DESIGN AND ACCESS STATEMENT

Uisenis Wind Farm

Prepared for: Uisenis Power Limited



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CONTENTS

1.0	INTRODUCTION	1
2.0	SITE LOCATION	2
2.1	Site Description	2
2.2	Surrounding Area	2
3.0	DESIGN POLICIES	4
3.1	National Guidance	4
3.2	Outer Hebrides Local Development Plan (OHLDP)	5
3.3	OHLDP Supplementary Guidance for Wind Energy Development	5
4.0	DESIGN PRINCIPLES	7
4.1	Constraints, Policy and Design Objectives	7
4.2	Embedded Mitigation	11
5.0	DESIGN EVOLUTION	12
5.1	Wind Turbine Layouts	12
5.1.1	Layout A (Scoping Layout): 26 Turbines at 225m Tip Height	12
5.1.2	Layout B (1st Public Exhibition Layout): 26 Turbines at 215m tip height	12
5.1.3	Layout C (Gatecheck Report Layout): 25 Turbines at 180m-200m Tip Height	13
5.1.4	Layout D (Design Freeze – The Proposed Development): 25 Turbines at 180m-200m Tip Height	13
5.2	Other Site Infrastructure	14
5.2.1	Site Access	14
5.2.2	Site Tracks	15
5.2.3	Borrow Pits.	15
5.2.4	Temporary Construction Compound	15
5.2.5	Crane Pads	15
5.2.6	Substation Compound	16
5.3	The Proposed Development Considered Against Design Objectives	16
6.0	PROPOSED DEVELOPMENT	20
7.0	PUBLIC ACCESS	21
7.1	Public Access - Pedestrian	21
7.2	Public Access – Vehicular	21
8.0	CONCLUSION	22



9.0	REFERENCES	23

DOCUMENT REFERENCES

FIGURES

Figure	1:	Site	location
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Figure 2: Aerial Photograph

Figure 3: Application Boundary

Figure 4: Landscape Character Types

Figure 5: Topography and Watercourses

Figure 6: Residential Receptors

Figure 7: Cumulative Wind Farm Map

Figure 8: Environmental Designations

Figure 9: Existing Consented Wind Farm Layout

Figure 10a: Key Design Iterations

Figure 10b: Key Design Iterations with Constraints

Figures 11a – 14c: Wirelines

Figure 15: Abnormal Load Route

Figure 16: Indicative Future Berthing Facility

Figure 17a-b: Bare Earth ZTV - Borrow Pits

Figure 18: Indicative Crane Hardstanding

Figure 19a-b: Bare Earth ZTV – Substation

Figure 20: Key Peat and Hydrology Related Design Iterations

Figure 21: Key Ecology Related Design Iterations

Figure 22: Key GWDTE Related Design Iterations

Figure 23: Proposed Development ZTV with Landscape Designations

Figure 24: Proposed Development ZTV with Cultural Heritage Assets

Figure 25a-l: Site Layout



1.0 Introduction

Uisenis Power Limited (the applicant) proposes to install and operate a wind farm comprising up to 25 turbines with associated infrastructure (the proposed development) on land approximately 20km south west of Stornoway, on the Eisgen Estate (Eishken) on the Isle of Lewis. The location of the main site area (hereafter referred to as the 'Site') is centred on NGR NB 31366 12772 and covers an area of approximately 1,429.4ha. The proposed development includes a substation compound with associated control building. The proposed development would be known as Uisenis Wind Farm.

The Site currently has consent for a 45 wind turbine scheme (across several separate planning applications / Section 36 applications) called Muaitheabhal Wind Farm. This **Design and Access Statement (DAS)** does not set out a detailed comparison between the proposed development and the consented Muaitheabhal Wind Farm as that is presented in the **Project Comparison Report**, submitted in support of the application for consent.

An application for consent for the proposed development is being submitted to the Scottish Government Energy and Consents Unit (ECU) under Section 36 of the Electricity Act 1989 (the 1989 Act), to include a request for deemed planning permission to be granted for the development under Section 57(2) of the Town and Country Planning (Scotland) Act 1997. The relevant planning authority will be Comhairle nan Eilean Siar (CneS) (the Western Isles Council).

This **DAS** is submitted in support of the application for consent which has been submitted by Uisenis Wind Farm for the proposed development. The **DAS** does not form part of the Environmental Impact Assessment (EIA Report). However, the **DAS** should be read in the context of the EIA Report.



2.0 Site Location

In order to understand the design of the proposed development it is important to relate this to the Site and its context. A Site location plan is contained as **Figure 1** of this document. An aerial photograph of the Site and its surroundings is contained as **Figure 2**. A plan (OS mapping not aerial photography) showing the application boundary in more detail is contained as **Figure 3**.

2.1 Site Description

A detailed design description is included within the EIA Report (**Chapter 2** and **Chapter 3**). The following paragraphs provide a general description of the Site.

The Site is located in the south east of Lewis, with turbines located approximately 7km east of the A859 spine road which connects the Isle of Harris to the south with Stornoway approximately 20km north east of the Site (shown on **Figure 1**). The Site is located in the north of the Park (Pairc) peninsula. The peninsula is defined by two long and narrow sea lochs, Loch Erisort (Eireasort) to the north, and Loch Seaforth (Shiophoirt) to the south, the latter forming part of the boundary between Lewis and Harris.

The area within the Site is currently utilised recreationally for hunting, fishing and deer stalking for residents of, and visitors to, the Eishken Estate Lodge and the wider Eishken Estate area.

Predominant land cover within the Site is shown to be heather grassland interspersed with freshwater lochans and a network of tributaries. The Site also encompasses a number of small lochs with a number of rivers and streams crossing the Site and feeding into the lochs.

The proposed development would be located across three Landscape Character Types (LCTs):

- the west extent of the Site is located within the Prominent Hills and Mountains LCT 326;
- the east of the Site is located within the Rocky Moorland Outer Hebrides LCT 323; and
- a small area in the south east of the Site surrounding the Eishken Estate Lodge is located within Dispersed Crofting LCT 319.

The LCTs are shown on Figure 4.

The Site comprises numerous ridges and elevated landform, including the summits of Creag na Beirighe (236m AOD) and Cleit Catriona (139m AOD) in the south of the Site. Topography rises from sea level in the south, reaching a high point of approximately 270m AOD in the north west. The summits of Feiriosbhal (326m AOD), Cleit na Cerdaich (168m AOD) and Beinn Mheadhanach (288m AOD) are located outside of the Site boundary but are within close proximity to the north western Site boundary (see **Figure 5**).

There are numerous lochans and watercourses across the Site, draining to Loch Seaforth to the north and west and Loch Sealg to the south. (See **Figure 5**).

There are no statutory environmental designated sites within the Site.

Dominant wind direction at the Site is from the south west, with very high average wind speeds experienced across the Site.

2.2 Surrounding Area

The immediate surrounding area is remote, and residential dwellings are restricted to the Lodge and inner estate. Beyond this there are only isolated residential properties, typically isolated crofts, within 2km and located within the adjacent estate to the north and east (Pairc Estate) (see **Figure 6**).

The nearest settlements are to the north and east of the Site, where the Park (Pairc) peninsula adjoins the rest of the island: Arivruach (Airidh a Bhruaich) and Balallan (Baile Ailein) on the A859 road, as well as small crofting



townships along the B8060 road to the north and east (between Habost and Orinsay). There are no core paths or Public Rights of Way (PRoW) for a significant distance, the closest is located approximately 9.7km west of the Site.

The underlying bedrock of the wider area is largely uniform across the region and comprises Outer Hebrides Thrust Zone Mylonite Complex with small pockets of Lewisian Complex amphibolite. Soils are derived from Mylonite and are indicated to be sand to sandy loam, of shallow to intermediate depth (can be dug to depths of more than 0.5m but less than 1m)¹.

The only large operational (or consented) wind turbine within 10km of the Site boundary is the Lemreway Wind Turbine, which is located approximately 3.54km from the Site and consists of a single turbine of 42m to blade tip height (**Figure 7**).

The following environmental designations lie within 10km of the Site boundary² (see Figure 8):

- Wild Land Area 31: Eisgein directly abuts the south western boundary of the Site;
- Loch Seaforth Marine Conservation Area approximately 60m to the west of the Site at its nearest point;
- Wild Land Area 30: Harris-Uig Hills approximately 1.2km to the west of the Site at its nearest point;
- Lewis Peatlands Special Protection Area (SPA) approximately 954m to the north west of the Site at its nearest point;
- Lewis Peatlands RAMSAR site approximately 954m to the north west of the Site at its nearest point;
- Lewis Peatlands Special Area of Conservation (SAC) approximately 3.6km to the north west of the Site at its nearest point;
- South Lewis, Harris and North Uist National Scenic Area (NSA) approximately 2.6km to the south of the Site at its nearest point;
- Inner Hebrides and the Minches SAC approximately 5.5km to the south east of the Site at its nearest point;
- Loch nan Eilean Valley Bog Site of Special Scientific Interest (SSSI) approximately 4.2km to the north west of the Site at its nearest point; and
- Achmore Bog SSSI Approximately 8.3km to the north of the Site at its nearest point.

² Note: These measurements are from the nearest part of the application boundary to the environmental designation, not from the proposed wind turbines.



¹ British Geological Survey, GeoIndex Onshore – Bedrock Geology

3.0 Design Policies

The preparation of this DAS has had regards to Planning Advice Note 68: Design Statements, National Planning Framework 4 (NPF4), the Outer Hebrides Local Development Plan (OHLPD) adopted 2018, and the OHLDP Supplementary Guidance for Wind Energy Development (SGWED) adopted in 2021.

The design of the proposed development was carefully considered in the context of national advice in respect of design, the Development Plan and supplementary guidance which is relevant to the proposed development.

EIA Report Chapter 4: Renewable Energy and Planning Policy sets the proposed development in the context of the relevant national and Development Plan policies (noting that NPF4 now also forms part of the Development Plan). The Planning Statement provides an assessment of the proposed development against the Development Plan (including NPF4) and material considerations relevant to the decision-making process.

3.1 National Guidance

The most important national policy documents relating to the siting and design of the proposed development are NPF4, associated Planning Advice Notes (PANS), and also the Onshore Wind Turbines: Planning Advice. See **Chapter 4** and **Technical Appendix 4.1** of the EIA Report.

In relation to the siting of wind farm development, Policy 11: Energy, of NPF4, makes clear that wind farm development within National Parks and National Scenic Areas will not be supported. However, outside of these designations, wind farm development should be acceptable subject to meeting relevant policy.

NPF4 Policy 11 highlights that proposals which impact on international or national designations, and/or protected areas, will be assessed in relation to Policy 4: Natural Places.

NPF4 Policy 11 states that development proposals should show how various potential impacts have been addressed through design and mitigation. These potential impacts are as follows:

"i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;

ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable;

iii. public access, including impact on long distance walking and cycling routes and scenic routes;

iv. impacts on aviation and defence interests including seismological recording;

v. impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;

vi. impacts on road traffic and on adjacent trunk roads, including during construction;

vii. impacts on historic environment;

viii. effects on hydrology, the water environment and flood risk;

ix. biodiversity including impacts on birds;

x. impacts on trees, woods and forests;

xi. proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration;

xii. the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and

xiii. cumulative impacts.



In considering these impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets."

3.2 Outer Hebrides Local Development Plan (OHLDP)

The OHLDP was adopted in November 2018 and supersedes the previous Local Development Plan covering the Site. The OHLDP outlines through planning policies what is required of new developments in order for them to be considered acceptable and receive approval. The policy considered most relevant to the proposed development is EI8: 'Energy and Heat Resources'. In addition to Policy EI8, the OHLDP includes a number of other polices relating to environmental and design considerations including:

- DS1: Development Strategy;
- PD1: Placemaking and Design;
- PD2: Car Parking and Roads Layout;
- PD6: Compatibility of Neighbouring Uses;
- ED1: Economic Development;
- ED5: Minerals;
- EI1: Flooding;
- EI3: Water Environment;
- EI4: Waste Management;
- EI5: Soils;
- EI7: Countryside and Coastal Access;
- EI9: Transport Infrastructure;
- EI11: Safeguarding;
- EI12: Developer Contributions;
- NBH1: Landscape;
- NBH2: Natural Heritage;
- NBH3: Trees and Woodland;
- NBH4: Built Heritage;
- NBH5: Archaeology; and
- NBH6: Historic Areas.

3.3 OHLDP Supplementary Guidance for Wind Energy Development

Supplementary Guidance forms part of the Development Plan. The relevant Supplementary Guidance pertaining to this proposed development is the OHLDP Supplementary Guidance for Wind Energy Development (SGWED), adopted in November 2021. This Supplementary Guidance aims to:

- set out the Comhairle's definition of a 'wind farm';
- provide applicants with a guide to the areas where the principle of onshore 'wind farms' (larger turbine developments) may be acceptable;



- provide applicants with a guide to the areas where the principle of onshore 'wind farms' (larger turbine developments) will not be acceptable;
- set out development policies for the assessment of all scales of wind turbine.

Map 1 of the Comhairle Spatial Strategy for Wind Farms presented in the SGWED classifies the Site as an 'Area of Constraint (with potential in some certain circumstances)'.

The SGWED contains the following policies that wind farm development proposals will be assessed against:

- Economics Impacts and Benefits;
- Landscape and Visual Impact;
- Aviation and Defence;
- Noise;
- Community Amenity;
- Neighbouring Developments;
- Historic Resources;
- Natural Heritage;
- Peat and Soil Resources;
- Water Resources;
- Borrow Pits;
- Repowering;
- Planning Obligations;
- Decommissioning;
- Cumulative Impacts; and
- Radar Impacts.



4.0 Design Principles

The layout and design of the proposed development was considered as part of an iterative design process aimed at reducing the potential environmental effects of the wind farm whilst taking into account Site constraints and commercial requirements.

4.1 Constraints, Policy and Design Objectives

The design of any wind farm is driven by the key objective of positioning turbines so that they capture the maximum energy as far as practical within a suitable area, further informed by environmental and technical constraints. The main constraints which were considered during the design process included:

- topography and ground conditions (including peat);
- ecological and ornithological interests (including protected habitats and species);
- proximity to environmental designations (including SSSI, SPA, SAC and SLA);
- proximity to the South Lewis, Harris and North Uist National Scenic Area (NSA):
- proximity to Eisgein Wild Land Area (WLA 31);
- views to Site from settlements from the north, east, and north west (including the need for visible aviation lighting);
- proximity to nearby residential receptors (with regards residential visual amenity, shadow flicker and noise);
- presence of watercourses, private water supplies and related infrastructure;
- presence of cultural heritage features (both onsite and offsite);
- aviation and radar constraints; and
- fixed communications links.

Trying to avoid or minimise any adverse effects relating to the above constraints as a result of the proposed development, while ensuring the energy potential of the Site was maximised, was the main focus of the design process. It was considered that aiming to minimise potential negative effects on the above constraints was also beneficial in aligning with the policy requirements of NPF4 and SGWED outlined in Section 3 of this **DAS**. This also allowed early design objectives to be set which had principles rooted in clearly defined constraints and policy requirements.

Table 1 matches the relevant Site constraints and relevant NPF4 / SGWED policy requirements, with the resulting design objectives for the proposed development.

Table 1: Constraints, Policy Requirements and Design Objectives

Site Constraint	Relevant NPF4 / SGWED Policy Requirement Considerations	Resulting Design Objective
topography and ground conditions (including peat)	NPF4: Policy 11 ix: biodiversity including impacts on birds. SGWED: Natural Heritage.	Avoid siting wind farm infrastructure in deep peat >1.5m where possible. Where not possible applicable mitigation to applied if available / realistic e.g. floated track, crane pad orientation.



Site Constraint	Relevant NPF4 / SGWED Policy Requirement Considerations	Resulting Design Objective
	Peat and Soil Resources.	Avoid siting wind farm infrastructure on gradients of 14% or more.
ecological and ornithological interests (including protected habitats and species)	NPF4: Policy 11 ix: biodiversity including impacts on birds. SGWED: Natural Heritage.	Avoid siting wind farm infrastructure near nest sites where possible. Avoid siting wind farm infrastructure near locations identified as used by protected species. Avoid siting wind farm infrastructure on areas identified as having a high potential for Ground Water Dependent Terrestrial Ecosystems.
proximity to environmental designations (including SSSI, SPA, SAC and SLA)	NPF4: Policy 11 ii: significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable. Policy 11 ix: biodiversity including impacts on birds. SGWED: Natural Heritage. Landscape and Visual Impact.	Avoid siting wind farm infrastructure within any environmental designations.
proximity to the South Lewis, Harris and North Uist NSA	NPF4: Policy 4c: Development proposals that will affect a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve will only be supported where: i: The objectives of designation and the overall integrity of the areas will not be compromised; or ii: Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance. Policy 11 ii: significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or	Limit the extent of the visibility of the proposed development across the NSA and seek to reduce overall impacts on the special landscape qualities of the NSA. Avoid siting turbines on the Feiriosbhal ridge which would appear prominent in views from the NSA, and utilise this landform to partially screen turbines within the Site. Try to ensure a cohesive turbine layout which is not prominent above the skyline when viewed from key locations within the NSA.



Site Constraint	Relevant NPF4 / SGWED Policy Requirement Considerations	Resulting Design Objective
	appropriate design mitigation has been applied, they will generally be considered to be acceptable. SGWED: Landscape and Visual Impact.	
proximity to Eisgein WLA 31	NPF4: Policy 4g: Development proposals in areas identified as wild land in the Nature Scot Wild Land Areas map will only be supported where the proposal: i: will support meeting renewable energy targets; or, ii: is for small scale development directly linked to a rural business or croft, or is required to support a fragile community in a rural area. Policy 11 ii: significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable. SGWED: Landscape and Visual Impact.	Seek to reduce the overall impacts on the wild land qualities of the WLA by siting turbines away from the south western Site boundary. Try to ensure a cohesive turbine layout which minimises the horizontal extent of turbines and 'stacking' or overlapping of turbine blades when viewed from key locations within the WLA.
views to Site from settlements from the north, east, and north west (including the need for visible aviation lighting)	NPF4: Policy 11 ii: significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable. SGWED: Landscape and Visual Impact.	Limit the extent of the visibility of the proposed development when viewed from settlements to the north, east, and north west. Utilise the landform of the Feiriosbhal and Beinn Mheadonach west of the Site to contain the proposed development as far as possible, and minimise visibility from communities located along the A858, Loch Eireasort and Loch Seaforth. Minimise the number of lit wind turbine hubs visible from settlements to the north. east, and north west in order to avoid potential negative effects of visible aviation lighting. Achieve a cohesive turbine layout, with no turbines appearing as outliers, or overly prominent, when seen in the



Site Constraint	Relevant NPF4 / SGWED Policy Requirement Considerations	Resulting Design Objective
		context of other turbines of the proposed development. Minimise the horizontal extent of turbines and 'stacking' or overlapping of turbine blades. Where possible, have the proposed turbines appear 'backclothed' by more distant landform, rather than against the skyline, when viewed from settlements to the north, east and north east of the Site.
proximity to nearby residential	NPF4:	Ensure that no wind turbine is within
receptors (with regards visual amenity, shadow flicker and noise);	Policy 11 i: impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker	800m of any residential receptor, and within 1km of any non-financially involved residential receptor.
	SGWED:	
	Landscape and Visual Impact.	
	Noise.	
	Community Amenity.	
presence of watercourses, private water supplies and related	NPF4:	Try to ensure that no wind farm infrastructure is located within 50m of
infrastructure	Policy 11 viii: effects on hydrology, the water environment and flood risk	a watercourse or waterbody where possible.
	SGWED:	
	Water Resources.	
presence of cultural heritage features (both onsite and offsite);	NPF4:	Try to ensure that no wind farm infrastructure is located on cultural
(both offsite and offsite),	Policy 11 vii: impacts on historic environment.	heritage features within the Site. Limit the extent of the visibility of the
	SGWED:	proposed development when viewed
	Historic Resources.	from cultural heritage assets offsite.
		Avoid visibility of lit turbine hubs in views from the Calanais Standing Stones.
aviation and radar constraints	NPF4:	Ensure that proposed wind turbines
	Policy 11 iv: impacts on aviation and defence interests including seismological recording.	do not cause unacceptable effects to instrument flight procedures at Stornoway airport. Ensure that an acceptable visible aviation lighting
	SGWED:	strategy is in place.
	Aviation and Defence.	
	Radar Impacts.	



Site Constraint	Relevant NPF4 / SGWED Policy Requirement Considerations	Resulting Design Objective
fixed communications links	NPF4: Policy 11 v: impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised	Ensure that turbines are not within 150m of the BT operated fixed communications link that runs north-south through the Site.

4.2 Embedded Mitigation

The findings of the technical and environmental studies undertaken for the EIA were used to inform the design of the proposed development, and hence achieve a 'best fit' within the environment of the proposed development Site. Where potentially significant effects were identified, efforts were made to avoid these through evolving the design of the proposed development, 'embedding' mitigation into the design. 'Embedded mitigation' includes but is not limited to:

- sensitive siting of the proposed infrastructure incorporating appropriate buffer distances from environmental receptors (including nearby residential properties) to avoid or reduce effects;
- considering the size and scale of the proposed development appropriate to the location;
- reducing the number and size of turbines in order to avoid or reduce effects on birds;
- applying painted blade mitigation to turbines in order to avoid or reduce effects on birds;
- considering the appearance, finish and colour of wind turbines and the control building in accordance with SNH Guidance 'Siting and Designing Wind Farms in the Landscape', V3 (SNH, 2017);
- design of the tracks to minimise cut and fill, reducing landscape and visual effects as well as costs; and
- potential for micrositing of infrastructure during construction to ensure the best possible location is chosen based on site investigations.

Considerable effort was made to produce a turbine layout which achieves the most satisfactory relationship with the landform of the Site whilst respecting other environmental, technical and economic considerations. During the EIA process, the multi-disciplinary team met to discuss the various issues which were identified as part of the constraints mapping process. The team identified the optimal locations for the proposed turbines and associated infrastructure.



5.0 Design Evolution

The evolution of the design and layout of the proposed development was an iterative constraint-led process driven by the technical and environmental studies undertaken for the EIA. It involved review of multiple layouts and related wirelines from key landscape and visual receptor locations in the study area, and adjustment to turbine locations to reduce potentially adverse landscape and visual impacts insofar as possible, whilst also taking into consideration the energy generation, other environmental, technical and economic considerations.

To provide additional context to the overall design evolution of proposed wind farms at the Site, the 45 turbine consented layout of the Muaitheabhal Wind Farm (and extensions) is shown on **Figure 9**. For a more detailed comparison of the proposed development and the consented Muaitheabhal Wind Farm (and extensions), please refer to the **Project Comparison Report**.

