	Drawn	Chk'd	App'd
P03	16.09.2024	SITE LAYOUT UPDATED	THW	BP	JRC
P02	03.09.2024	AMENDED TO SUIT CLIENT COMMENTS	THW	BP	JRC
P01	14.08.2024	PRELIMINARY ISSUE	THW	BP	JRC

Status
PRELIMINARY

HAYDN EVANS
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Crown Street, Ipswich, IP1 3LG
01473 236550
www.haydnevans.co.uk
mail@haydnevans.co.uk

Client
FIELD

Project
RIGIFA

Drawing title
SITE ACCESS ROUTE 1
GENERAL ARRANGEMENT SHEET 1 OF 2

Scale	Drawn	Checked	Approved	Date
1:500 @ A1	THW	BP	JRC	AUG 2024

Drawing no.
336-004-D220

Revision
P03

Appendix D: Preliminary Access Design

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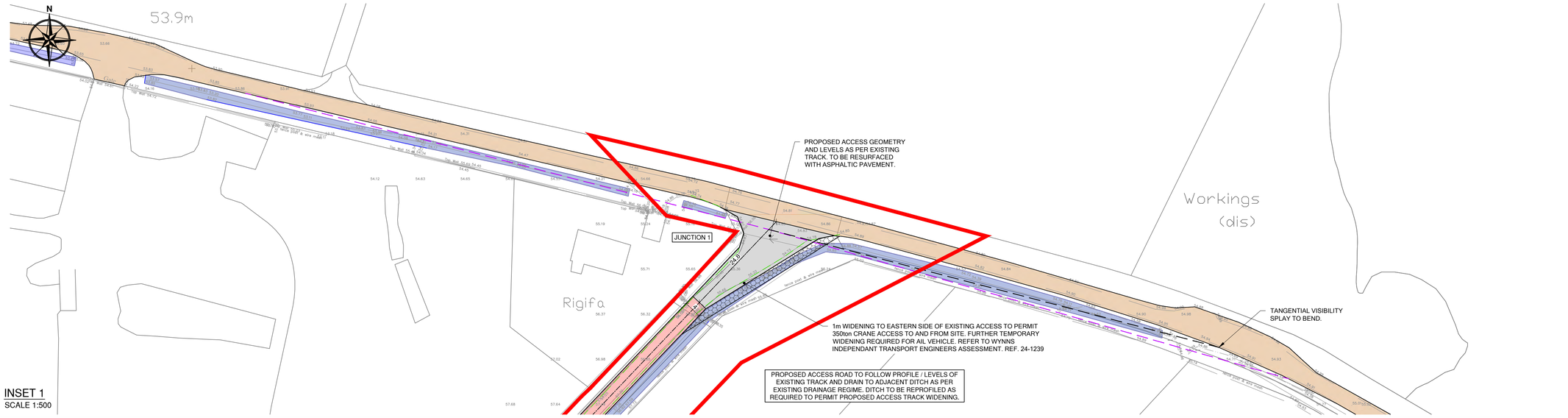

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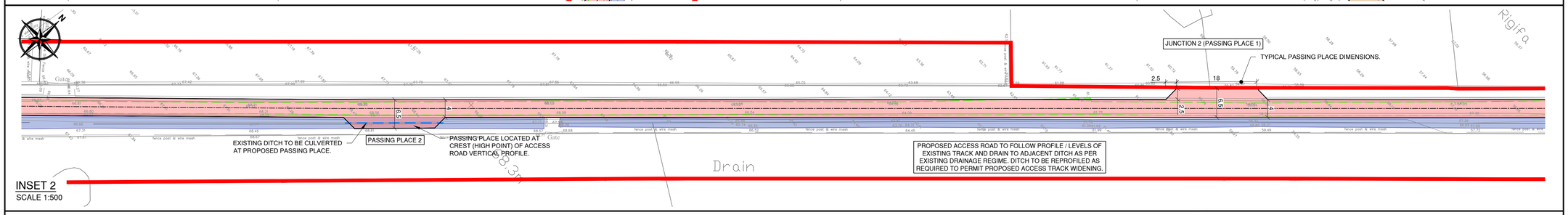