5.1 Wind Turbine Layouts

The initial potential development area (for wind turbines) within the Site boundary was established using constraints mapping. Constraints such as deep peat (>1.5m depth), watercourses and fixed communications links were mapped as hard constraints, whereas others such as steep slopes (>14%), and peat depths between 1m – 1.5m were mapped as soft constraints. This constraints mapping was used to identify the areas within the Site which may be suitable for wind turbines.

As the EIA process progressed, other factors influenced the location, size and number of wind turbines proposed. These factors included such things as consideration of the proposed turbines from key viewpoints and landscape designations, potential ornithological effects (collision rates), and potential effects on aviation (instrument flight procedures).

Four of the key design iterations, are shown on **Figure 10a** and **10b** and comprise the EIA Scoping Layout (Layout A), the 1st Public Exhibition Layout (Layout B), the Gatecheck Report Layout (Layout C) and the Design Freeze Layout (Layout D – the proposed development). The layouts and their rational are also detailed in the following paragraphs.

5.1.1 Layout A (Scoping Layout): 26 Turbines at 225m Tip Height

This Scoping layout was developed prior to the majority of the environmental surveys and landscape assessment working commencing. Some environmental and technical constraints were taken into consideration during the production of the Scoping layout, however this layout focused more on representing a realistic size and number of turbines in order to illicit responses from consultees.

This layout comprised 26 turbines at a height of up to 225m to blade tip height. Wirelines of this initial layout are shown on **Figure 11a**, **Figure 11b** and **Figure 11c**.

As a result of the early environmental, and landscape and visual assessment work, this layout was deemed to bring turbines too close to the Eisgein WLA and, due to the height of the turbines, too prominent from key viewpoints to the north.

5.1.2 Layout B (1st Public Exhibition Layout): 26 Turbines at 215m tip height

In order to reduce the prominence of turbines in key views to the north (such as views experienced from the A859 and Bailie Ailein) and south west (such as Beinn Mhor within the Eisgein WLA) of the Site, turbine blade tip heights were reduced from 225m to 215m. Turbines located along the north eastern site boundary (T2 and T3 of Layout A) were pulled slightly further south west to reduce prominence in views from locations to the north of the Site.



This layout comprised 26 turbines at a height of up to 215m to blade tip height and was presented at the first round of public exhibitions. Wirelines of this layout (Layout B) are shown on Figure 12a, Figure 12b, Figure 12c.

Following continued environmental, and landscape and visual assessment work, as well as feedback from consultees and the public, this layout was still considered as bringing turbines too close to the Eisgein Wild Land Area and, still considered as too prominent from key viewpoints to the north, and also considered to be too close to an area of prominent eagle territory (Creag na Beirighe).

5.1.3 Layout C (Gatecheck Report Layout): 25 Turbines at 180m-200m Tip Height

As a result of the highlighted issues around Layout B, the number of turbines was reduced, as was the turbine tip height. Turbines located closest to the Eisgein Wild Land Area (T24, T25 and T26) were relocated further north east to the lower-lying area of the centre and north of the Site in order to reduce proximity and horizontal extent of turbines in key views from the Eisgein WLA. T8 of Layout B, which was located and on the eastern footslopes of the ridgeline formed by Feiriosbhal and Beinn Mheadonach in the north west of the Site, was relocated considerably further east to a lower-lying area of the Site to reduce prominence of this turbine in key views from the South Lewis, Harris and North Uist NSA, Eisgein WLA and settlements to the north and east of the Site. T13, which was also located at slightly higher elevation on the south eastern footslopes of the ridgeline formed by Feiriosbhal and Beinn Mheadonach, was moved downslope further south and the tip height was reduced to 180m to reduce the prominence of this turbine in these views.

The layout that was submitted as part of the Gatecheck Report for the proposed development comprised a 25 turbine scheme, with blade tip heights of up to 180m-200m. Wirelines of this layout (Layout C) are shown on Figure 13a, Figure 13b, Figure 13c.

The reduction in turbine blade tip heights from 215m to 180m-200m reduced the overall visibility of the proposed development, particularly in views from settlements to the north e.g. Tabost, Balallan, and Lacasaigh and from the South Lewis, Harris and North Uist NSA. The removal of turbines closest to the Eisgein WLA reduced the overall extent of the proposed development and prominence of turbines in views from the Eisgein WLA. This layout was considered to have addressed many of the main environmental and landscape and visual constraints / issues that were identified during the EIA and through consultation with stakeholders.

5.1.4 Layout D (Design Freeze – The Proposed Development): 25 Turbines at 180m-200m Tip Height

Following on from the Gatecheck Report layout, continued environmental and landscape assessment work, as well as further discussions with consultees (including the second round of public exhibitions), led to further improvements on the turbine layout.

The tip height of two additional turbines (T1 and T19) were reduced to 180m, with the blade tip height of T12 (T13 of Layout C) also remaining as 180m in order to reduce the prominence of these turbines when seen from key viewpoints, particularly to the north. The blade tip height of T1 was also reduced to avoid visibility of lit turbine hubs in views from settlements to the north of the Site, particularly the central extents of the settlement of Balallan. Some other minor turbine movements were also made at this stage in order to ensure that potential effects on other environmental constraints, such as peat, have been minimised.

The layout incorporates infrastructure elements which were not present on the Scoping Layout and other earlier iterations. This includes internal access tracks, a substation compound, a temporary construction compound and borrow pit locations.

This layout comprises 25 turbines, three of which are 180m to blade tip height, and 22 of which are 200m to blade tip height. Further to this, turbines T19 to T25 (the southernmost seven turbines) are proposed to have painted blade mitigation applied, in order to further reduce predicted collision rates for eagle species. The



painted blade mitigation would be applied to one of the three blades on each turbine (T19 to T25), with a semimatt black colour chosen, so as to be consistent with the May et al. (2020) study of painted turbine blades at Smøla (painted blade mitigation is considered further in **Chapter 7: Landscape and Visual Amenity** and **Chapter 9: Ornithology**). A semi-matt colour finish is considered to preferable with regards to landscape and visual effects, whilst still providing the predicted benefits in reducing collision rates for eagle species.

Wirelines of this layout (Layout D) are shown on Figure 14a, Figure 14b and Figure 14c.

5.2 Other Site Infrastructure

5.2.1 Site Access

Access to the Site would be afforded from the A859, taking the existing minor road (just north of Loch na h-Ola) south east towards Eishken lodge.

The proposed abnormal load route required to transport turbine components to the Site is shown on **Figure 15** and would be from the Port of Arnish, via the A859 to the junction south of Bailie Ailein and then onto Site. HGV and construction traffic would also use this route to Site.

In order to accommodate abnormal loads, the existing minor road running from the A859 to Eishken lodge would need to be upgraded. Widening works are proposed, to bring the existing carriageway up to a minimum of 4.5m on straight sections, with improved or new passing places provided. In addition, there may be requirements for carriageway regrading and creation of over-run areas for abnormal loads, together with the provision of a new bridge at Seaforth Head. Confirmation on the type of bridge structure (temporary or permanent) will be confirmed following additional onsite investigations.

Berthing Facility

Consideration is being given to use of a berthing facility³ on the north shore of Loch Sealg, in order to bring large components e.g. turbine blades, on to Site. This would avoid the need to transport abnormal loads via the road network (A859) from the Port of Arnish. Should a berthing facility be considered beneficial in order to facilitate turbine delivery, this would be subject to a separate planning application. The berthing facility would likely comprise:

- a slipway ramp and conventional slipway which would enable landing craft and barges to unload (including a crane for lifting the turbines ashore). These could be used also during construction by boats bringing construction workers and some HGV traffic for the proposed development and could be retained to service maintenance activities;
- an 'A' frame fender berthing facility against which vessels delivering the turbines would berth;
- a crane hardstanding from where the crane would unload the turbines from the delivery vessels; a heavy storage and blade storage area; and
- an access track to the closest part of the Site.

An indicative location for a potential berthing facility is shown on Figure 16.

³ There is a lapsed planning consent (Ref. 12/00248/PPD) for a dedicated berthing facility for the direct delivery of wind turbine components to Site. The berthing facility was subject to a planning application submitted to CnES and Marine Scotland and was consented in 2012. Planning consent lapsed in 2015.



5.2.2 Site Tracks

The onsite access tracks have been designed to reduce cut and fill requirements wherever possible in order to reduce the amount of ground and peat disturbance, the amount of material required for construction, the loss of sensitive habitats and landscape and visual effects, particularly during construction.

Access tracks have been designed to follow routes which, in the main, do not exceed gradients of 14%. This gradient is specified by a number of turbine manufacturers in their technical specifications to permit safe delivery of turbine components and associated parts.

There are five sections of floated track across the Site. Consideration was given to alternative routing options in order to avoid needing to propose floated track, however due to Site topography (slope steepness) and watercourses, it was considered that floated track would be most appropriate at these locations.

5.2.3 Borrow Pits

Up to five borrow pits would be required as a source of rock to be used in the construction of the tracks, hardstandings and foundations. On Site borrow pits have been sought in order to reduce the need to transport large quantities of aggregate to the Site.

Search area locations for the borrow pits have been identified based upon a review of geological mapping and Site reconnaissance by a geological specialist. The location of each was considered with respect to the Site infrastructure and environmental constraints, including landscape and visual impacts. **Figure 17a-b** shows a cumulative ZTV for all borrow pit search areas, with the majority of visibility within the Site boundary or to the south and east (within approximately 5km of the Site boundary).

Further intrusive geotechnical investigations would be carried out to identify which of the borrow pits would yield the required quality of rock for each aspect of the infrastructure. It is not anticipated that any more than five borrow pits would be needed.

5.2.4 Temporary Construction Compound

Two temporary construction compounds are proposed, one would be located at the centre of the Site at NGR NB 31865 13324, while the other is located at the south of the Site at NGR NB 30146 11589. These locations are considered appropriate as they:

- have appropriate topography;
- are located in an area of shallow peat and low peat slide risk; and
- avoid sensitive habitats.

Visibility of the temporary construction compounds would be minimal from key viewpoints due to their low laying location.

5.2.5 Crane Pads

Crane hardstandings, which would be built adjacent to each wind turbine, are likely to have a footprint of approximately 50m x 20m and 1m in depth (with additional temporary crane pad areas – shown on **Figure 18**). The actual crane pad design and layout would be determined by the turbine supplier according to their preferred erection method. An indicative design, considered to be the worst-case in terms of size, has been used during the iterative design process and is provided on **Figure 18**. The indicative crane pad design show on **Figure 18** shows the areas of the crane pad which are permanent hardstanding (e.g. turbine foundation area), temporary hardstanding (e.g. additional crane pad / support areas), and clearance only (e.g. areas in between additional crane pad / support areas). This breakdown in terms of the permanence and level of intrusion of the crane pad was taken into consideration during the design process, with crane pads being orientated so that if watercourses



or deeper peat were near to a proposed turbine location, effort was made to align the temporary and less intrusive parts of the crane pad with these constraints.

5.2.6 Substation Compound

The proposed substation compound would be located to the north of the turbine area at NGR NB 32509 14230. An enlarged substation compound footprint is proposed to accommodate both the applicant's and SSE control buildings. The location is considered appropriate as it:

- has appropriate topography (slope);
- is located in an area of shallow peat and low peat slide risk;
- avoids sensitive habitat areas;
- is lower down in the landscape than the wind turbines and as such less visible; and
- is adjacent to the exiting road.

The substation compound is located greater than topple distance from the proposed turbines. The internal site grid connection cables would be undergrounded within the Site from each turbine to control the building, therefore avoiding visual impact. **Figure 19a-b** shows a ZTV for the proposed substation compound (the equipment / buildings within the substation compound have varying heights, so for the purposes of the ZTV an indicative height of 5m has been used).

5.3 The Proposed Development Considered Against Design Objectives

The iterative design process has tried to ensure a balance between environmental and technical constraints, landscape and visual considerations and economic viability. Whilst giving due consideration to these various competing elements, the final layout forming the proposed development is considered to largely meet the design objectives detailed in **Table 1**. How the proposed development meets these design objectives is considered below in **Table 2**.

Table 2: Design Objectives, Design Evolution and Design Outcomes

Design Objective	Design Evolution	Outcome
Avoid siting wind farm infrastructure in deep peat >1.5m where possible. Where not possible applicable mitigation to be applied if available / realistic e.g. floated track, crane pad orientation. Avoid siting wind farm infrastructure on gradients of 14% or more.	Wind turbines have been relocated throughout the design process to ensure that they are located on peat less than 1.5m thick. Throughout the design process the amount of other infrastructure (tracks, crane pads, construction compounds, substation) located on peat over 1.5m deep has been reduced. This is highlighted in the design changes shown in Figure 20 .	All 25 wind turbines have been sited on peat less than 1.5m thick. The substation compound and temporary construction compounds are both located on ground that on average has peat less than 1.5m thick. The majority of newly proposed onsite track is located on ground with less than 1.5m of peat. 2.2km of floated track has been proposed where, due to other constraints, relocation of the tracks would be technically challenging / result in other environmental issues.
Avoid siting wind farm infrastructure near nest sites where possible. Avoid siting wind farm infrastructure near	Wind turbines (and other infrastructure) have been relocated throughout the design process in	No wind turbines are within 100m of any identified nest site.



Design Objective	Design Evolution	Outcome
locations identified as used by protected species. Avoid siting wind farm infrastructure on areas identified as having a high potential for Ground Water Dependent Terrestrial Ecosystems.	order to be as far as possible from nest sites and other locations identified as used by protected species (see Figure 21). Wind turbines have also been relocated so as to avoid areas of high potential GWDTE (See Figure 22).	No wind farm infrastructure is sited on any locations identified as used by protected species. No wind farm infrastructure is located within areas of high potential GWDTE.
Avoid siting wind farm infrastructure within any environmental (non-landscape related) designations, and avoid impacts upon these environmental designations.	There are no environmental designations within the proposed development Site.	No wind farm infrastructure is located within any environmental (non-landscape related) designations, and no environmental designations are impacted by the proposed development.
Limit the extent of the visibility of the proposed development across the NSA and seek to reduce overall impacts on the special landscape qualities of the NSA. Avoid siting turbines on the Feiriosbhal ridge which would appear prominent in views from the NSA, and utilise this landform to partially screen turbines within the Site. Try to ensure a cohesive turbine layout which is not prominent above the skyline when viewed from key locations within the NSA.	Turbines at the south west of the Site, closest to the NSA, were removed during the design process. Turbines located at slightly higher elevation along the north western site boundary (on the eastern and south eastern footslopes of the Feiriosbhal ridge were relocated to lower-lying areas in the centre or north of the site, or reduced in tip height to 180m. During the design process maximum turbine tip heights have reduced from 225m to 180m-200m.	Figure 23 shows the ZTV for the proposed development. As this shows, the theoretical visibility of the proposed turbines within the NSA is quite limited in both extent and also numbers of turbines visible. Turbines would be visible from localised hill summits and elevated landform within the NSA, and would appear backclothed by more distant landform and the sea. Visibility from lower-lying extents of the NSA has been avoided through the siting of the proposed development. Turbines in the north of the Site would appear contained beyond the Feiriosbhal ridge, which partially screens turbines in the centre and north of the Site.
Seek to reduce the overall impacts on the wild land qualities of the WLA by siting turbines away from the south western site boundary. Try to ensure a cohesive turbine layout which minimises the horizontal extent of turbines and 'stacking' or overlapping of turbine blades when viewed from key locations within the WLA.	Turbines at the south west of the Site, closest to the WLA, were removed during the design process. Turbines located at slightly higher elevation along the north western Site boundary (on the eastern and south eastern footslopes of the Feiriosbhal ridge were relocated to lower-lying areas in the centre or north of the Site, or reduced in tip height to 180m. During the design process maximum turbine tip heights have reduced from 225m to 180m-200m.	Figure 23 shows the ZTV for the proposed development. As this shows, the theoretical visibility of the proposed turbines within the WLA is predominantly in the north half of the WLA. The reduction in number of turbines has resulted in a more simple and balanced appearance to the proposed development. Turbines of the proposed development are set back from the south western site boundary, which has increased the intervening distance between the proposed development and the Eisgein WLA.
Limit the extent of the visibility of the proposed development when viewed from settlements to the north, east	As can be seen from Figures 11a to 14c , the design evolution of the proposed development has sought to	Figure 14a, Figure 14b and Figure 14c show that the proposed turbines are visible from the east and the north,



Design Objective

and north west. Utilise the landform of the Feirioshhal and Reinn Mheadonach west of the Site to contain the proposed development as far as possible, and minimise visibility from communities located along the A858. Loch Eireasort and Loch Seaforth. Minimise the number of lit wind turbine hubs visible from settlements to the north, east and north west in order to avoid potential negative effects of visible aviation lighting. Achieve a cohesive turbine layout, with no turbines appearing as outliers, or 'prominent' above, other turbines. Minimise the horizontal extent of turbines and 'stacking' or overlapping of turbine blades. Where possible, have the proposed turbines appear 'backclothed' by more distant landform, rather than against the skyline, when viewed from settlements to the north, east and north west...

Design Evolution

reduce the visibility of the proposed development when viewed from settlements to the north, east and north west. This has been primarily through reducing turbine tip heights from a maximum of 225m to 180m-200m, and by moving turbines from higher elevations to lower elevations, particularly avoiding siting turbines on Feiriosbhal and Beinn Mheadonach ridge. Visibility of lit turbine hubs has also formed a consideration for design refinement, with visibility of lit turbine hubs avoided where possible settlements within approximately 6km of the nearest proposed turbine.

There is a statutory requirement to light the wind farm because the turbines are over 150m tall. However, because of the nature of the area, light pollution from aviation obstacle lighting is of concern. In balancing these two requirements it is considered appropriate to use a reduced lighting scheme, with not all turbines being lit.

Outcome

however theoretical visibility from settlements to the north west of the Site (Airidh a Bhruaich) has been avoided through siting of the proposed development. The proposed development will be partially screened by intervening landform in views from settlements within approximately 6km from the nearest proposed turbine. Turbines would appear as a relatively coherent cluster with no outliers or overly prominent turbines, although occasionally appearing as two clusters separated by the dip in landform along Loch Eisgein and Abhainn Cheothadail in views from the east. Turbines would not diminish the scale of surrounding landform in views from these settlements. In views from more distant settlements located between 8-15km to the north of the Site, slightly more direct, albeit distant, views are available into the Site with all 25 of the proposed turbines seen in views from Liurbost, Acha Mor and localised extents of the A859. However, turbines would appear as a relatively coherent cluster with no outliers or overly prominent turbines.

A reduced lighting scheme is considered acceptable as the night time use of the airspace is only very rarely low flying VFR (Visual Flight Rules) traffic with no NVGs (Night Vision Goggles).

In this case, the proposed reduced lighting scheme is for 7 turbines to have nacelle mounted, medium intensity, visible spectrum, steady red obstacle lights, specifically turbines 1, 3, 7, 12, 18, 22 and 25. The lights to operate from dusk until dawn. Visibility of turbine lighting has been avoided in views from Lemreway and Ballalan, and minimised in views from Orinsay.

Ensure that no wind turbine is within 800m of a financially involved residential receptor, or within 1km of

No turbine is located within 800m of a financially involved residential receptor, or within 1km of a non-

No turbine is located within 800m of a financially involved residential receptor, or within 1km of a non-



Design Objective	Design Evolution	Outcome
a non-financially involved residential receptor.	financially involved residential receptor.	financially involved residential receptor.
Try to ensure that no wind farm infrastructure is located within 50m of a watercourse or waterbody where possible.	As can be seen from Figure 20 there has been an effort to reduce the amount of infrastructure proposed within 50m of a watercourse / water body. However some crane pads are still located within 50m of a watercourse.	The following crane pads are located within 50m of a watercourse buffer: T1, T2, T10 and T24. None of these crane pads would require work to be carried out on the river banks.
Try to ensure that no wind farm infrastructure is located on cultural heritage features within the Site. Limit the extent of the visibility of the proposed development when viewed from cultural heritage assets offsite. Avoid visibility of lit turbine hubs in views from the Calanais Standing Stones.	Following the iterative design process, no wind farm infrastructure is located on cultural heritage features within the Site. Due to the reduction in proposed tip heights and the relocation of turbines to lower ground, visibility of the proposed development from offsite cultural heritage assets has been reduced.	No wind farm infrastructure is located on cultural heritage features within the Site. Figure 24 shows the extent of the theoretical visibility of the proposed development in relation to offsite cultural heritage assets. Visibility of lit turbine hubs has been avoided in views from the Calanais Standing Stones through the siting of the proposed development.
Ensure that proposed wind turbines do not cause unacceptable effects to instrument flight procedures at Stornoway airport. Ensure that an acceptable visible aviation lighting strategy is in place.	Tip heights have been reduced from 225m to a maximum of 200m. Turbines on higher ground have either been relocated to lower ground or had tip heights reduced to 180m.	An Instrument Flight Procedure Impact assessment has confirmed that the proposed development would not cause unacceptable impacts.
Ensure that turbines are not within 150m of the BT operated fixed communications link that runs north-south through the Site.	Turbines, such as T1 and T8 were moved west and east respectively in order to ensure they were outwith the 150m fixed communications link buffer.	All turbines are outwith the 150m BT fixed communications link buffer that runs north to south through the Site.

The final layout for the proposed development is considered to largely meet the design objectives set out in **Table 1** and **Table 2**. Whilst the proposed development would still be visible from many key receptors and nearby designations and whilst there remains some proposed infrastructure located on deeper pockets of peat and within 50m of watercourses, it is considered that the design of the proposed development has improved considerably in relation to these points, over the course of the design process. The proposed turbine layout has minimised visibility from key viewpoints and settlements as far as possible (taking into account economic viability as well as the need to maximise the wind resource at the Site), and is viewed as a coherent wind farm with no isolated or overly prominent turbines.



6.0 Proposed Development

The proposed development is described in **Chapter 3** of the EIA Report. An outline Construction and Environmental Management Plan (CEMP) is contained in the EIA Report as **Technical Appendix 3.1**. The layout of the proposed development is contained in **Figure 25a-I**. In summary, the proposed development would comprise:

- 25 wind turbines including internal transformers, three with blade tip heights of 180m and 22 with blade tip heights of 200m;
- 25 turbine foundations (approximately 22.8m diameter) and associated crane hardstandings (approximately 50m x 20m and 1m in depth, with an additional temporary crane pad area.
- approximately 12.1km of upgraded access tracks, and approximately 16.5km of new access tracks with
 a typical running width of 6m (wider at bends and junctions) and associated drainage. 2.2km of the new
 track is anticipated to be floating track where consistent (50m distance or more) peat depths of over
 0.5m or greater are identified along with shallow topography (below 5%);
- approximately 19.16km of underground cabling along access tracks to connect the turbine locations, and the onsite electrical substation;
- one onsite substation which would accommodate 33kV Switchgear to collect electricity from different parts of the Site. The substation compound would have an area of 75m x 100m and would include a control and metering building (approximately 16m x 30m and 8m high);
- up to five borrow pits (covering approximately 6.82ha);
- two permanent met masts; and
- two temporary construction compounds (1.43ha and 1.20ha respectively).



7.0 Public Access

7.1 Public Access - Pedestrian

Public access to the Site would be restricted during the construction of the proposed development for obvious health and safety reasons due to construction activities, the movement of heavy plant and the erection of turbines. EIA Report **Chapter 14: Socio-Economics, Tourism, Recreation and Land Use** concludes that the impact on users would be negligible and not significant. When operational, however, there would be no formal access arrangements implemented and members of the public would be able to access the site on foot and make use of the access tracks in accordance with the provisions of the Land Reform (Scotland) Act 2003.

During periods of maintenance, access by the public could be restricted depending on the nature of the maintenance activity.

7.2 Public Access – Vehicular

Once the proposed development is operational (if consent granted) vehicular access to the wind farm tracks will be limited to individuals directly involved in the maintenance of the wind farm, the landowners and estate residents, and emergency vehicles.



8.0 Conclusion

The layout of the proposed development has evolved through an iterative EIA and design process. Constraints identified throughout the EIA process were avoided, and potential impacts of the proposed development avoided or reduced by the design. EIA studies were used to achieve a 'best fit' within the environment of the site.

The final layout of the proposed development comprises 25 turbines with tip heights of between 180m and 200m. This is considered to be the most appropriate number and size of turbines that can be accommodated by the Site, balancing both energy yield and contribution towards renewable energy generation targets, with key planning, technical and environmental constraints.



9.0 References

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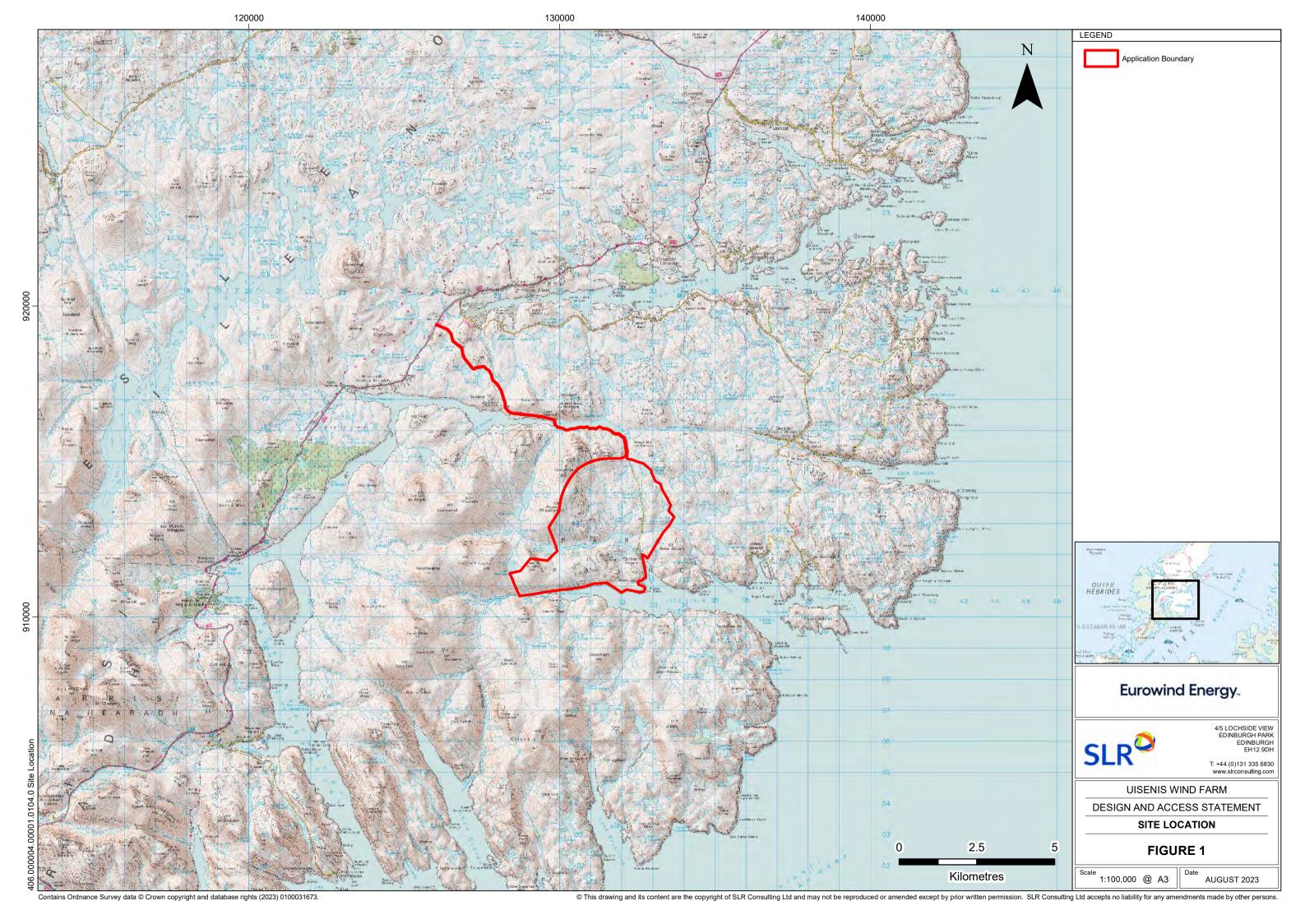
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FIGURES



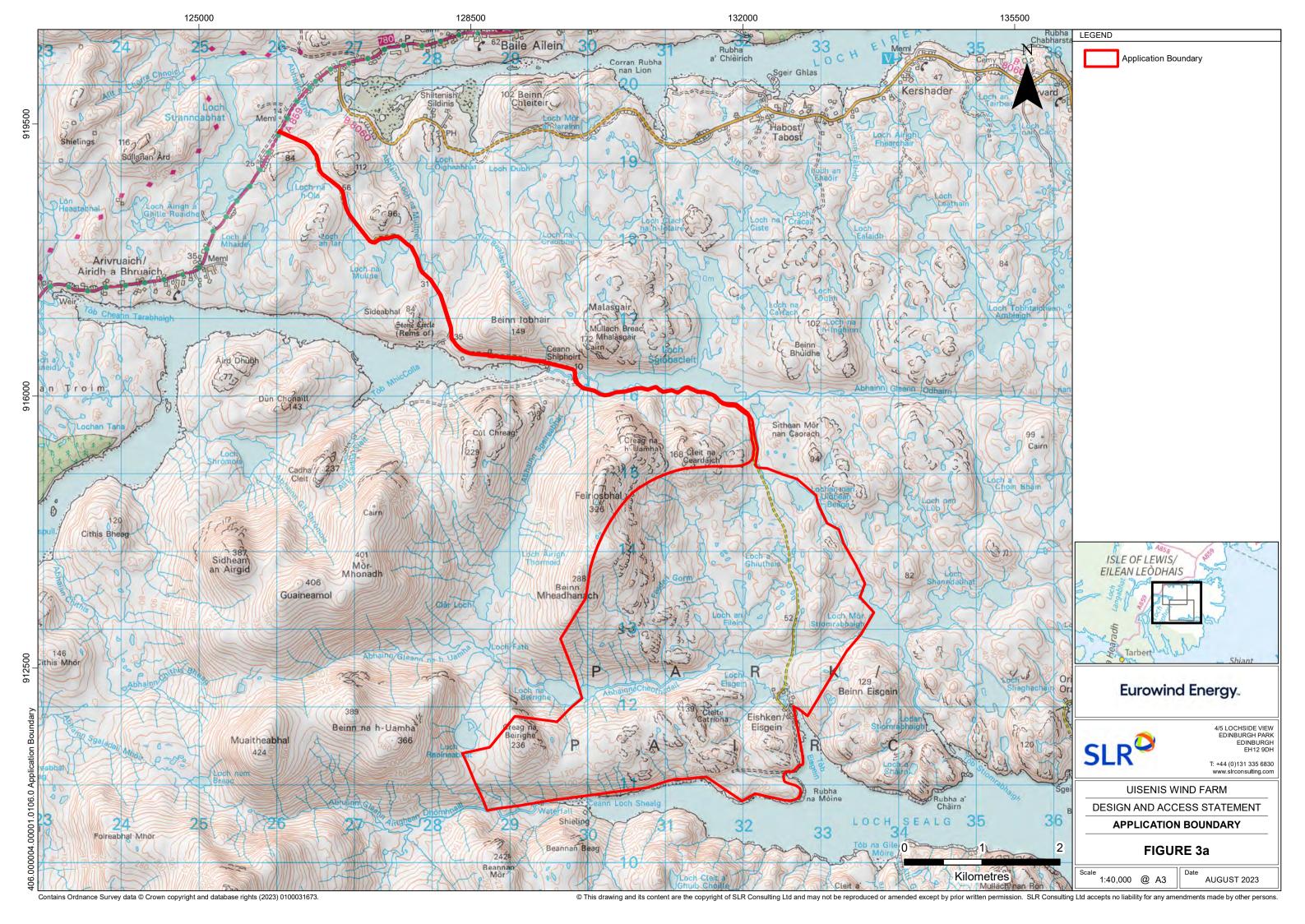


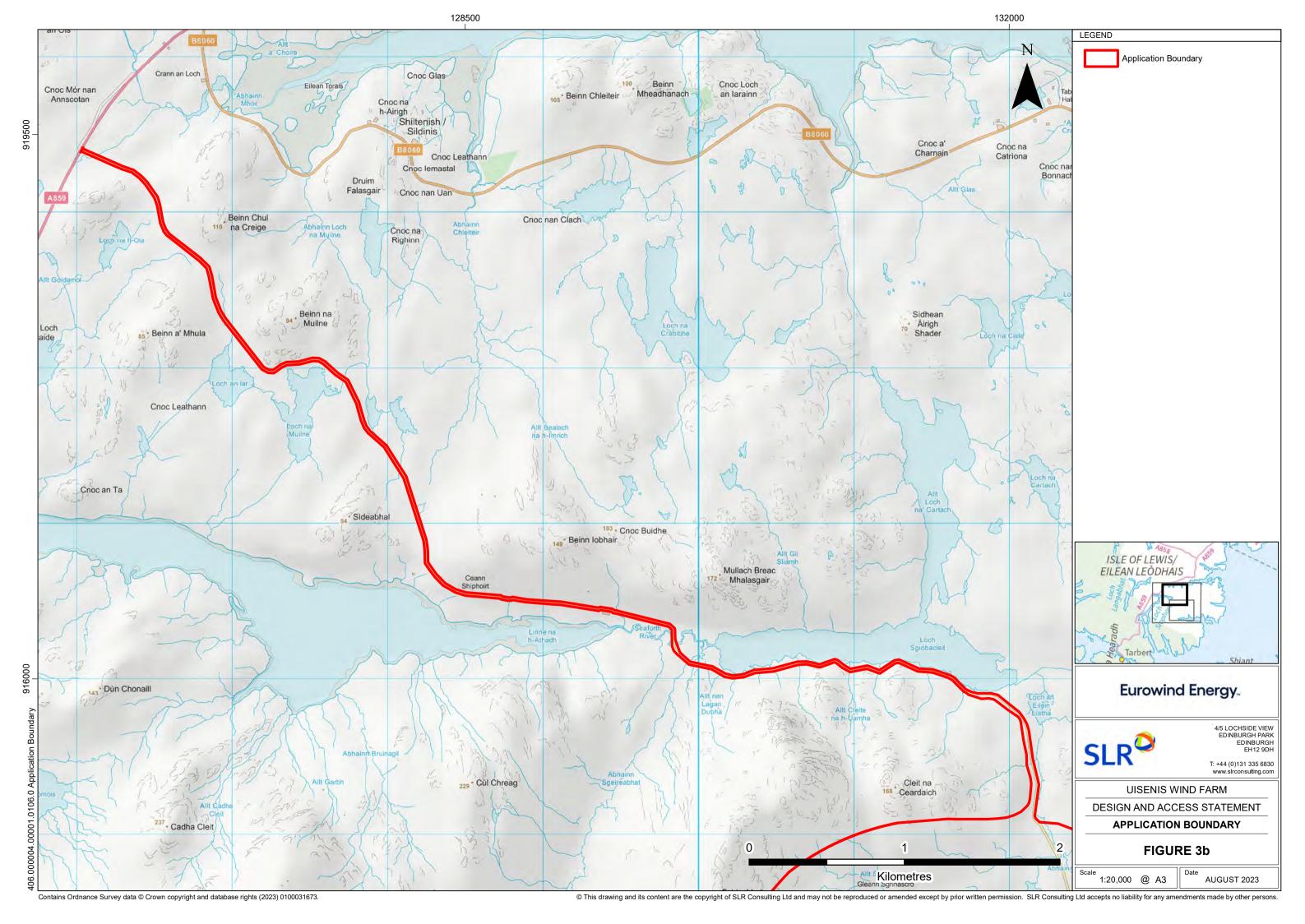


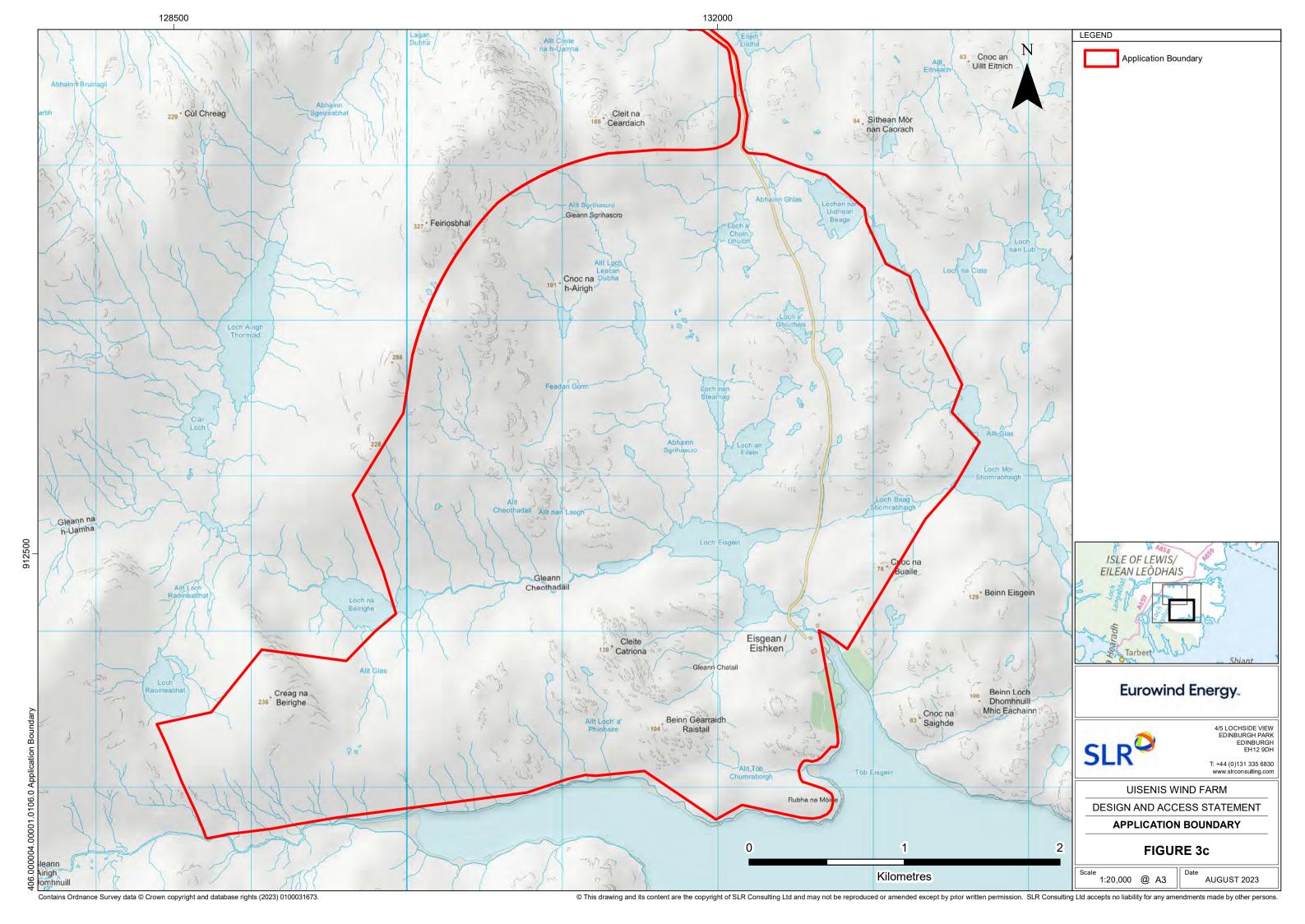


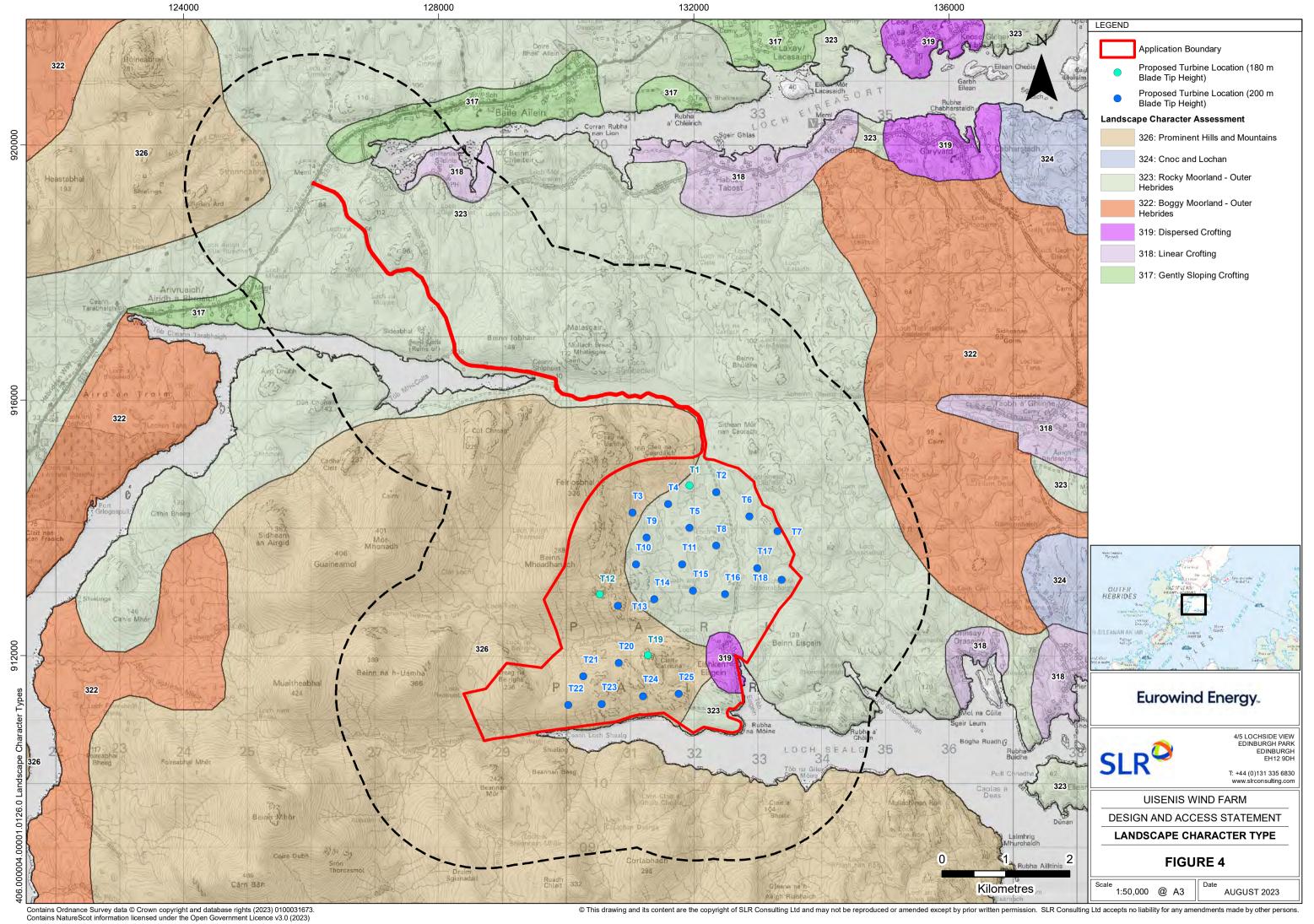
128500 132000 LEGEND Application Boundary ISLE OF LEWIS/ EILEAN LEÒDHAIS **Eurowind Energy UISENIS WIND FARM** DESIGN AND ACCESS STATEMENT SITE AERIAL MAP FIGURE 2c Scale 1:20,000 @ A3 Date AUGUST 2023 Contains Ordnance Survey data © Crown copyright and database rights (2023) 0100031673.