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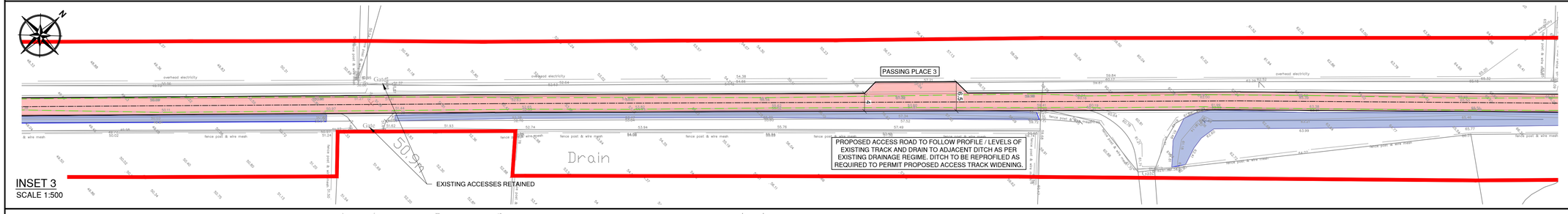

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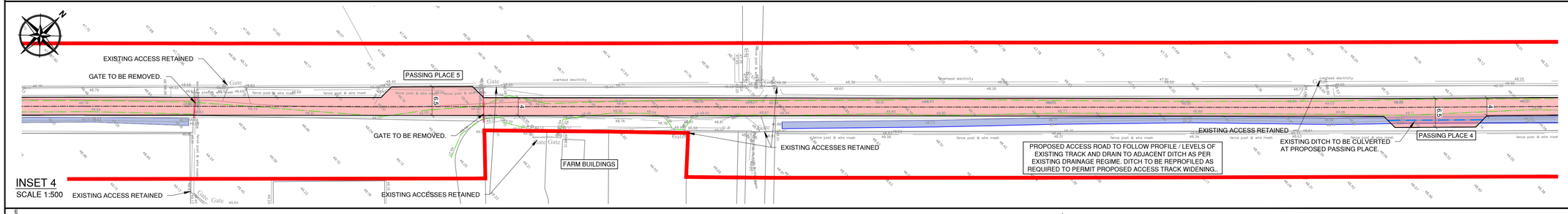
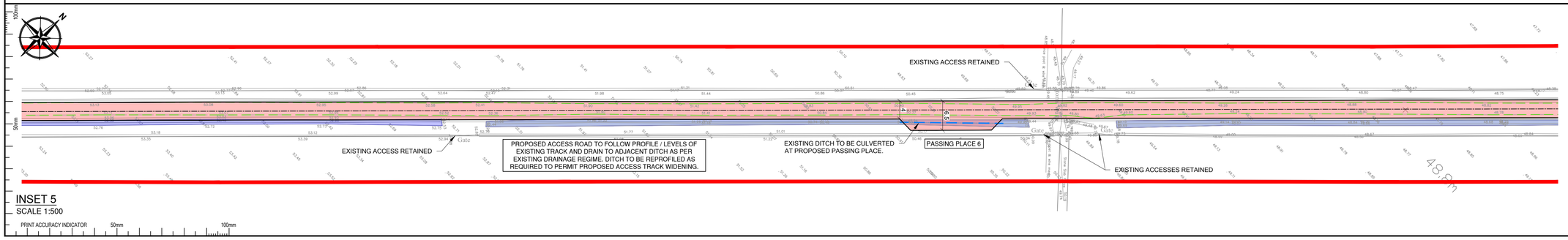


INSET 4
SCALE 1:500



INSET 5
SCALE 1:500

PRINT ACCURACY INDICATOR 50mm 100mm

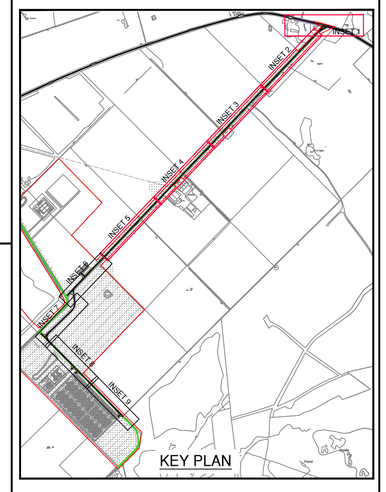
NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.
2. SITE LAYOUT BASED ON FIELD ENERGY SITE LAYOUT PLAN, DRAWING REF. BTGBRIG01-001.1 REV. 6, DATED 23/07/2024 .
3. SITE ACCESS LEVELS AND ALIGNMENT BASE ON TOPOGRAPHICAL SURVEY FROM HIGHLAND SURVEYORS LTD, DRAWING REF. 23066, UNDERTAKEN NOVEMBER 2023.
4. PROPOSED ACCESS DESIGNED IN ACCORDANCE WITH THE HIGHLAND COUNCIL 'ROADS AND TRANSPORT GUIDELINES FOR NEW DEVELOPMENTS'.
5. AIL OVER-RUN EXTENTS BASED ON WYNNS INDEPENDANT TRANSPORT ENGINEERS SWEPT PATH ANALYSIS ASSESSMENT. REF. 24-1239, DATED 31/07/2024.