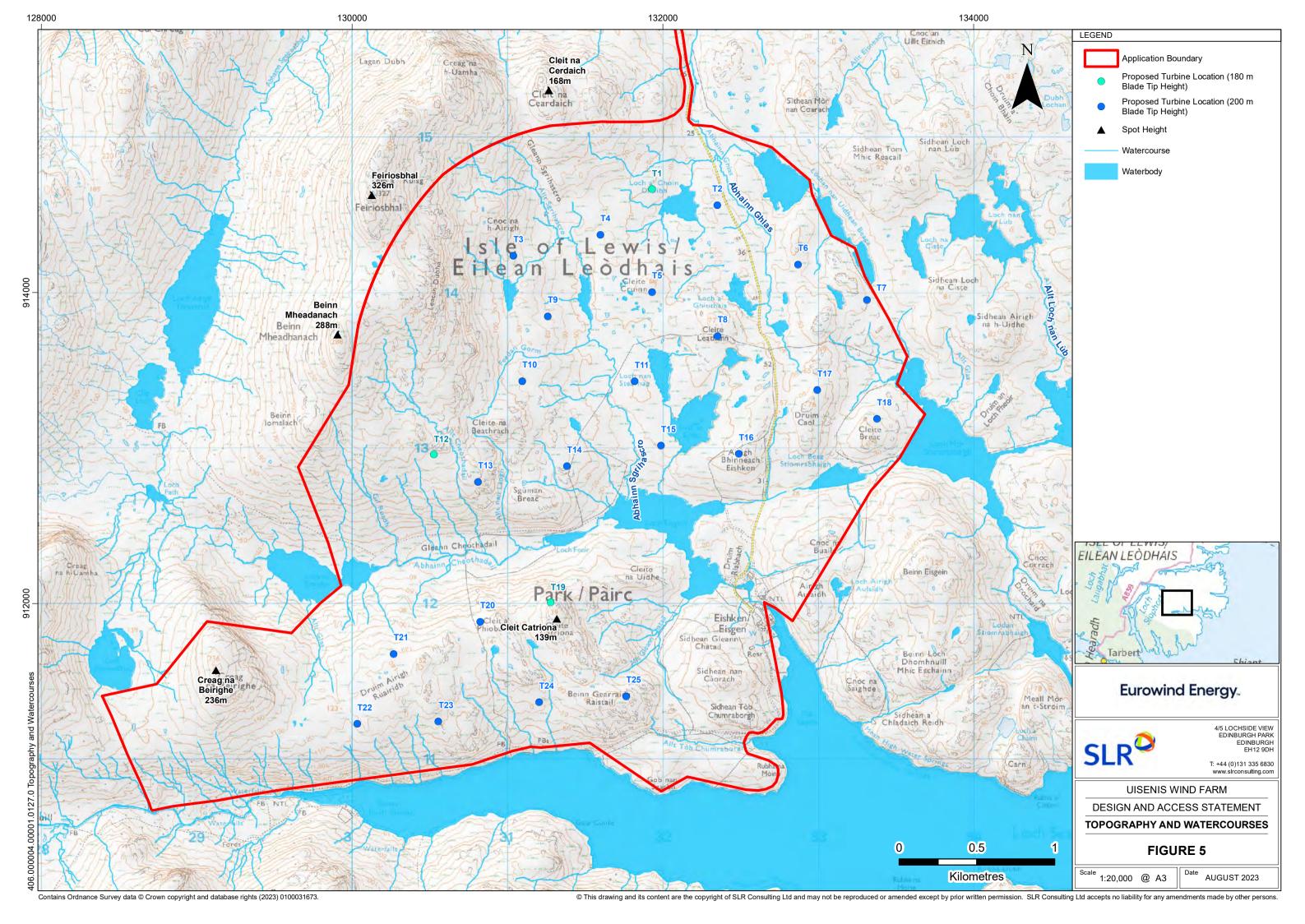
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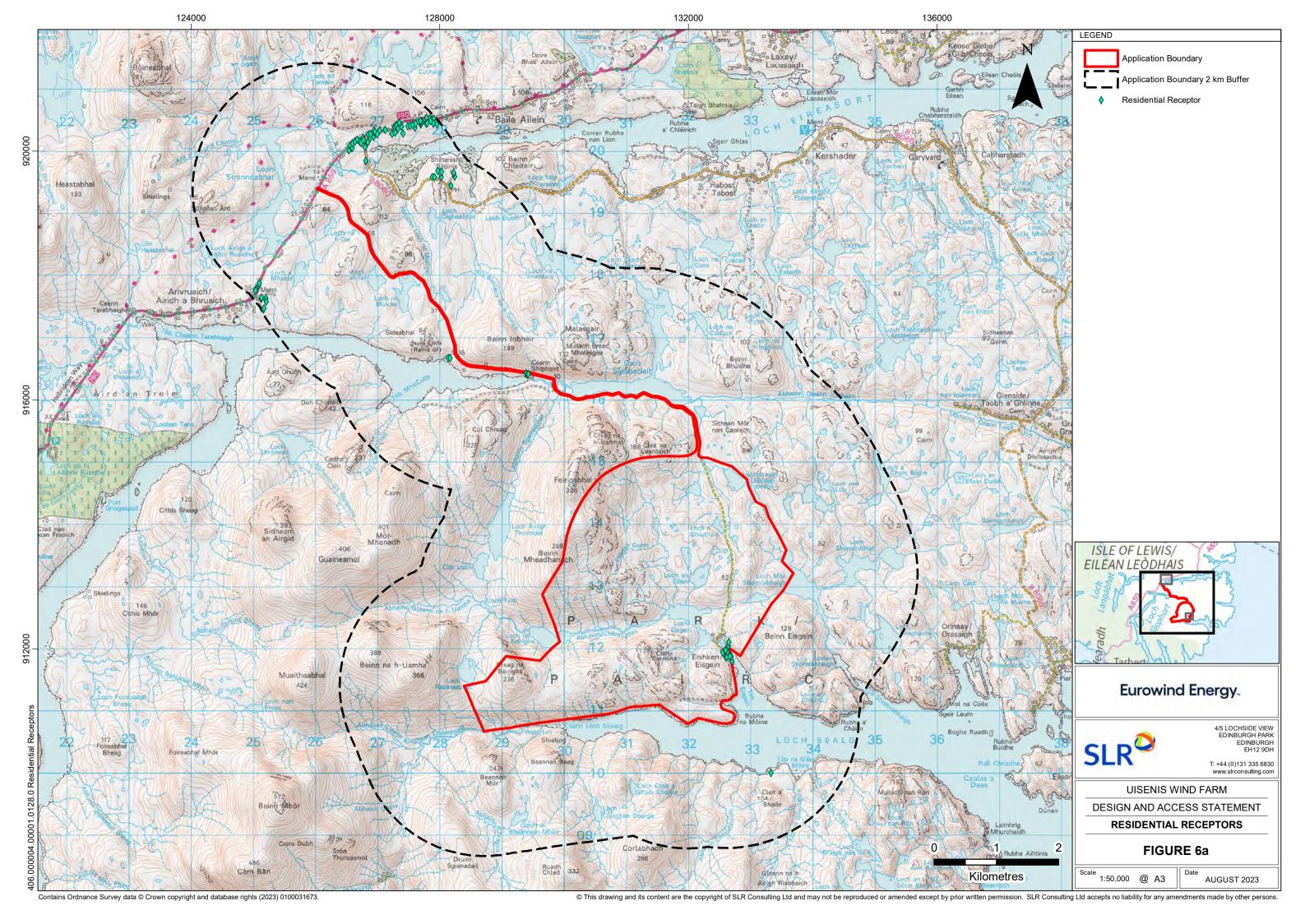


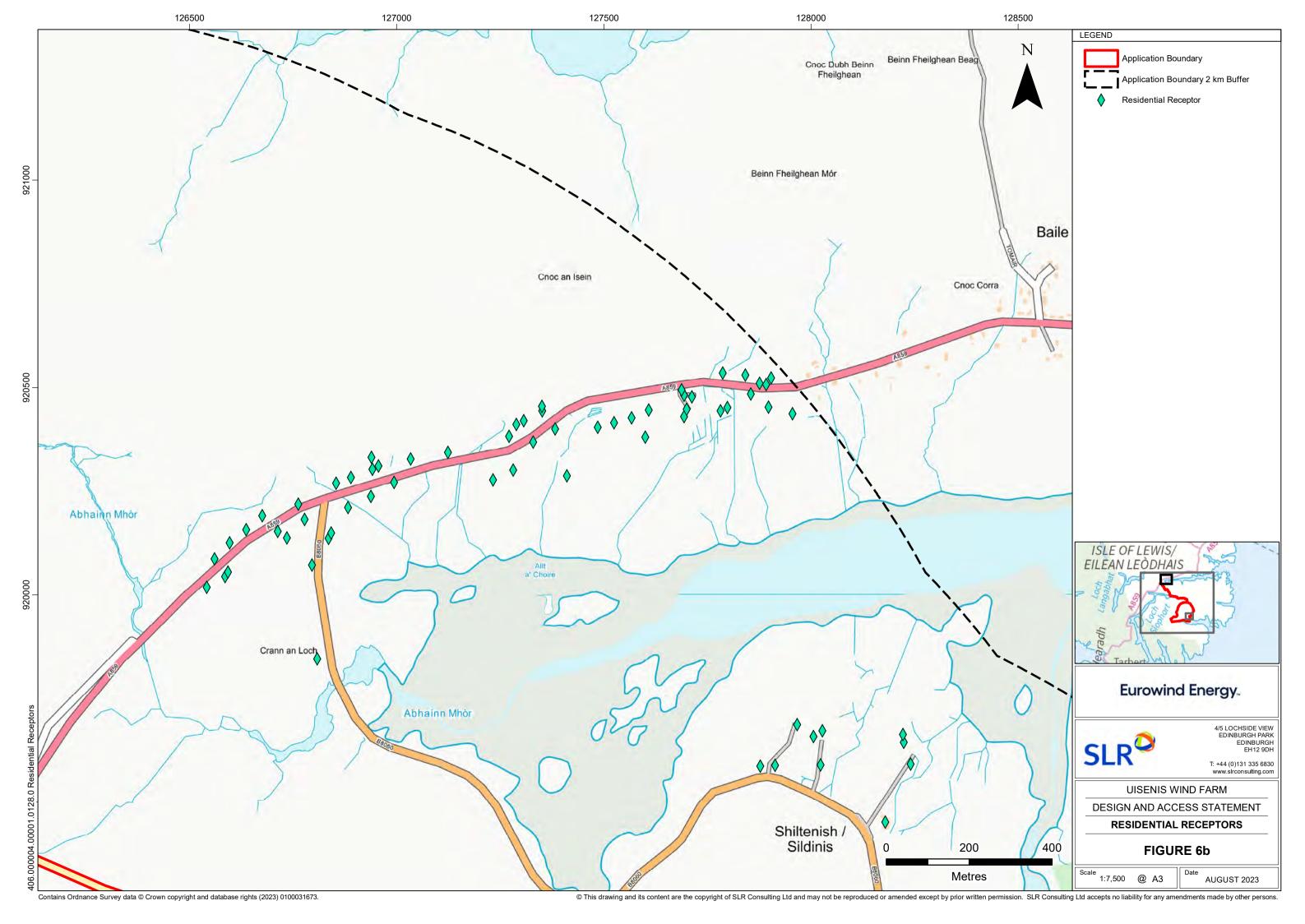


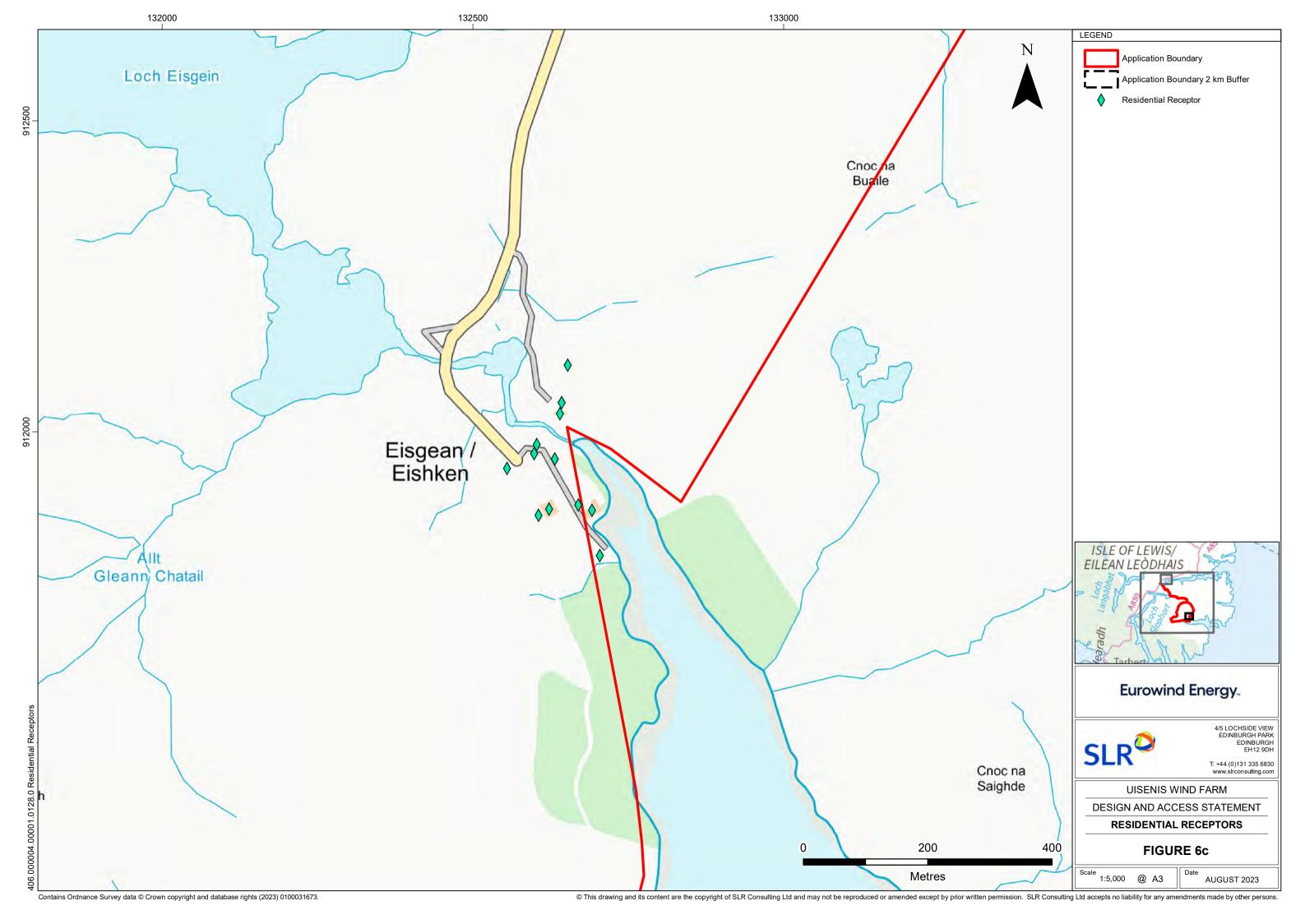


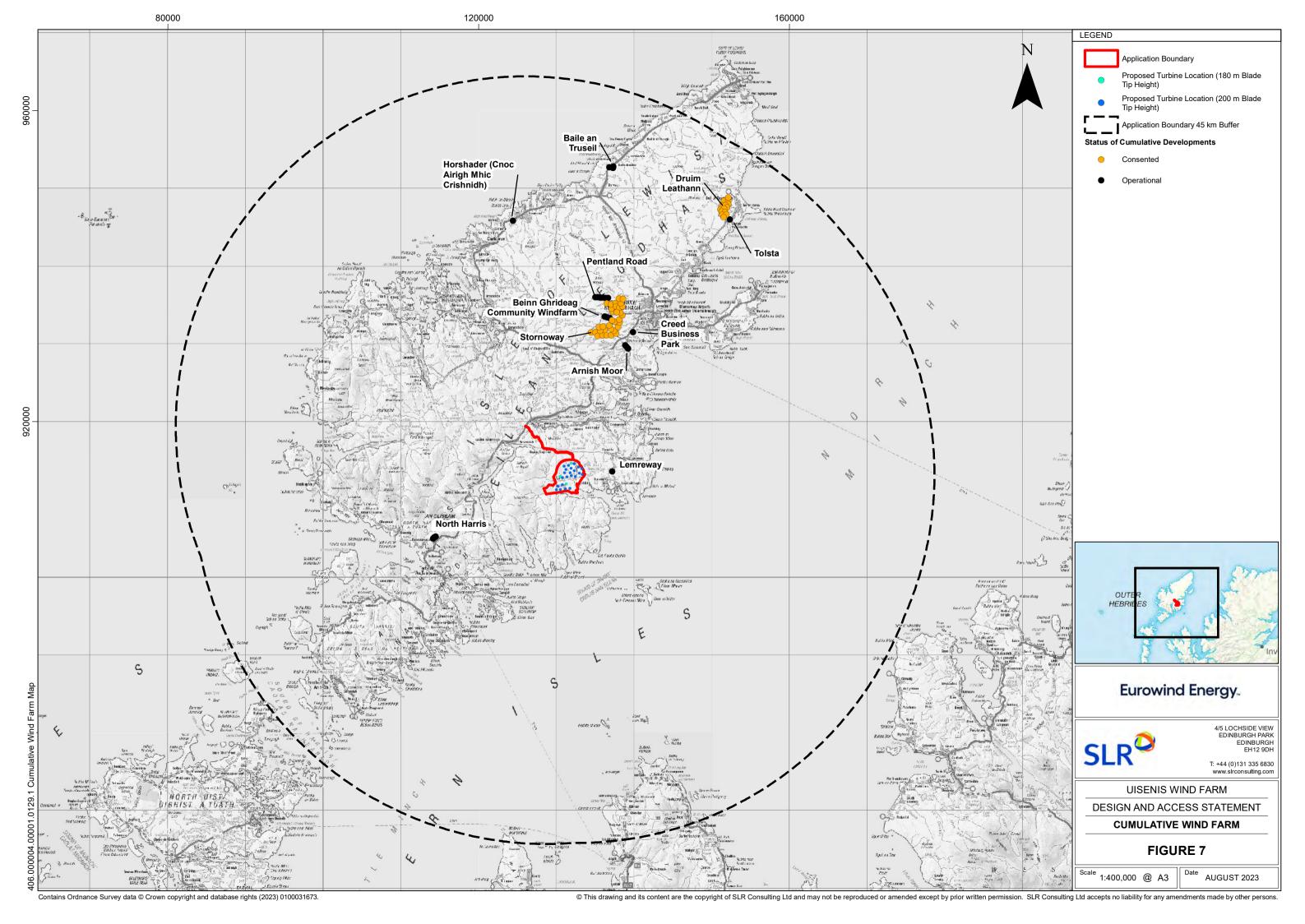


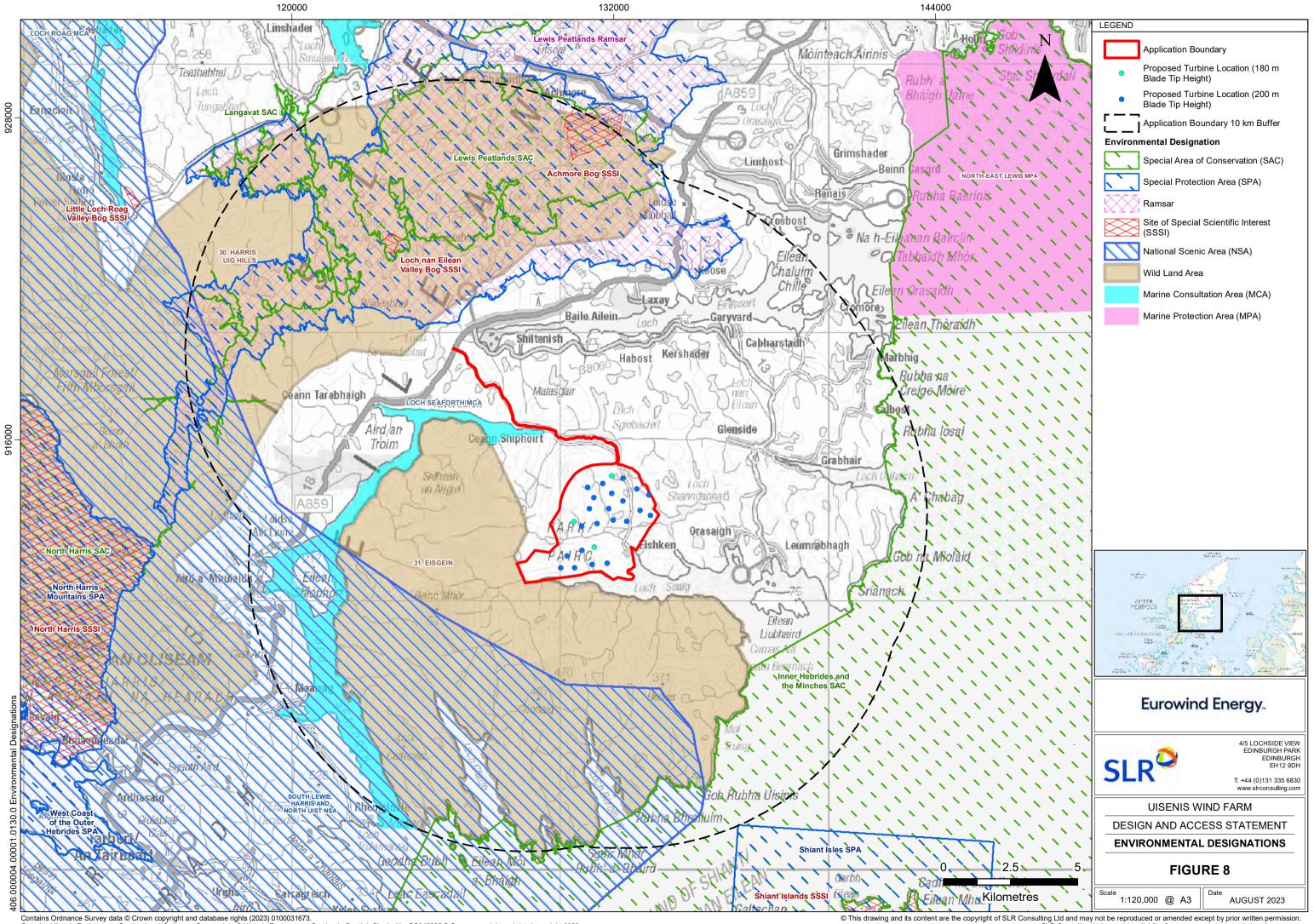


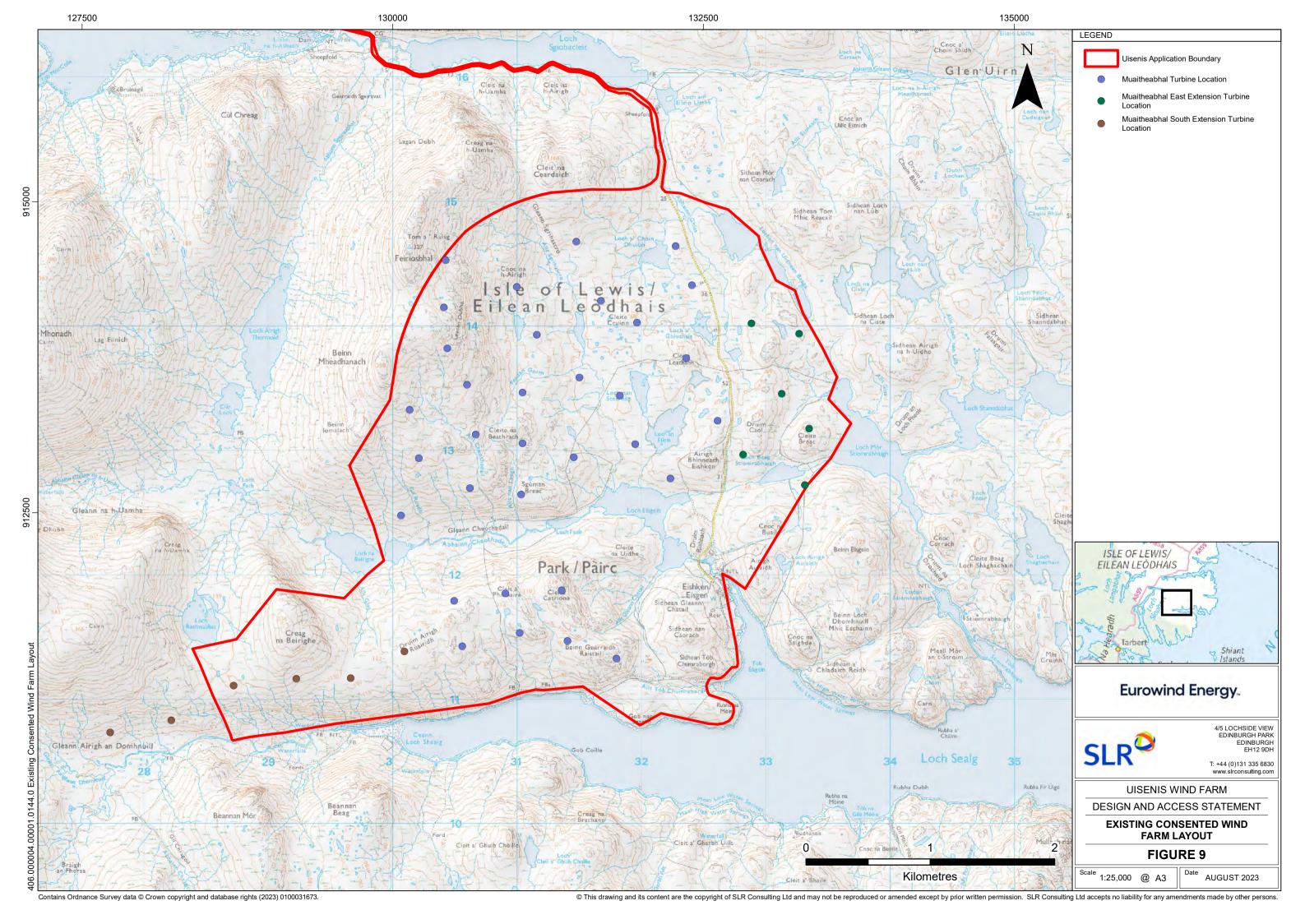




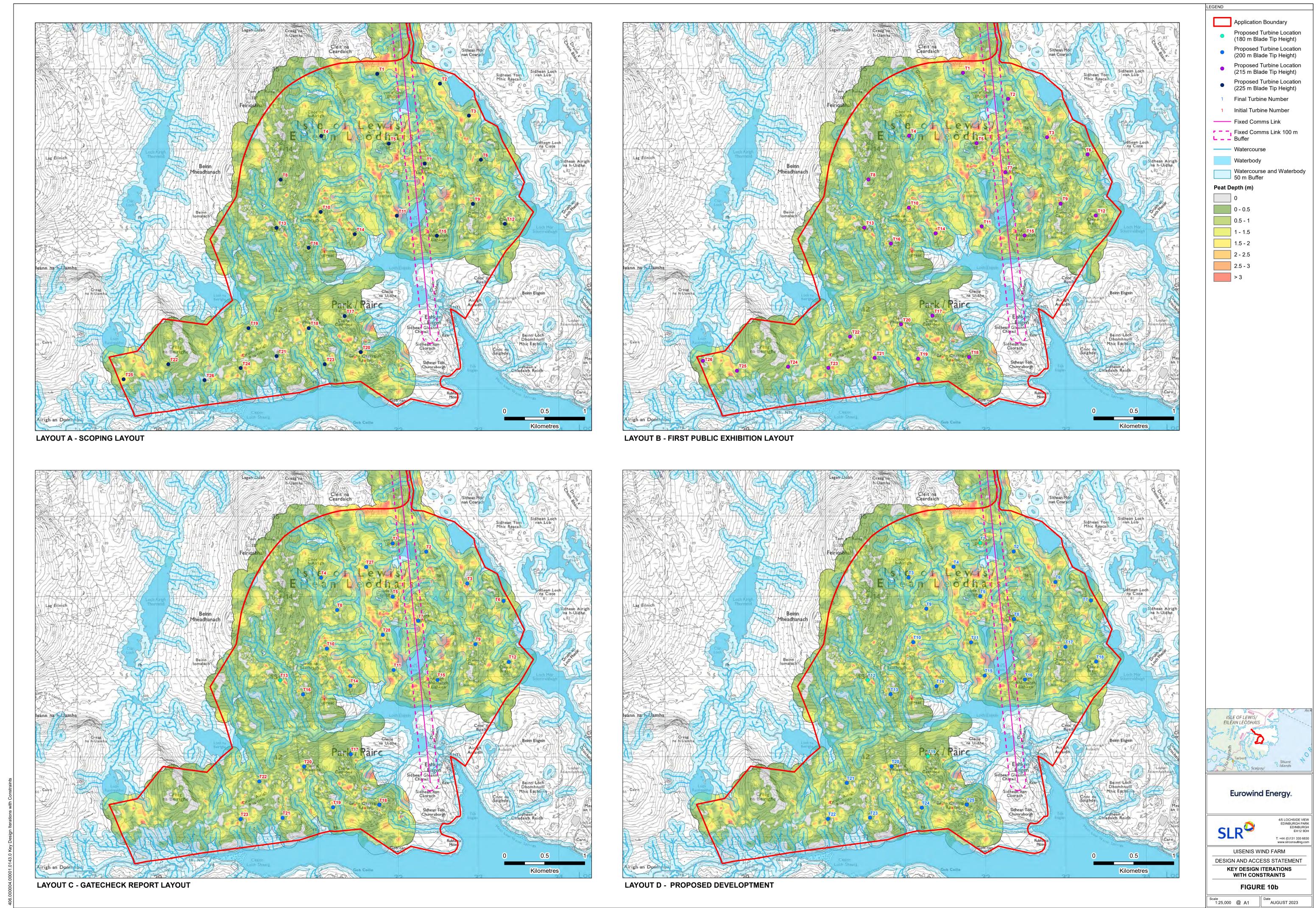








406.000004.00001.0137.0 Key Design Iterations



Arnish Moor Uisenis Druim Leathann Lemreway View flat at a comfortable arm's length Layout A Scoping Layout - 26 turbines @ 225m tip height (July 2022) Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm

Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm OS reference: 125433E 909534N AOD: 566 m Wind Farm Developments key (by status): Proposed scheme Operational Consented Figure 11a
Viewpoint 3: Beinn Mhor Direction of view: 60°
Nearest turbine: 3.5 km

Uisenis View flat at a comfortable arm's length Layout A Scoping Layout - 26 turbines @ 225m tip height (July 2022) OS reference: 137942E 915827N Horizontal field of view: 53.5° (planar projection)
AOD: 54 m Principal distance: 812.5 mm
Direction of view: 250° Paper size: 841 x 297 mm (half A1)
Nearest turbine: 5.3 km Correct printed image size: 820 x 260 mm Wind Farm Developments key (by status): **Uisenis Wind Farm** Proposed scheme Operational

Uisenis View flat at a comfortable arm's length Layout A Scoping Layout - 26 turbines @ 225m tip height (July 2022) **Uisenis Wind Farm** Proposed scheme Operational

Direction of view: 205°
Nearest turbine: 12.0 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Wind Farm Developments key (by status):

Arnish Moor **Uisenis** Druim Leathann Lemreway View flat at a comfortable arm's length Layout B 1st Public Exhibition Layout - 26 turbines @ 215m tip height (November 2022) OS reference: 125433E 909534N AOD: 566 m Wind Farm Developments key (by status): Proposed scheme Operational Consented **Uisenis Wind Farm**

Direction of view: 60°
Nearest turbine: 3.6 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm

Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Figure 12a
Viewpoint 3: Beinn Mhor

Uisenis View flat at a comfortable arm's length Layout B 1st Public Exhibition Layout - 26 turbines @ 215m tip height (November 2022) Proposed scheme **Uisenis Wind Farm** Wind Farm Developments key Operational

Direction of view: 250° Nearest turbine: 5.0 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm Paper size: 841 x 297 mm (half A1) Correct printed image size: 820 x 260 mm

Uisenis View flat at a comfortable arm's length Layout B 1st Public Exhibition Layout - 26 turbines @ 215m tip height (November 2022) Proposed scheme Operational **Uisenis Wind Farm**

Direction of view: 205°
Nearest turbine: 12.2 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Wind Farm Developments key (by status):

Arnish Moor **Uisenis** Druim Leathann Lemreway View flat at a comfortable arm's length Layout C Gatecheck Report Layout - 25 turbines @ 180-200m tip height (January 2023) OS reference: 125433E 909534N AOD: 566 m **Uisenis Wind Farm** Operational

Direction of view: 60°
Nearest turbine: 4.8 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Wind Farm Developments key (by status):

Uisenis View flat at a comfortable arm's length Layout C Gatecheck Report Layout - 25 turbines @ 180-200m tip height (January 2023) Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm Wind Farm Developments key (by status): Proposed scheme **Uisenis Wind Farm** Operational

Consented

Direction of view: 250° Nearest turbine: 5.0 km

Paper size: 841 x 297 mm (half A1) Correct printed image size: 820 x 260 mm

Uisenis View flat at a comfortable arm's length Layout C Gatecheck Report Layout - 25 turbines @ 180-200m tip height (January 2023) OS reference: 137284E 925851N Horizontal field of view: 53.5° (planar projection)
AOD: 46 m Principal distance: 812.5 mm
Direction of view: 205° Paper size: 841 x 297 mm (half A1)
Nearest turbine: 12.3 km Correct printed image size: 820 x 260 mm **Uisenis Wind Farm** Proposed scheme Operational

Wind Farm Developments key (by status):

Arnish Moor **Uisenis** Druim Leathann Lemreway View flat at a comfortable arm's length Layout D Design Freeze - 25 turbines @ 180-200m tip height (May 2023) OS reference: 125433E 909534N AOD: 566 m Wind Farm Developments key (by status): **Uisenis Wind Farm** Operational

Direction of view: 60°
Nearest turbine: 4.9 km

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm

Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Uisenis View flat at a comfortable arm's length Layout D Design Freeze - 25 turbines @ 180-200m tip height (May 2023) OS reference: 137942E 915827N Horizontal field of view: 53.5° (planar projection)
AOD: 54 m Principal distance: 812.5 mm **Uisenis Wind Farm** Proposed scheme Operational

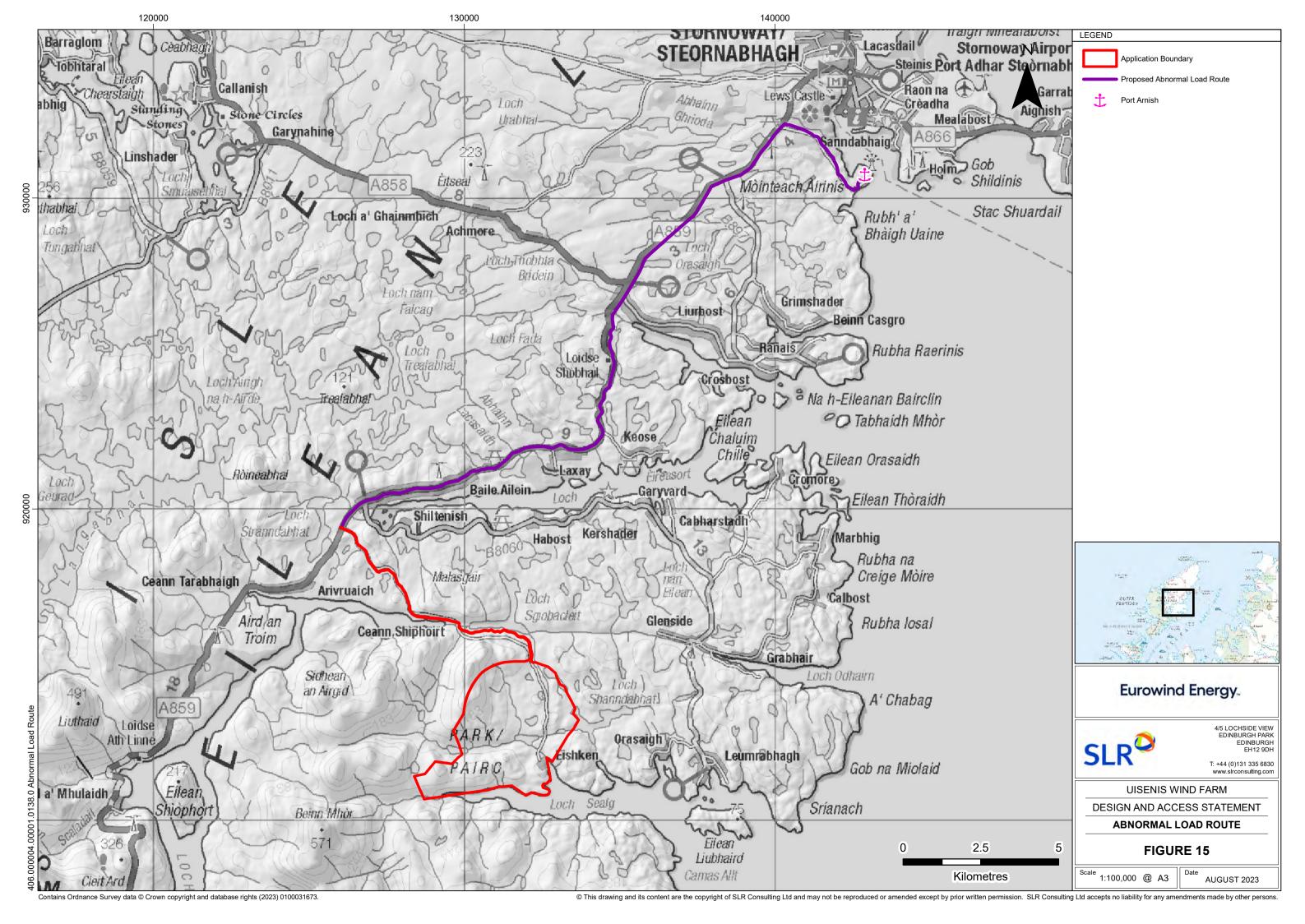
Direction of view: 250°
Nearest turbine: 5.0 km

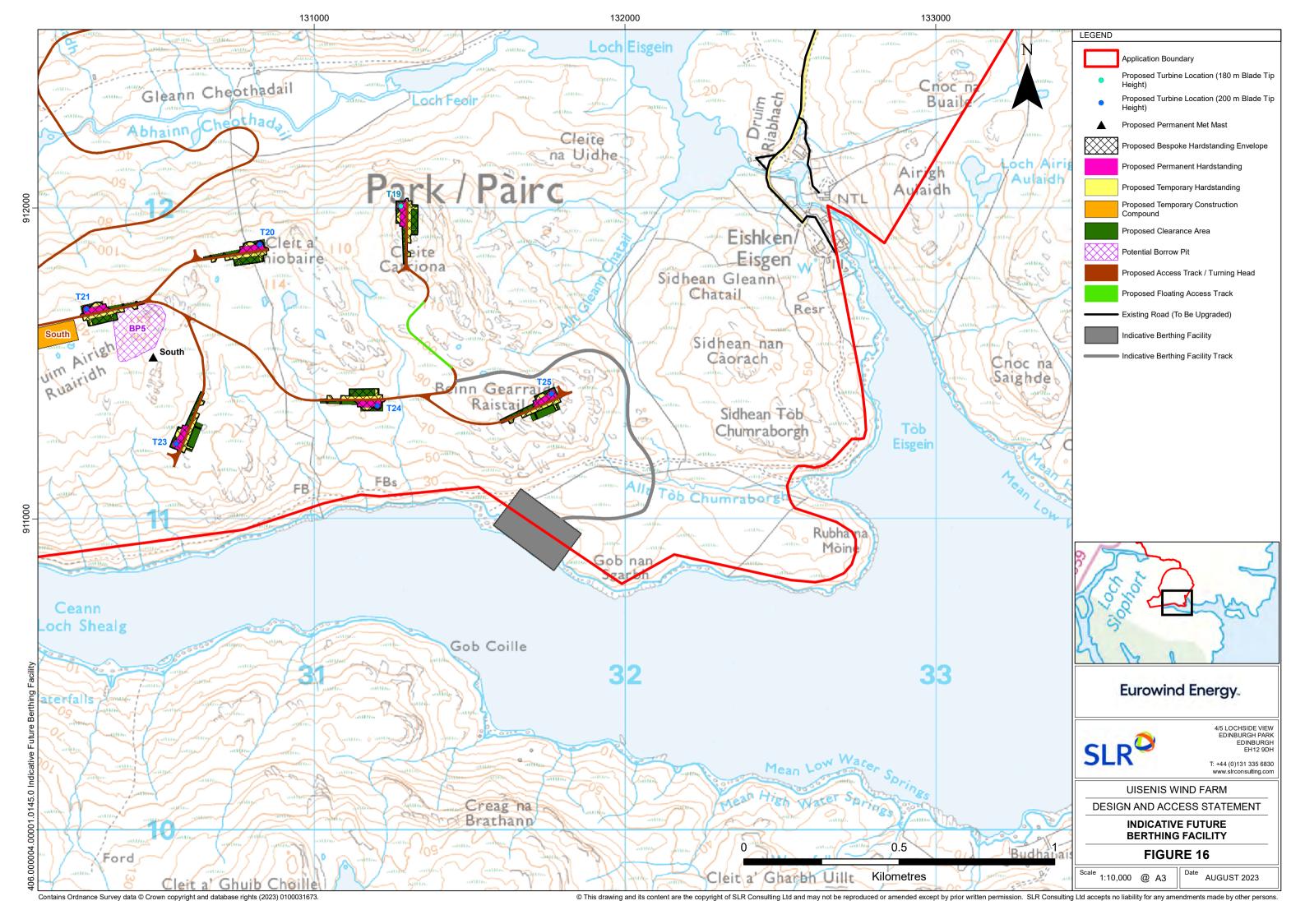
Paper size: 841 x 297 mm (half A1) Correct printed image size: 820 x 260 mm

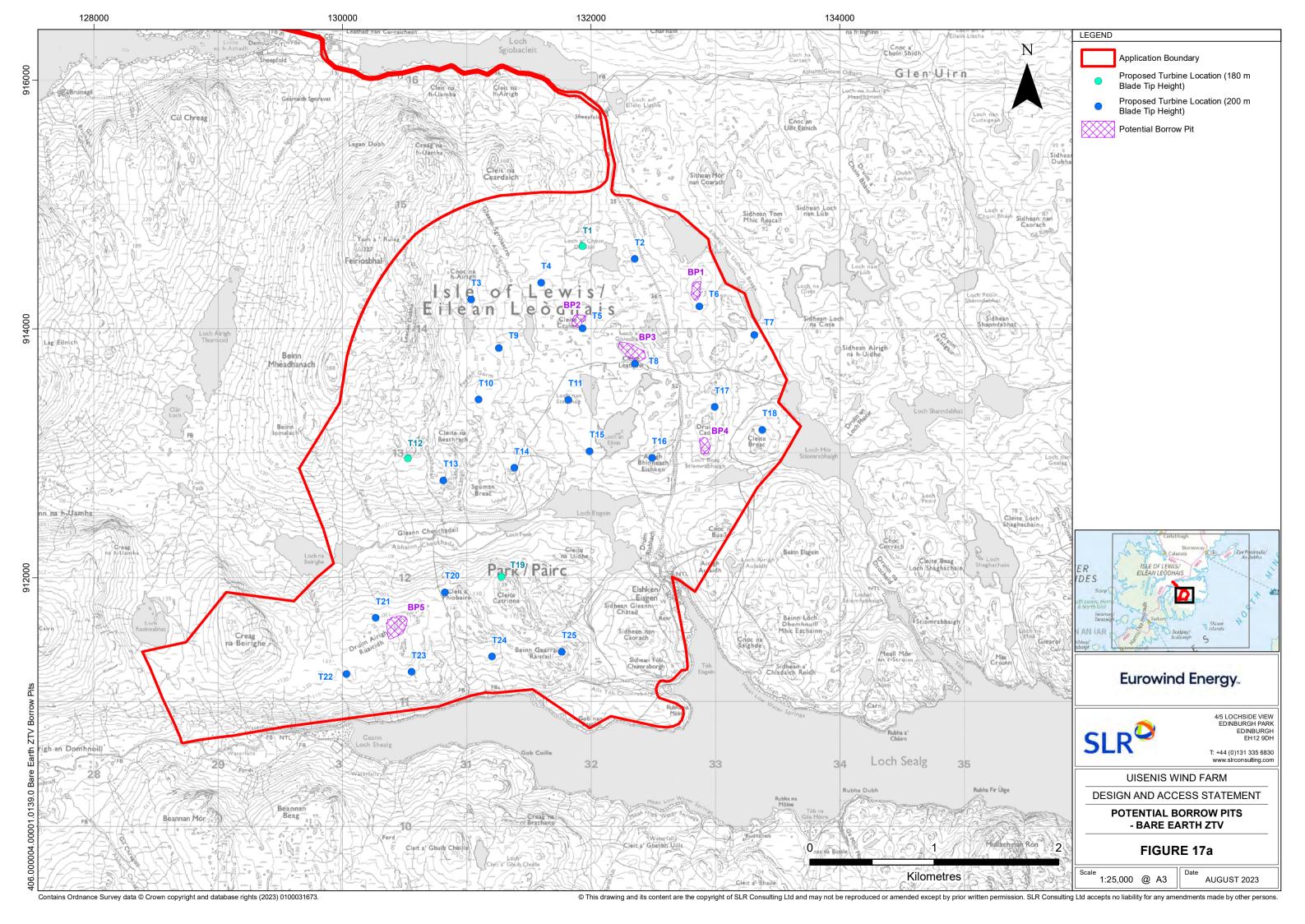
Wind Farm Developments key (by status):