KEY

- EXTENT OF EXISTING ACCESS ROAD
- EXTENT OF EXISTING DITCH
- EXTENT OF PROPOSED ASPHALTIC CONSTRUCTION
- EXTENT OF PROPOSED UNBOUND SURFACING
- EXTENT OF AIL RUN-OVER AREA
- 2.4m x 43m VISIBILITY SPLAY
- 2.4m x 120m VISIBILITY SPLAY
- PLANNING BOUNDARY
- PROPOSED CULVERT
- EXISTING TRACK
- EXISTING WALL TO BE REMOVED

DRAWING FOR APPROVAL
NOT FOR CONSTRUCTION



Rev'n	Date	Description	Drawn	Chk'd	App'd
P03	16.09.2024	SITE LAYOUT UPDATED	THW	BP	JRC
P02	03.09.2024	AMENDED TO SUIT CLIENT COMMENTS	THW	BP	JRC
P01	14.08.2024	PRELIMINARY ISSUE	THW	BP	JRC

Status
PRELIMINARY

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www.haydnevans.co.uk
mail@haydnevans.co.uk

Client
FIELD

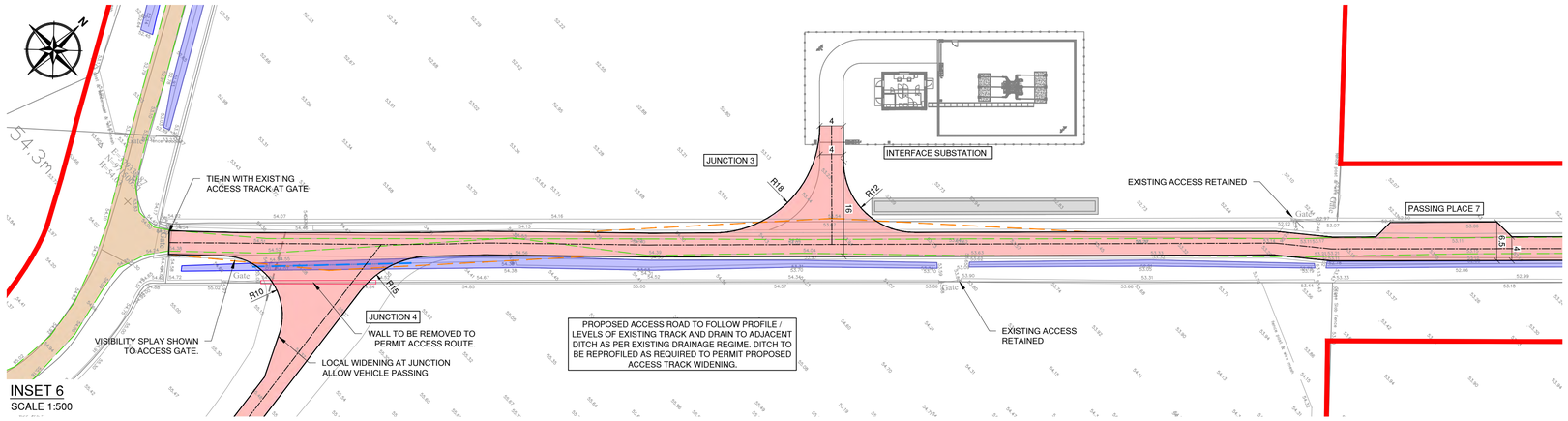
Project
RIGIFA

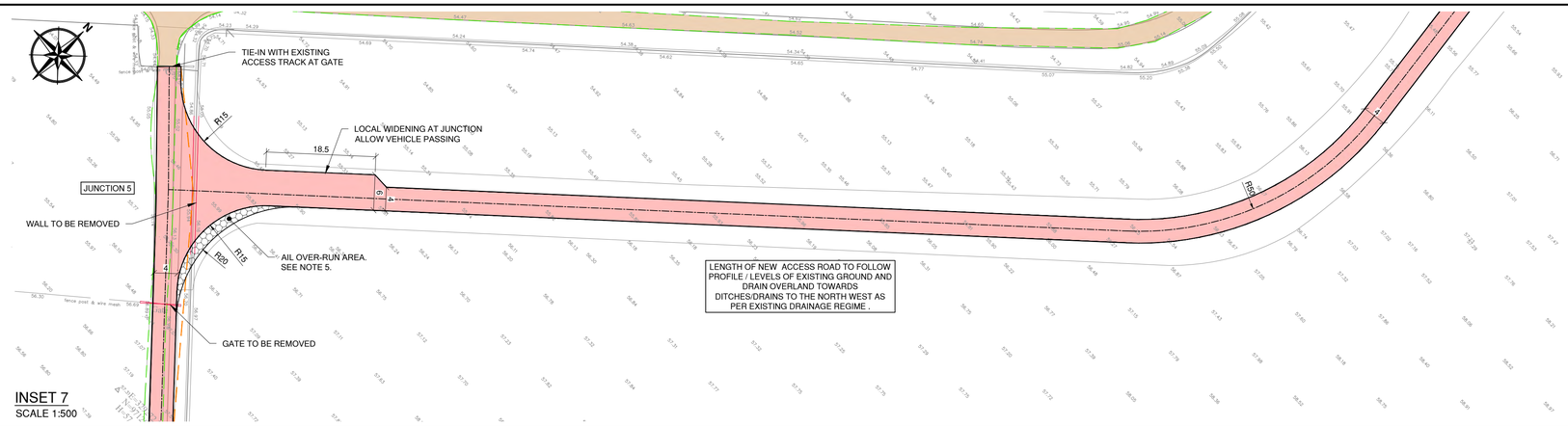
Drawing title
SITE ACCESS ROUTE 1
GENERAL ARRANGEMENT SHEET 1 OF 2

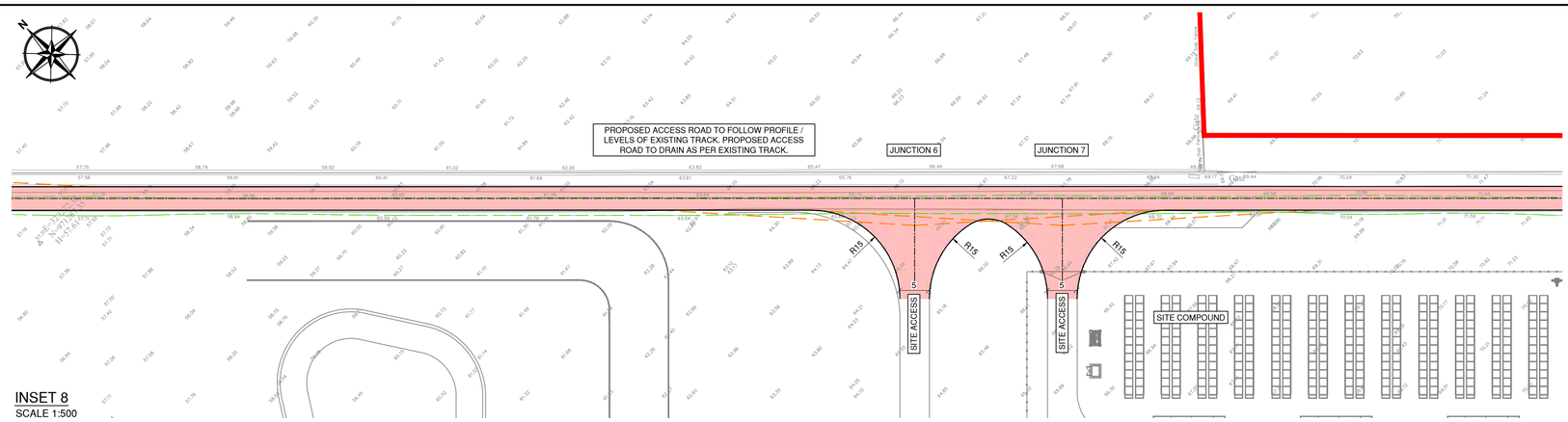
Scale	Drawn	Checked	Approved	Date
1:500 @ A1	THW	BP	JRC	AUG 2024