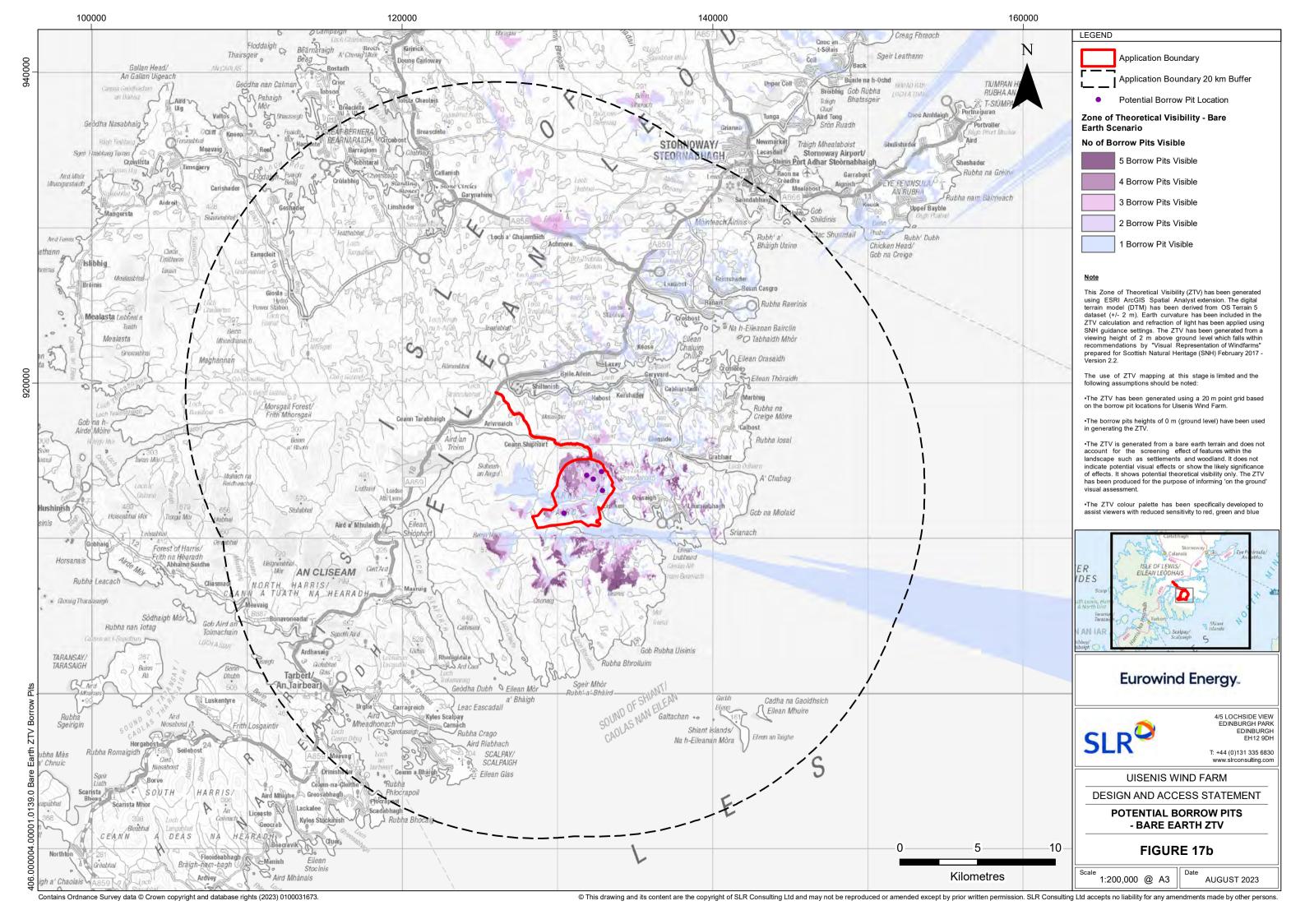
Uisenis View flat at a comfortable arm's length Layout D Design Freeze - 25 turbines @ 180-200m tip height (May 2023) OS reference: 137284E 925851N Horizontal field of view: 53.5° (planar projection)
AOD: 46 m Principal distance: 812.5 mm
Direction of view: 205° Paper size: 841 x 297 mm (half A1)
Nearest turbine: 12.3 km Correct printed image size: 820 x 260 mm **Uisenis Wind Farm** Proposed scheme Operational

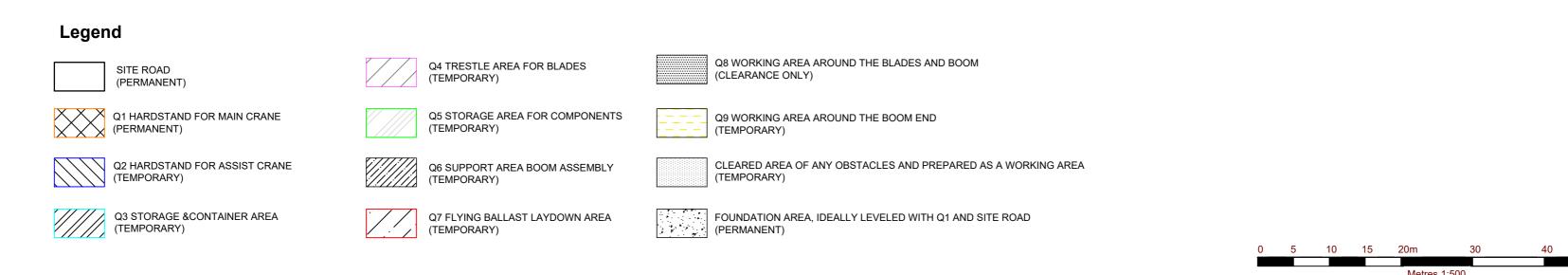
Wind Farm Developments key (by status):











4/5 LOCHSIDE VIEW EDINBURGH PARK EDINBURGH EH12 9DH

T: +44 (0)131 335 6830 www.slrconsulting.com

Date AUGUST 2023

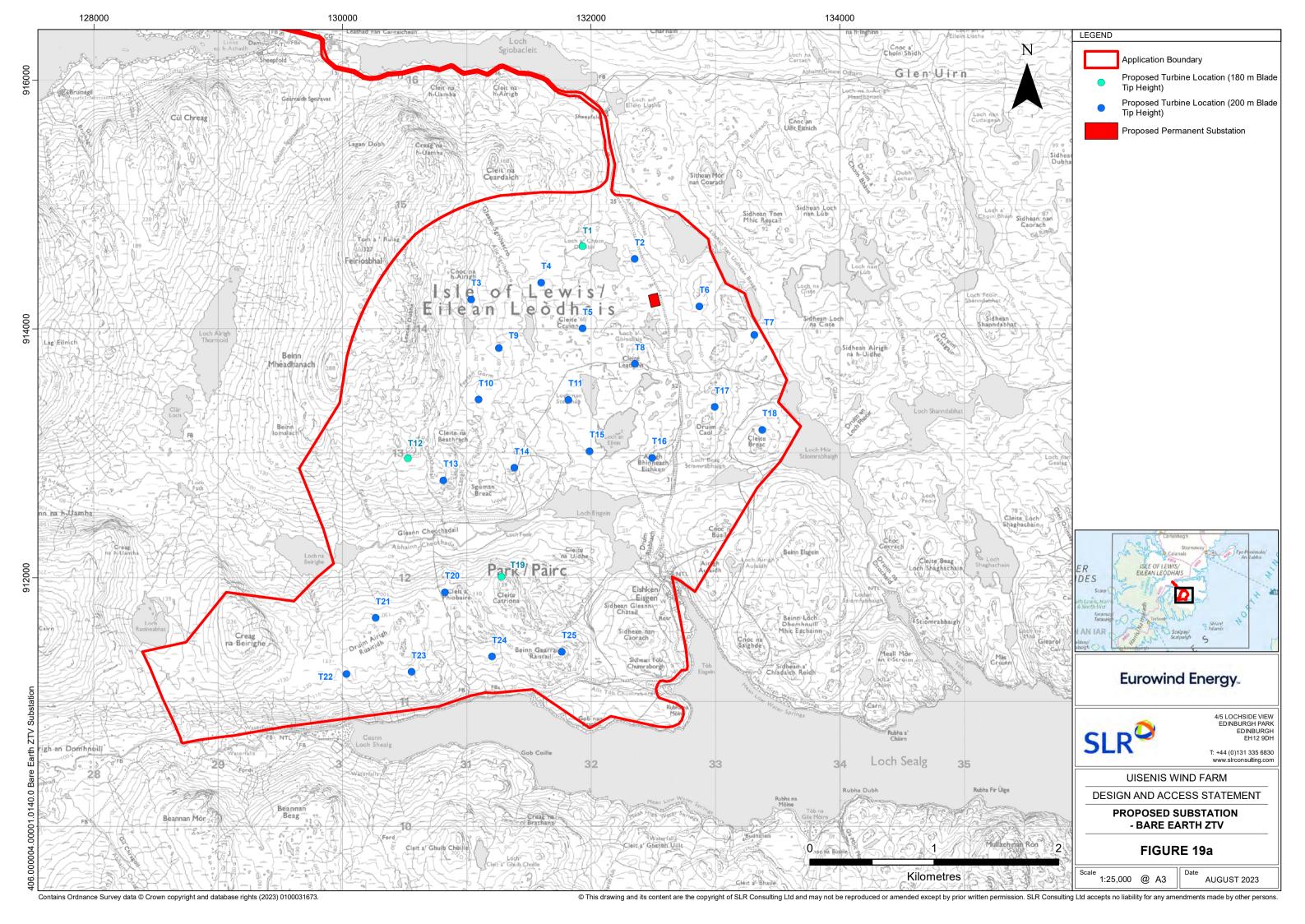
UISENIS WIND FARM

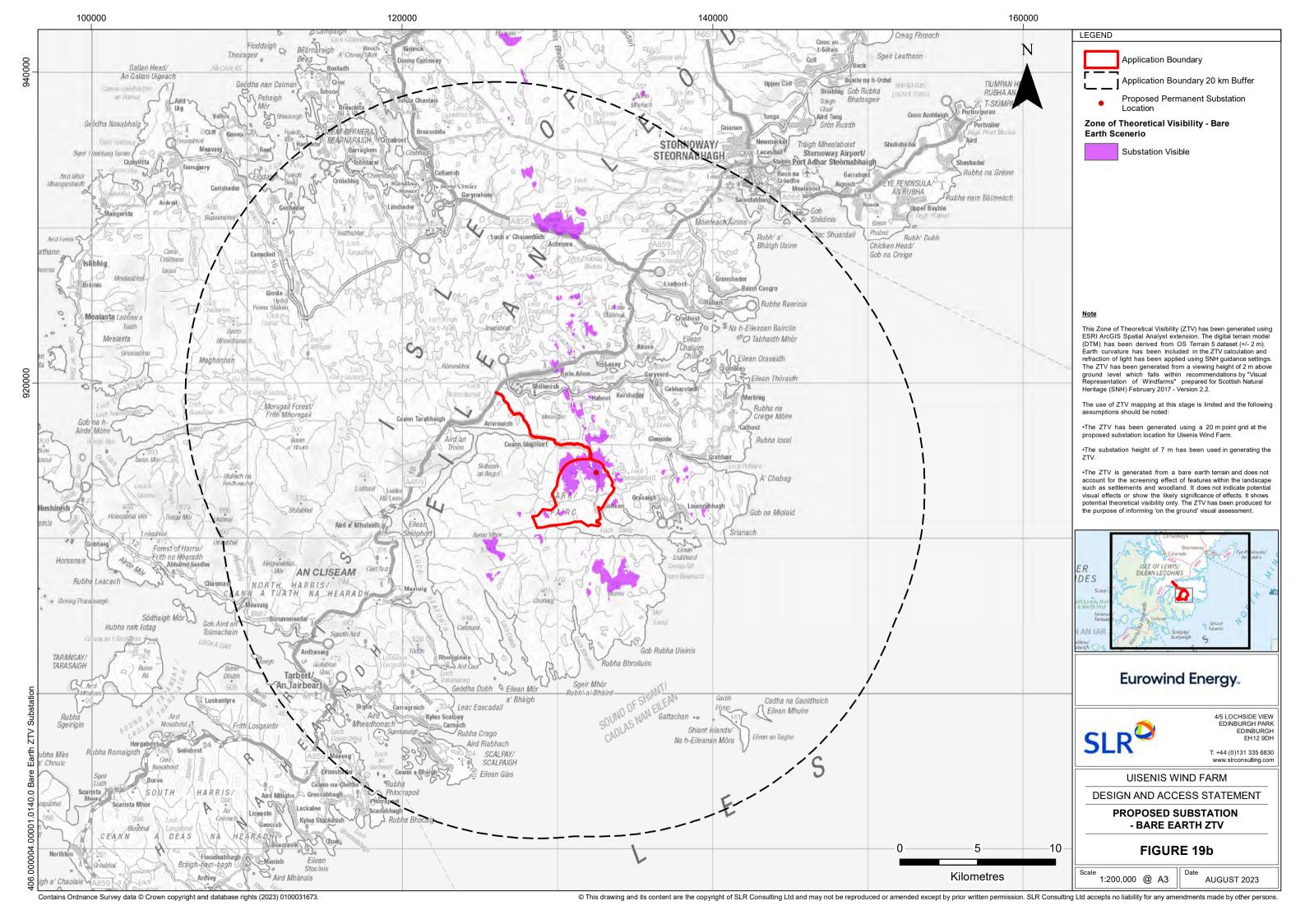
DESIGN AND ACCESS STATEMENT

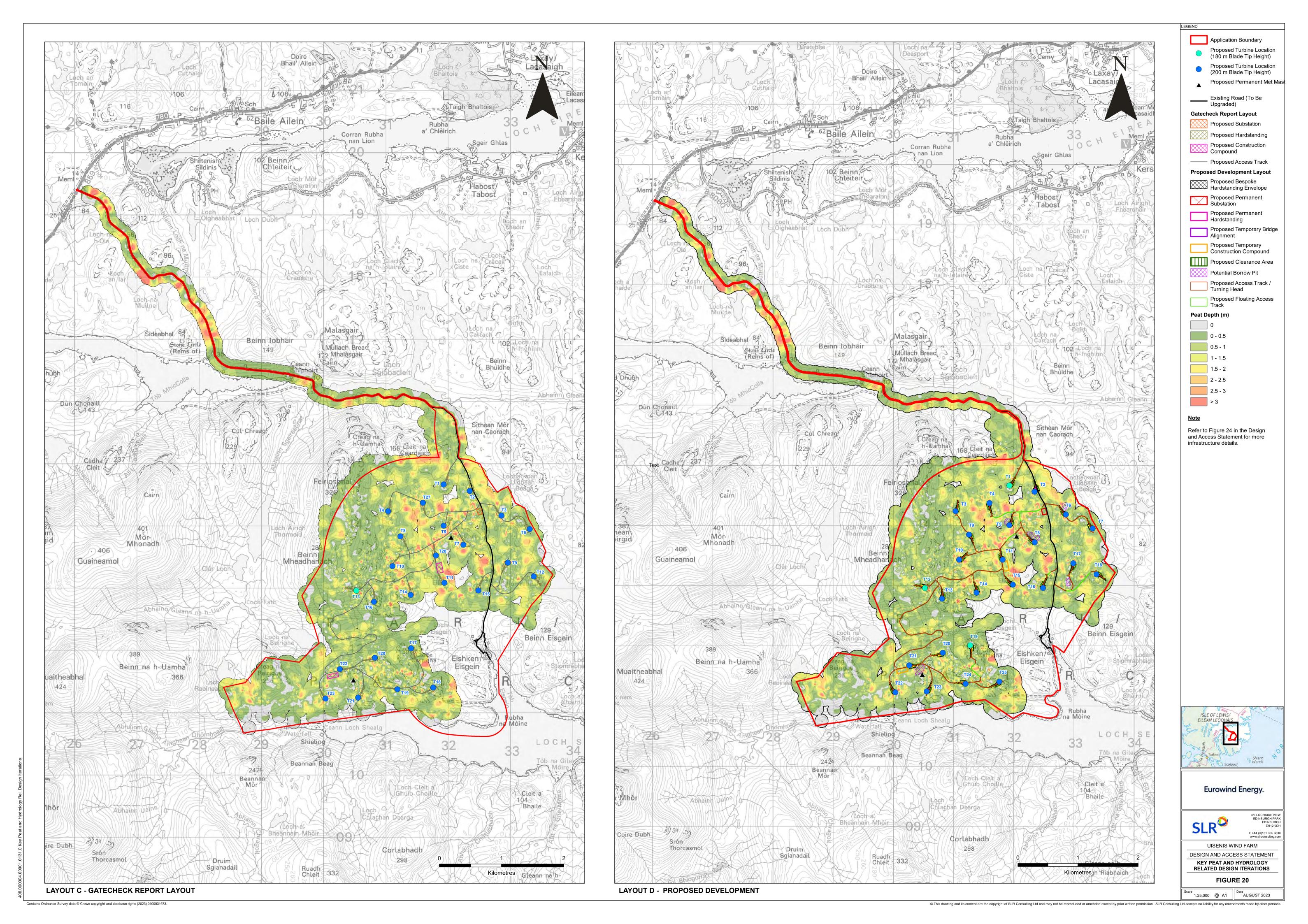
CRANE HARDSTANDING

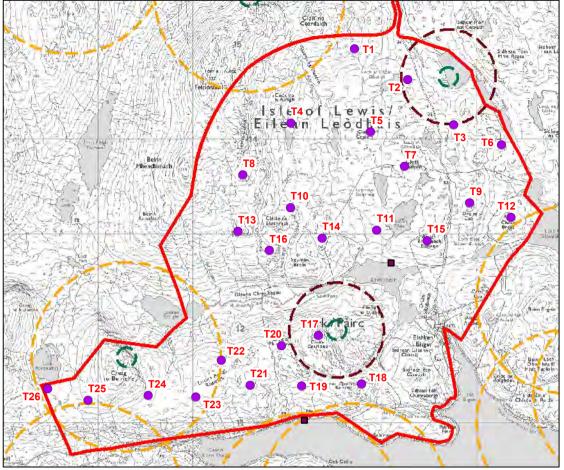
FIGURE 18

1:500 @ A2



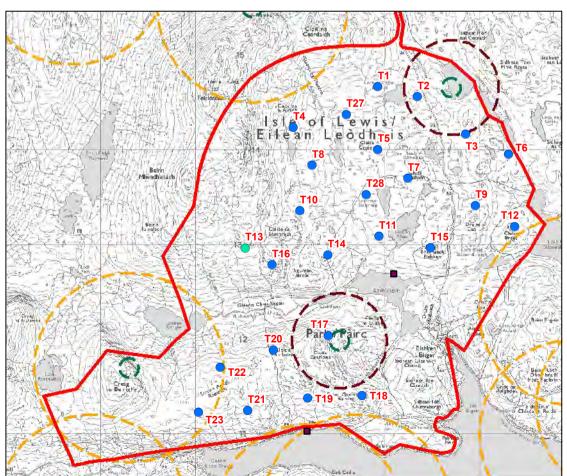


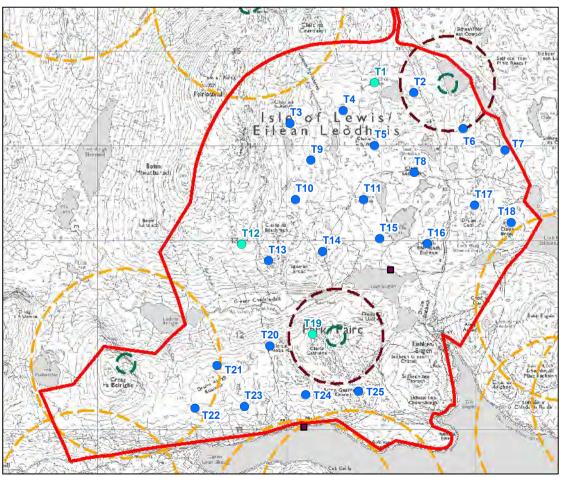




LAYOUT B - FIRST PUBLIC EXHIBITION LAYOUT

LAYOUT D - PROPOSED DEVELOPTMENT





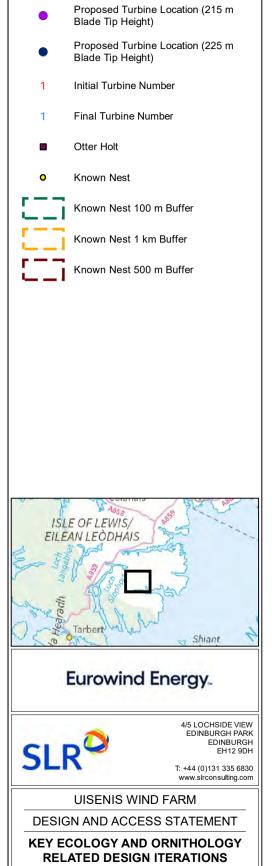


FIGURE 21

AUGUST 2023

1:40,000 @ A3

LEGEND

Application Boundary

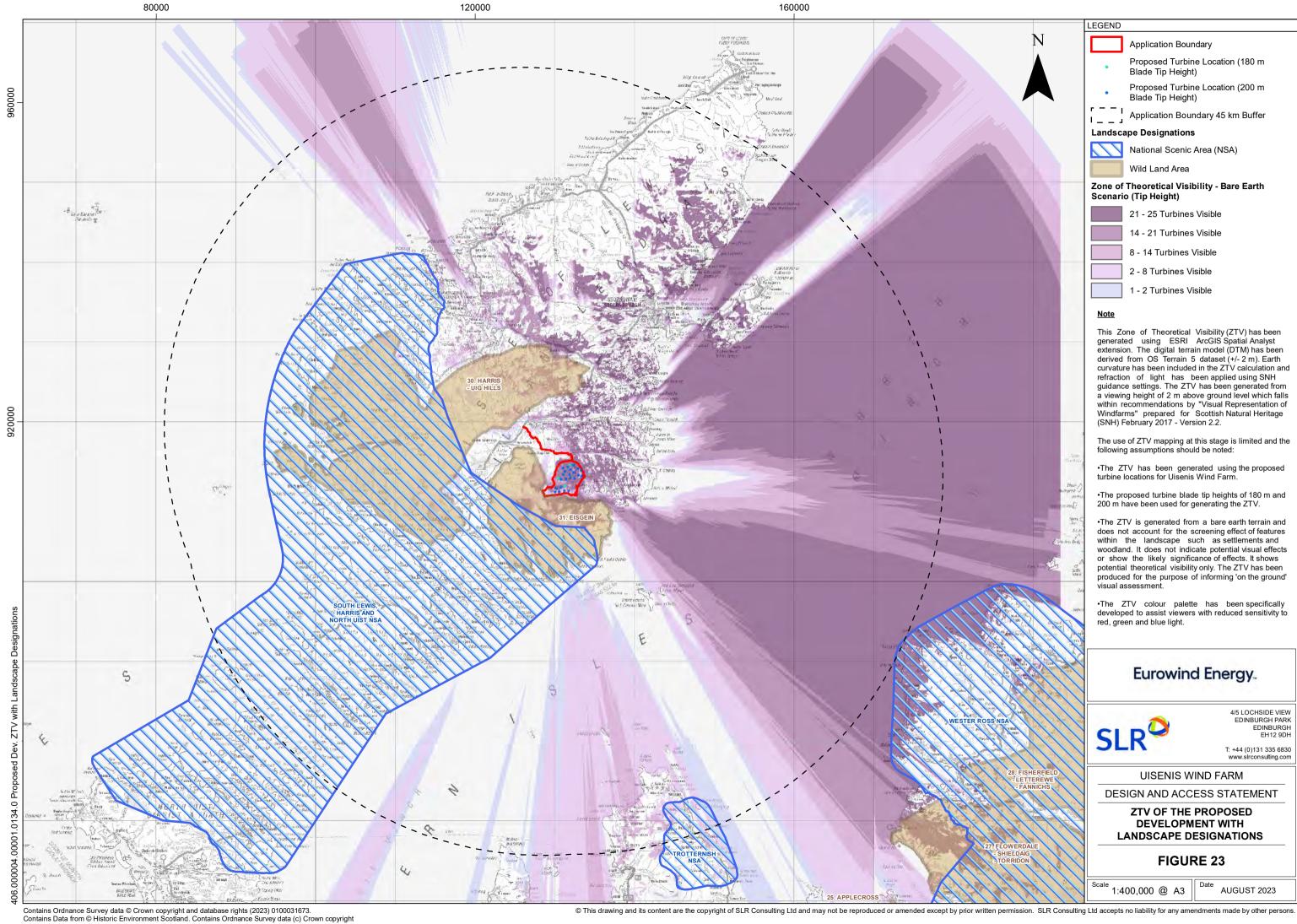
Blade Tip Height)

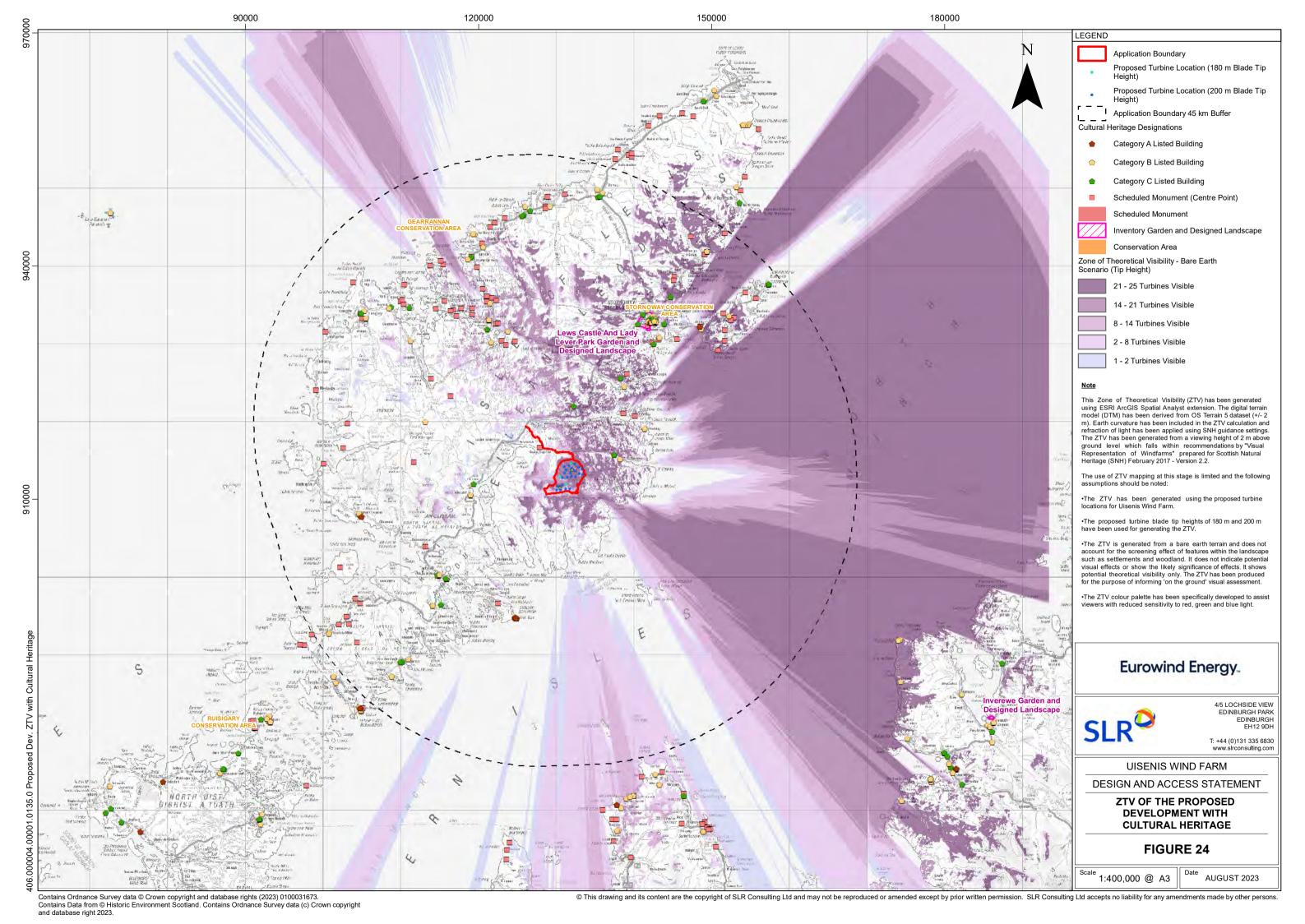
Proposed Turbine Location (180 m Blade Tip Height)

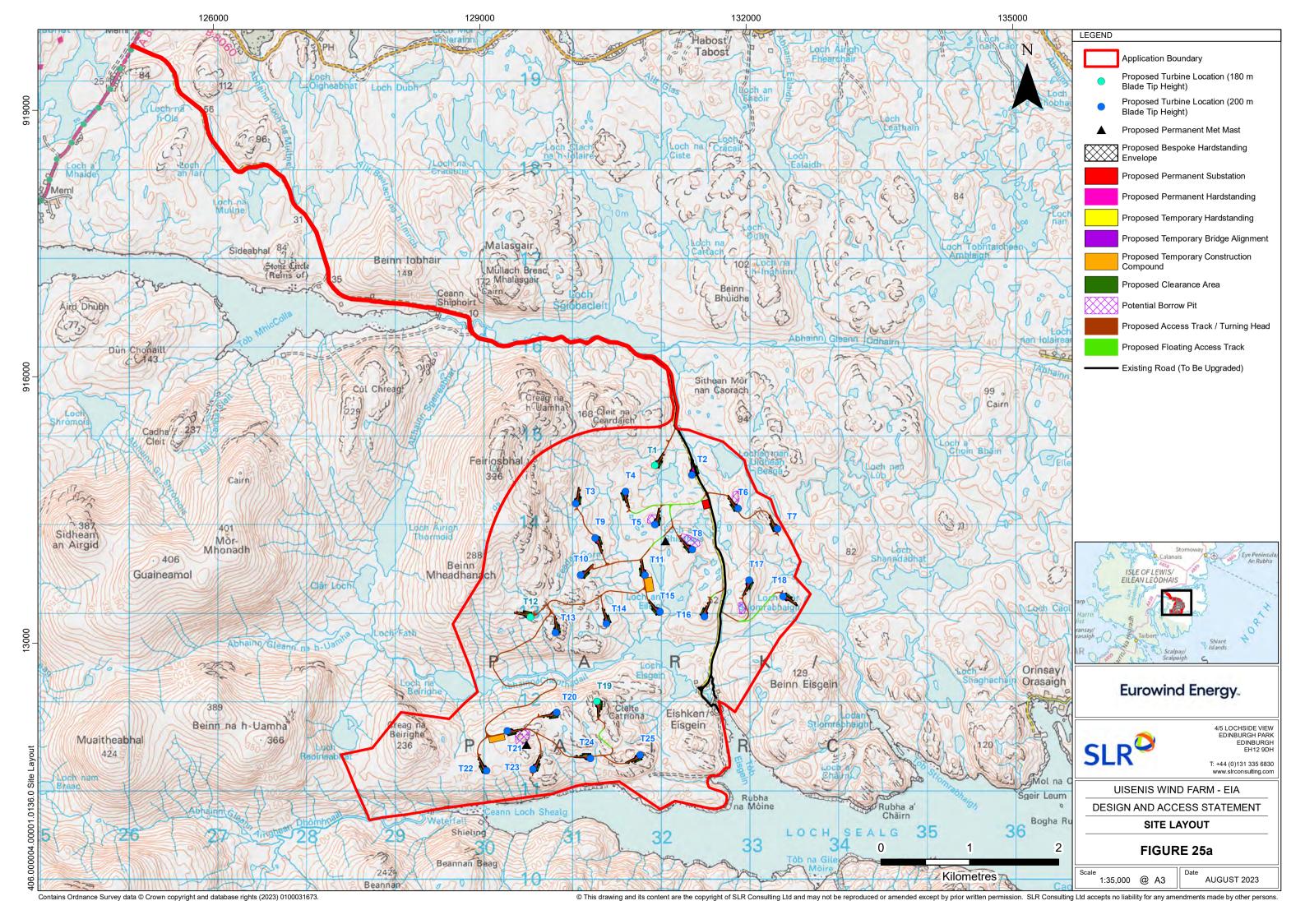
Proposed Turbine Location (200 m

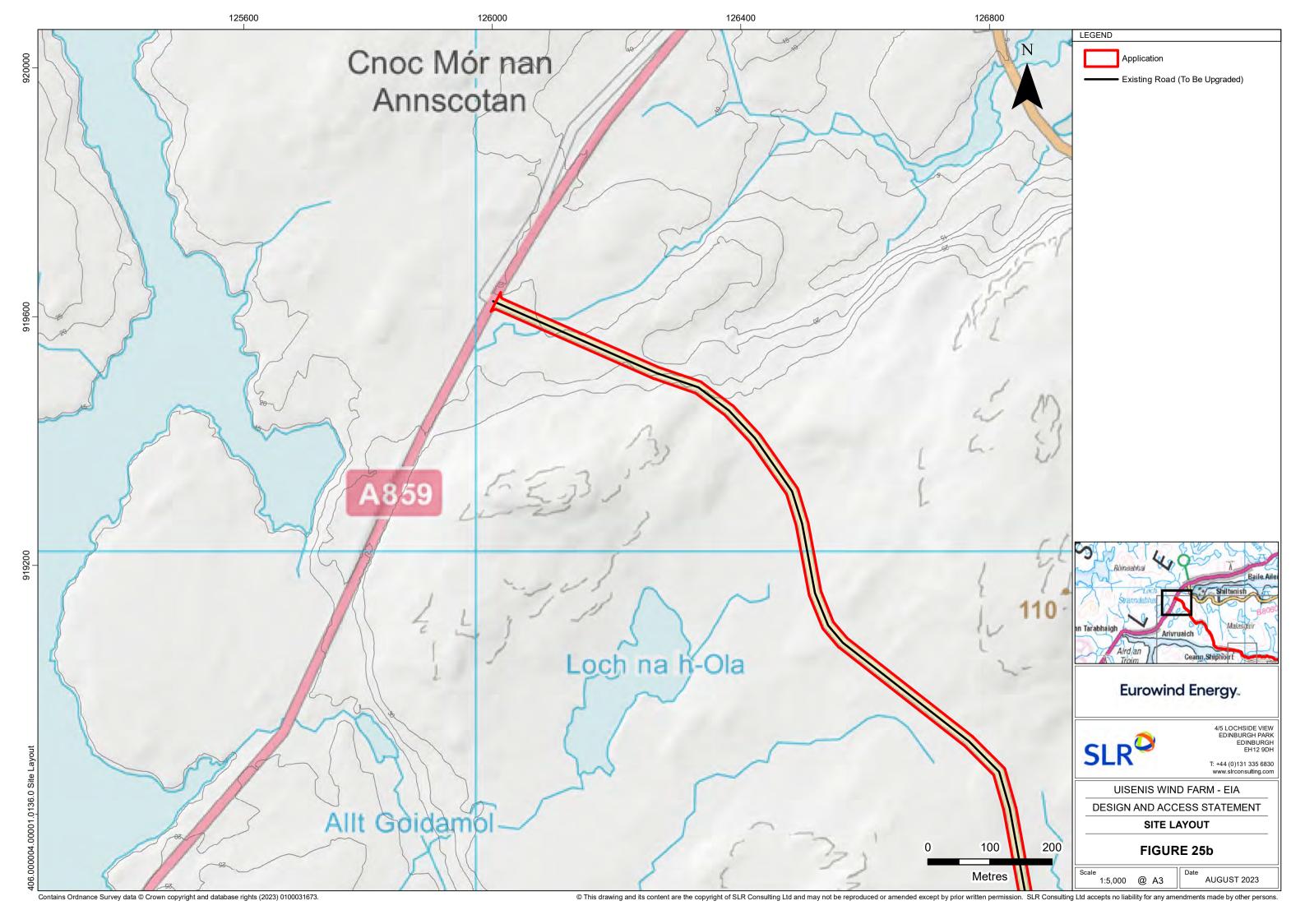
LAYOUT C - GATECHECK REPORT LAYOUT

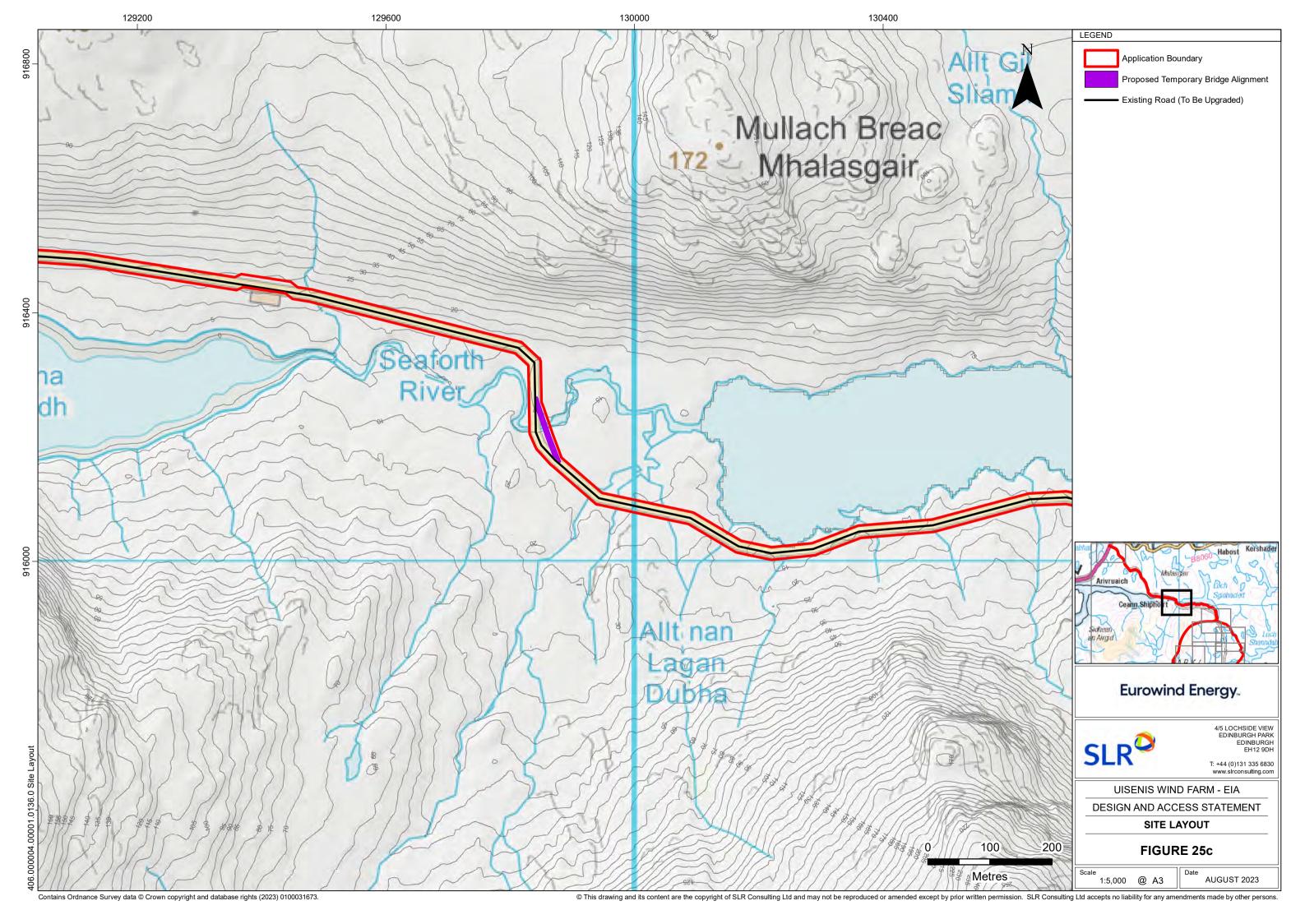
406.000004.00001.0133.0 Key GWDTE Rel. Design Iterations