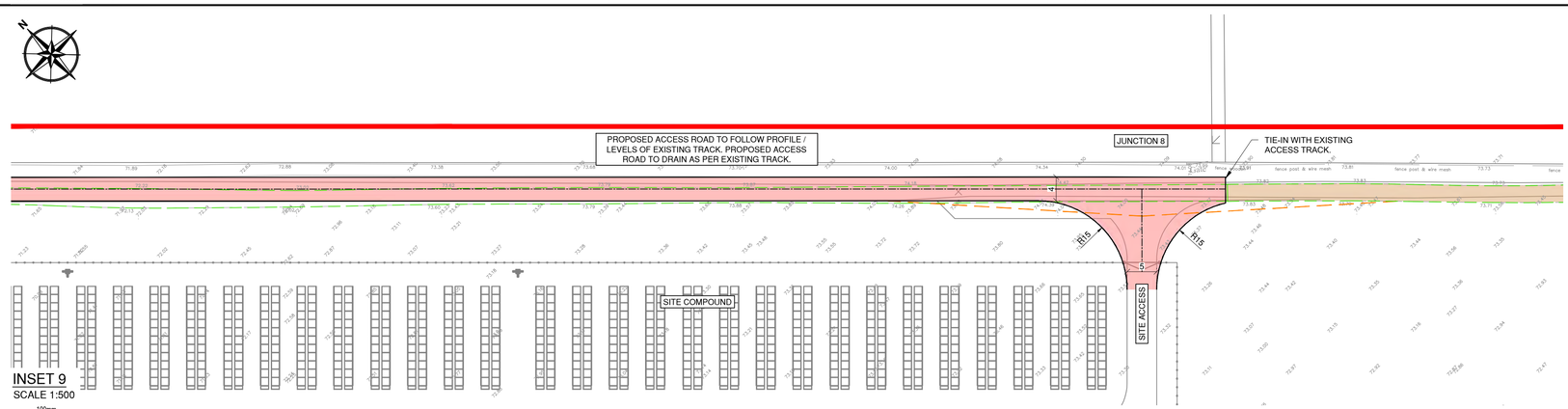
Drawing no.
336-004-D220

Revision
P03









PRINT ACCURACY INDICATOR 50mm 100mm

NOTES

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KEY

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- EXTENT OF EXISTING DITCH
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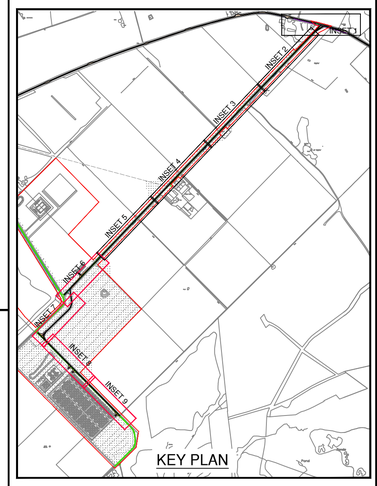
DRAWING FOR APPROVAL
NOT FOR CONSTRUCTION



Rev'n	Date	Description	Drawn	Chk'd	App'd
P06	18.09.2024	AMENDED TO SUIT CLIENT COMMENTS	THW	BP	JRC
P05	16.09.2024	AMENDED TO SUIT CLIENT COMMENTS AND SITE LAYOUT UPDATED	THW	BP	JRC
P04	10.09.2024	MINOR AMENDMENTS	THW	BP	JRC
P03	09.09.2024	AMENDED TO SUIT CLIENT COMMENTS	THW	BP	JRC
P02	03.09.2024	AMENDED TO SUIT CLIENT COMMENTS	THW	BP	JRC
P01	14.08.2024	PRELIMINARY ISSUE	THW	BP	JRC

Status: PRELIMINARY

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Client: FIELD

Project: RIGIFA

Drawing title: SITE ACCESS ROUTE 1
GENERAL ARRANGEMENT SHEET 2 OF 2

Scale	Drawn	Checked	Approved	Date
1:500 @ A1	THW	BP	JRC	AUG 2024

Drawing no.: 336-004-D221
Revision: P06