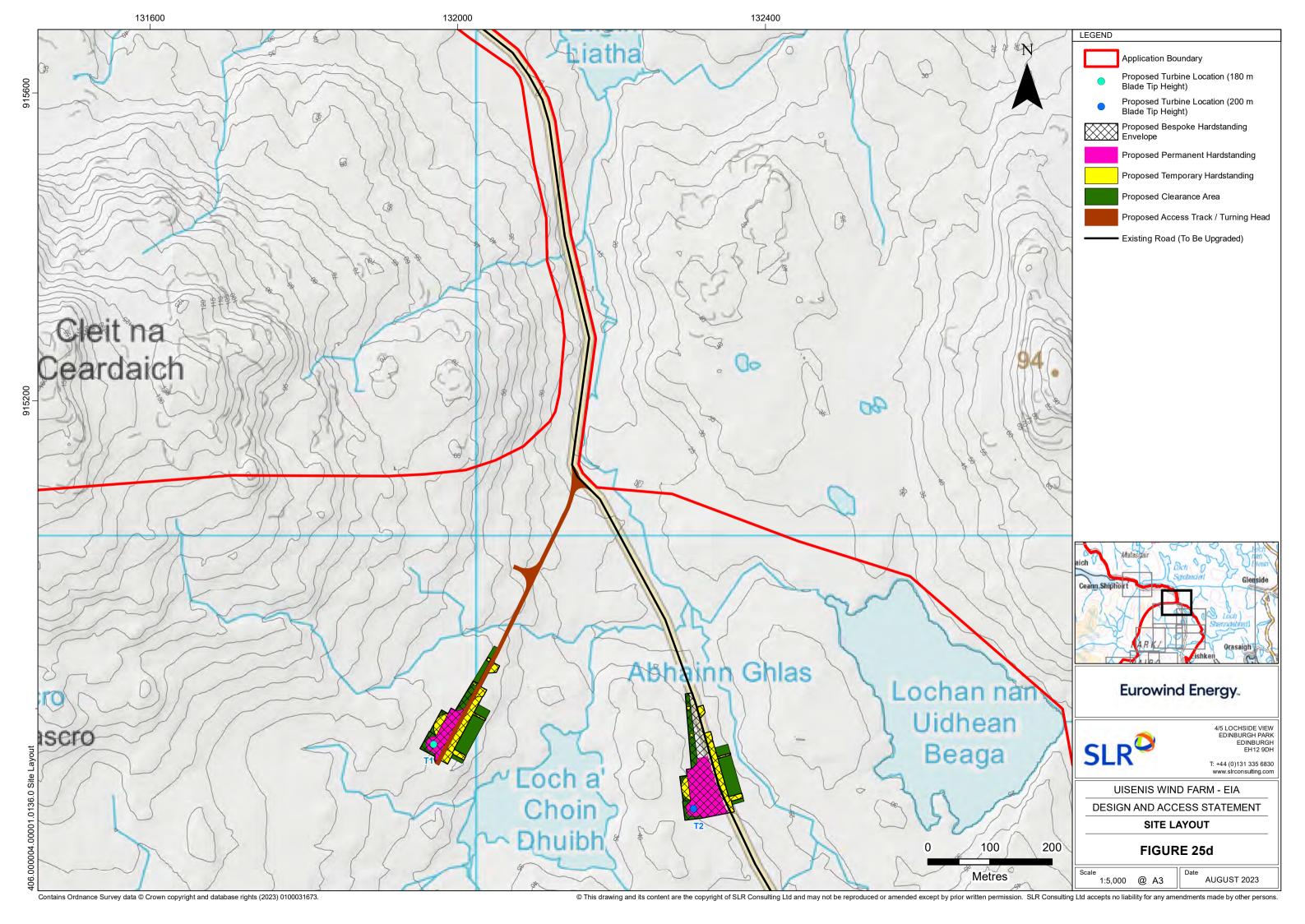


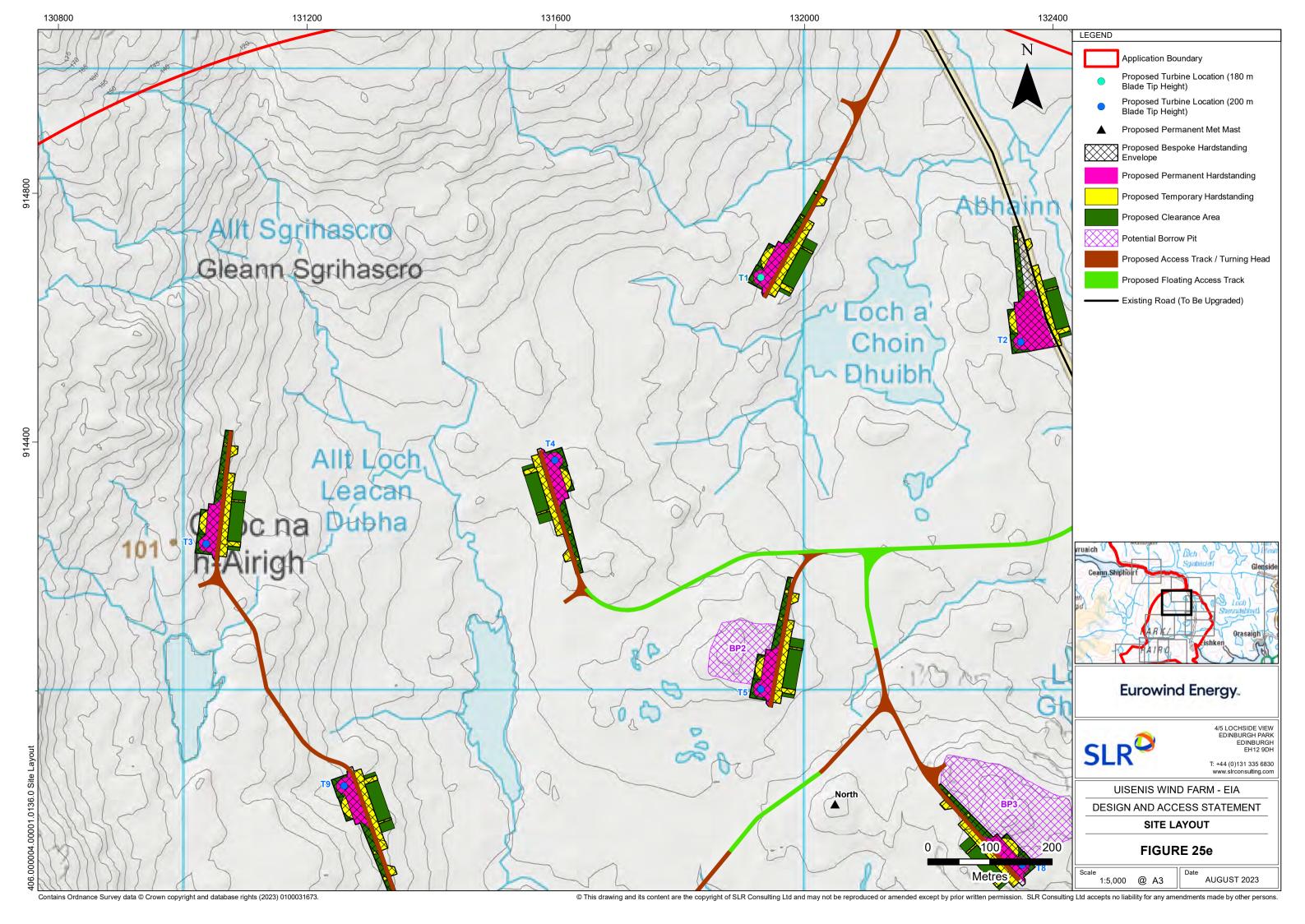


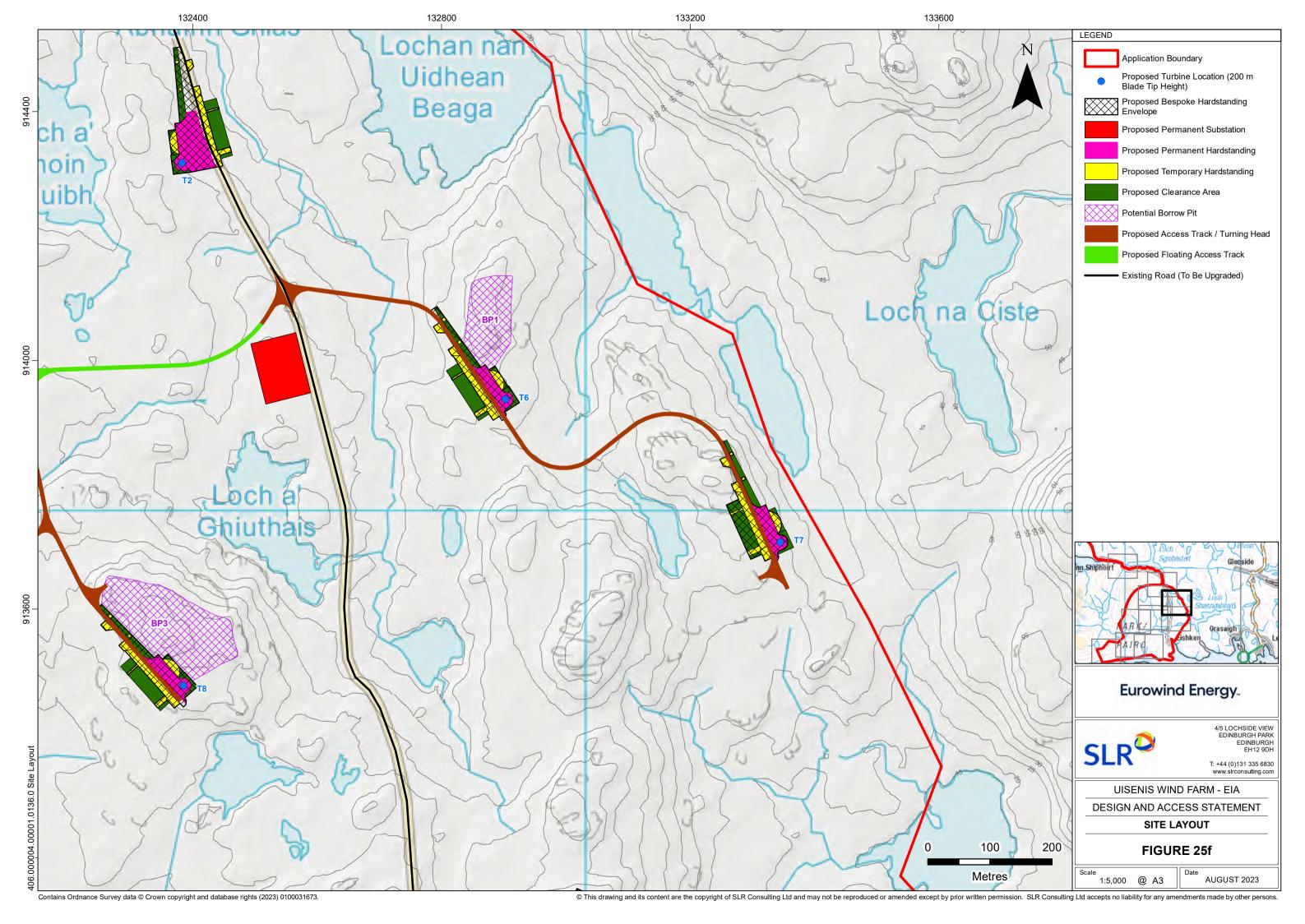


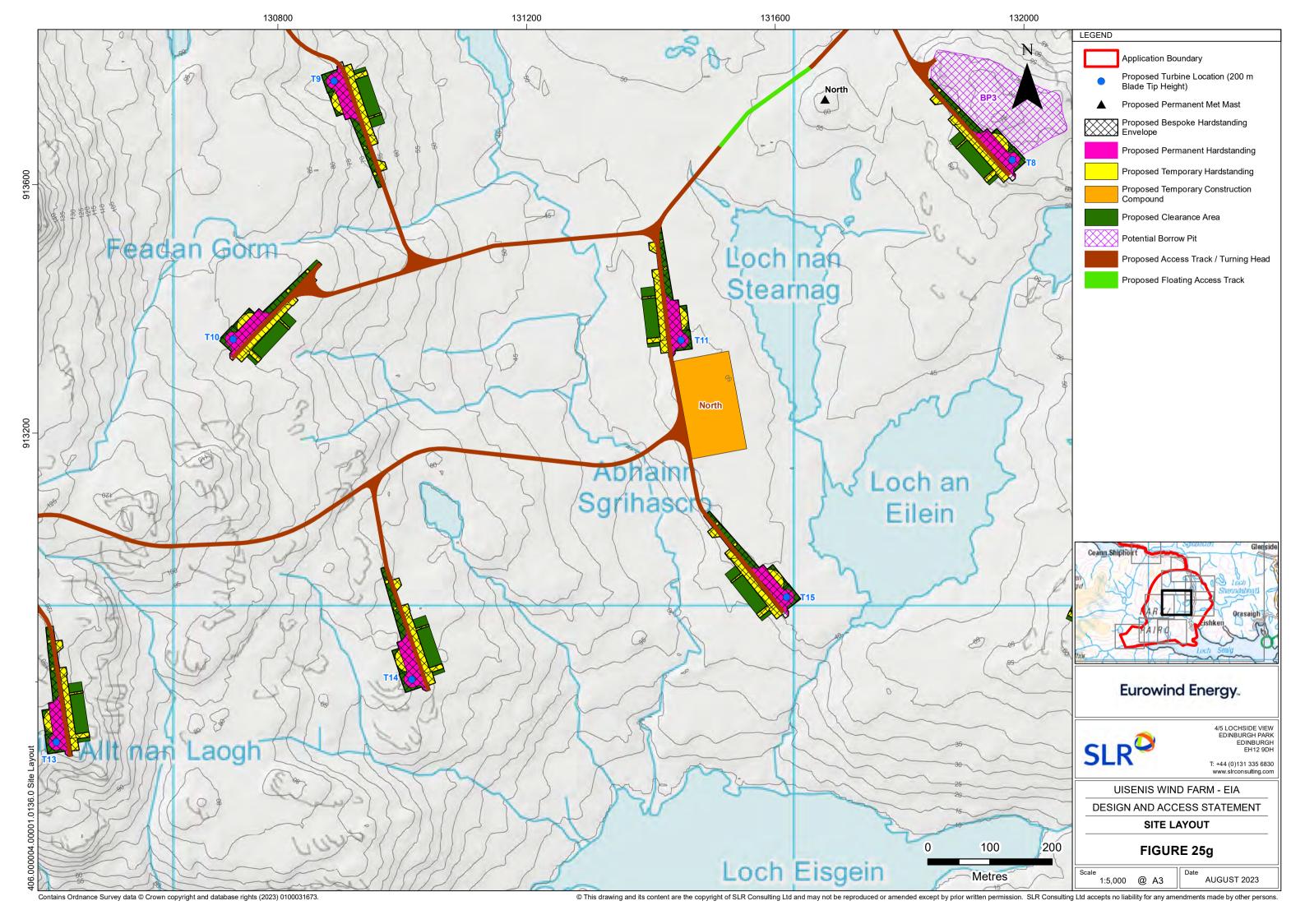


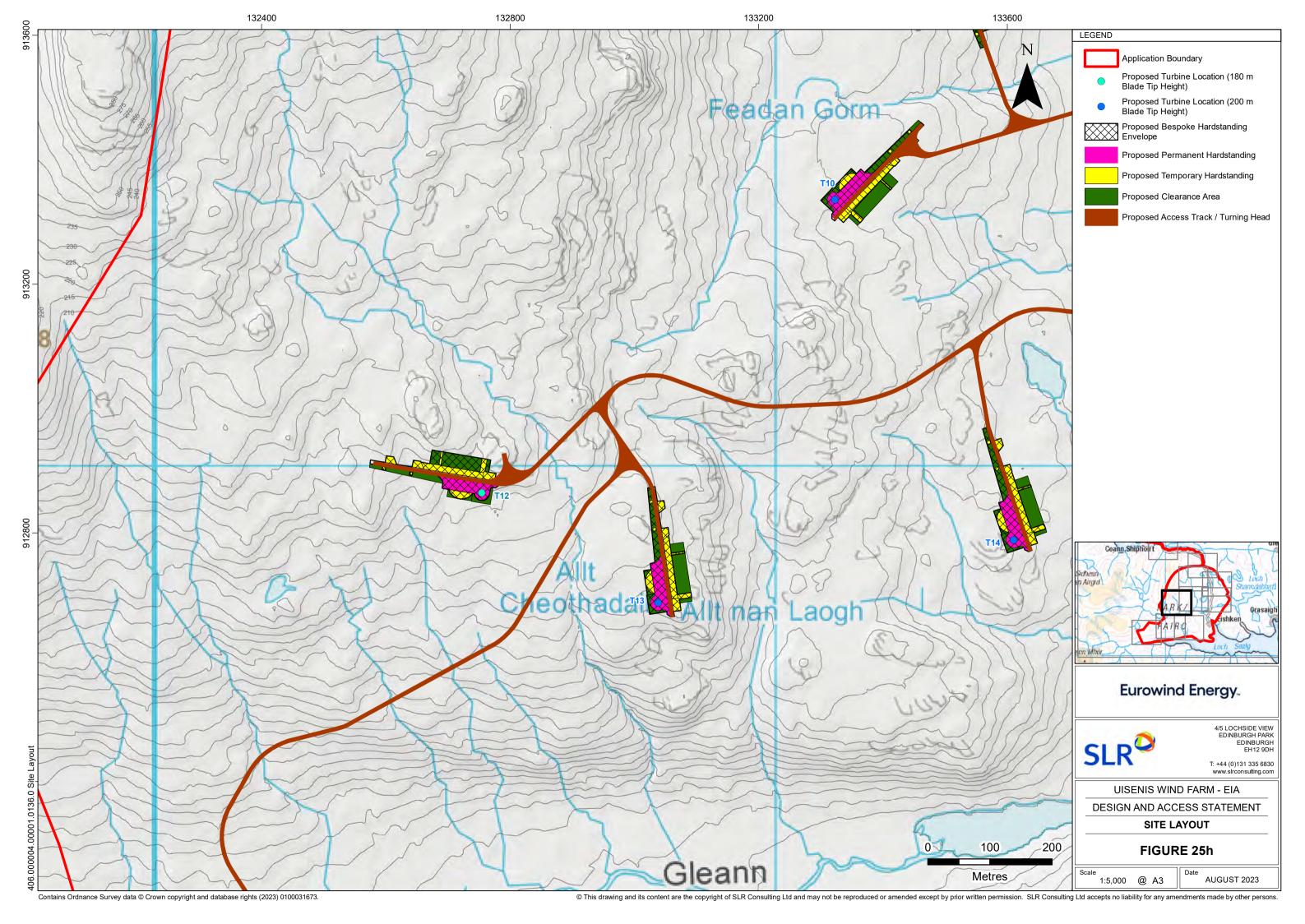


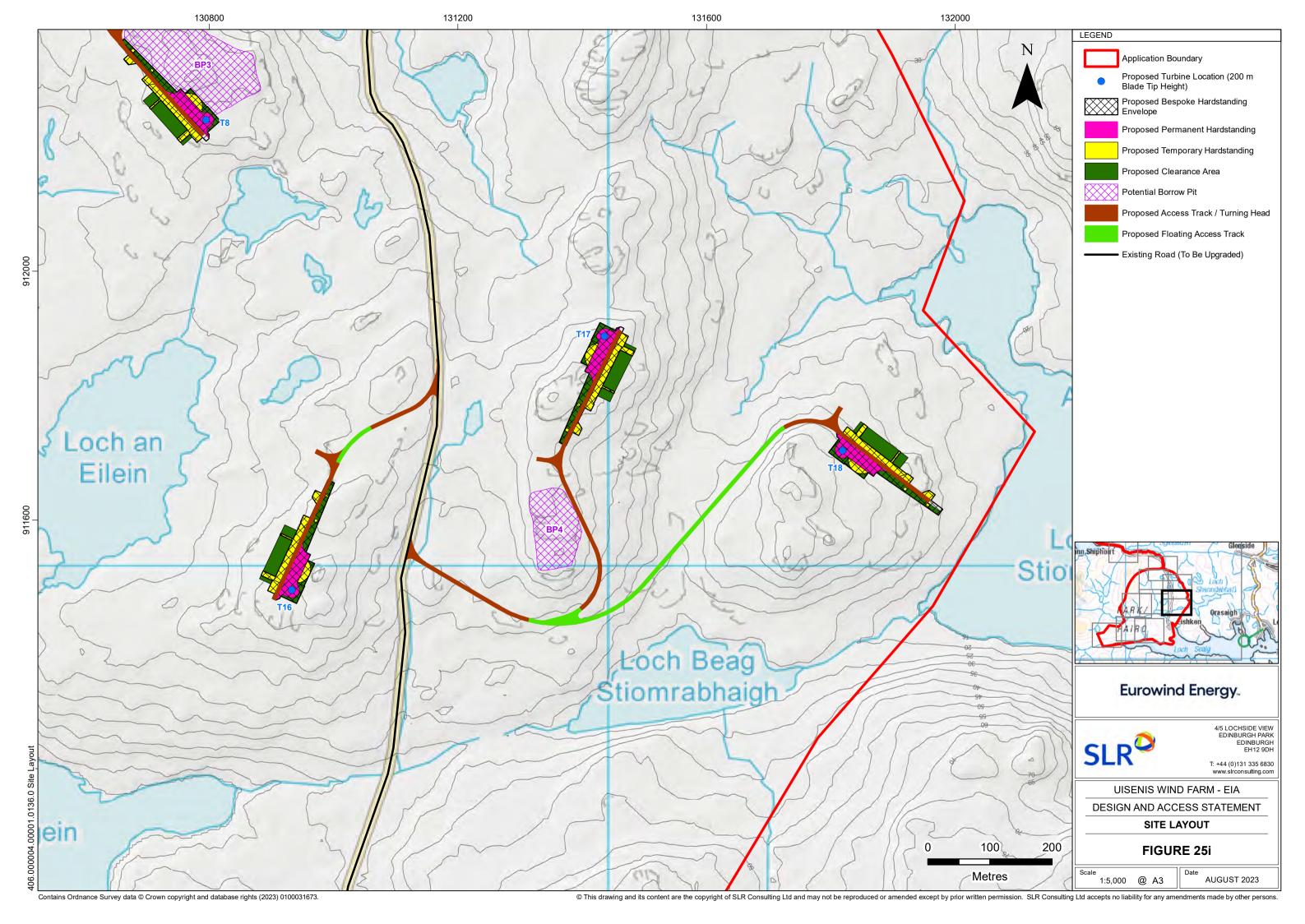


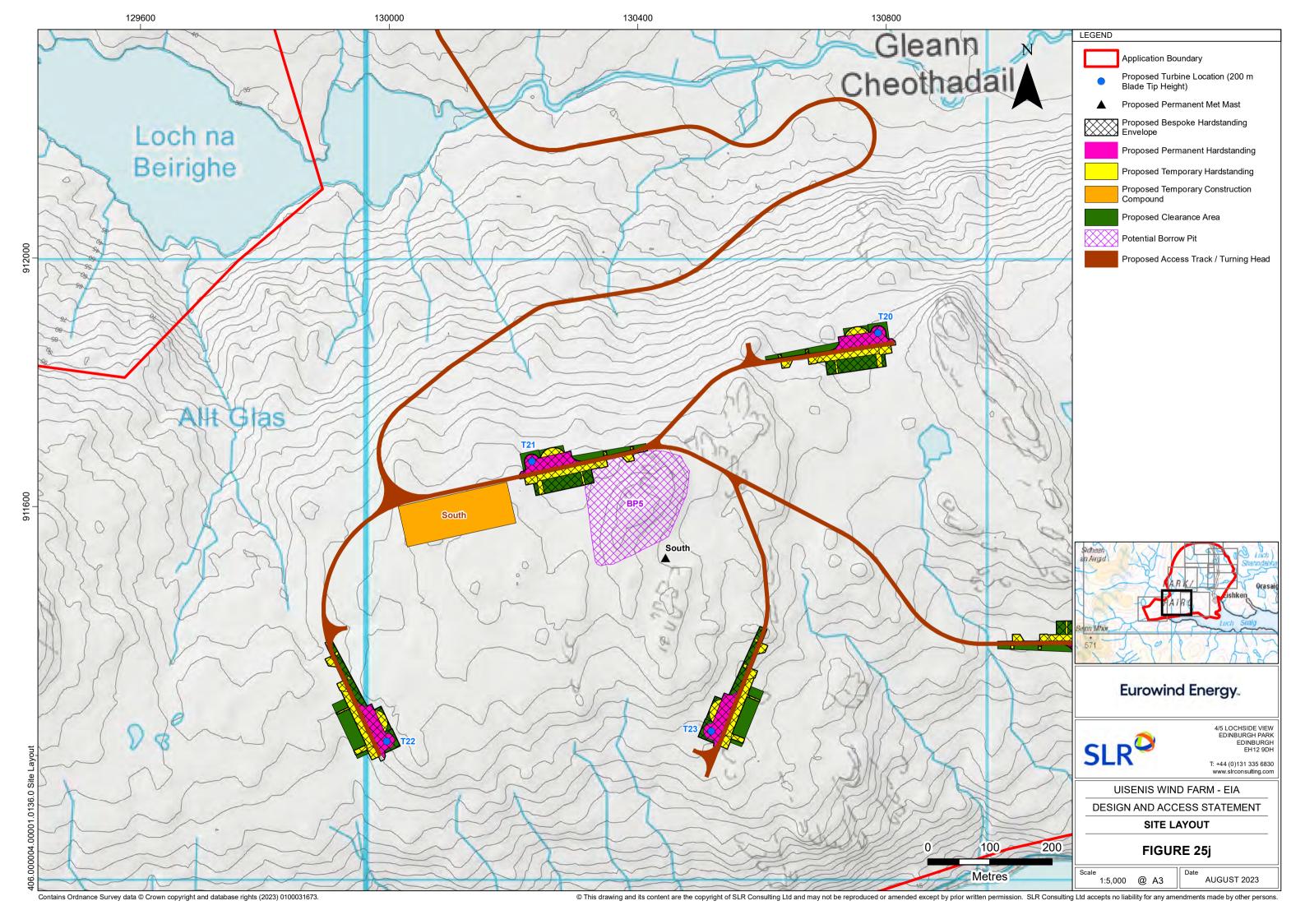


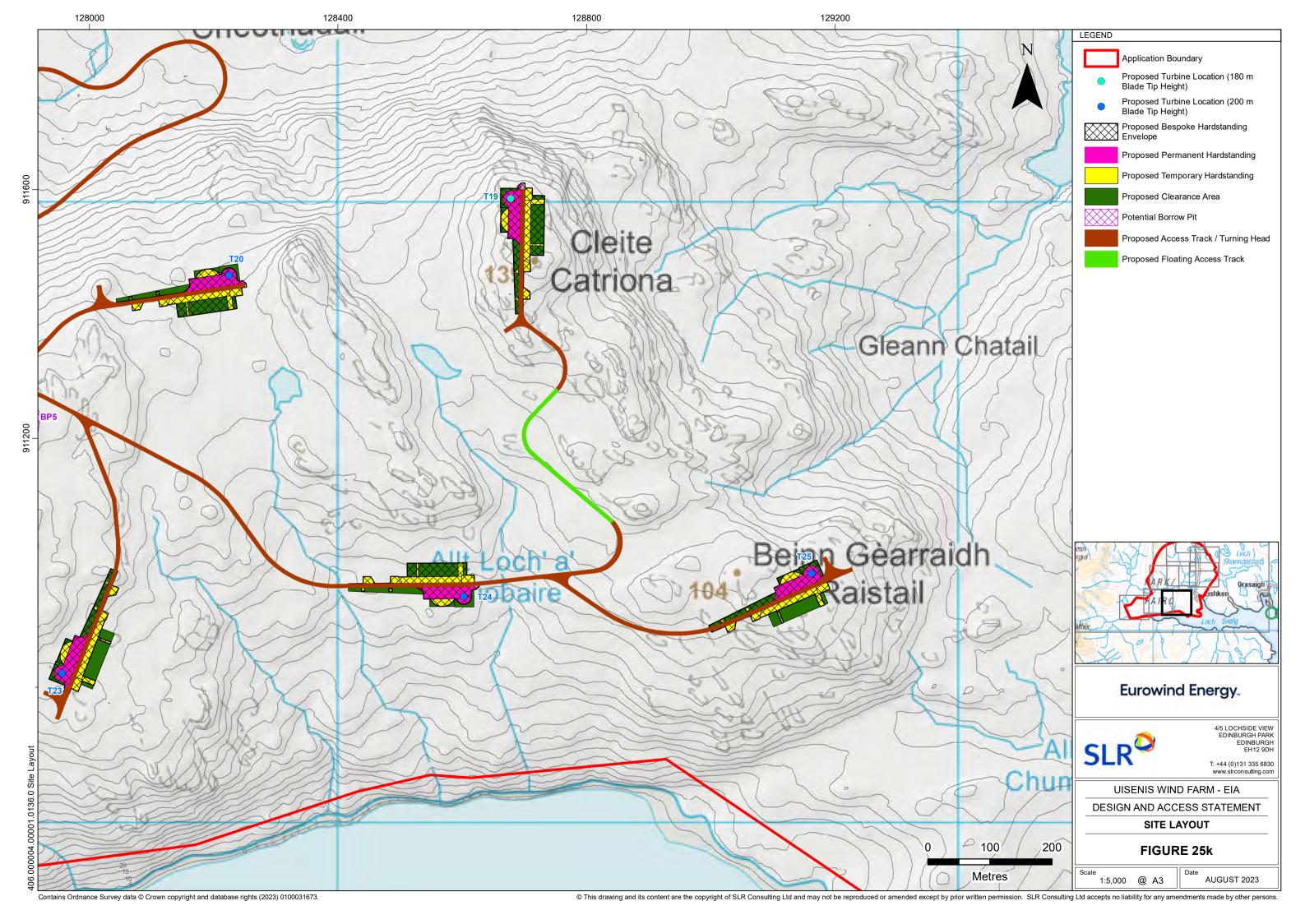


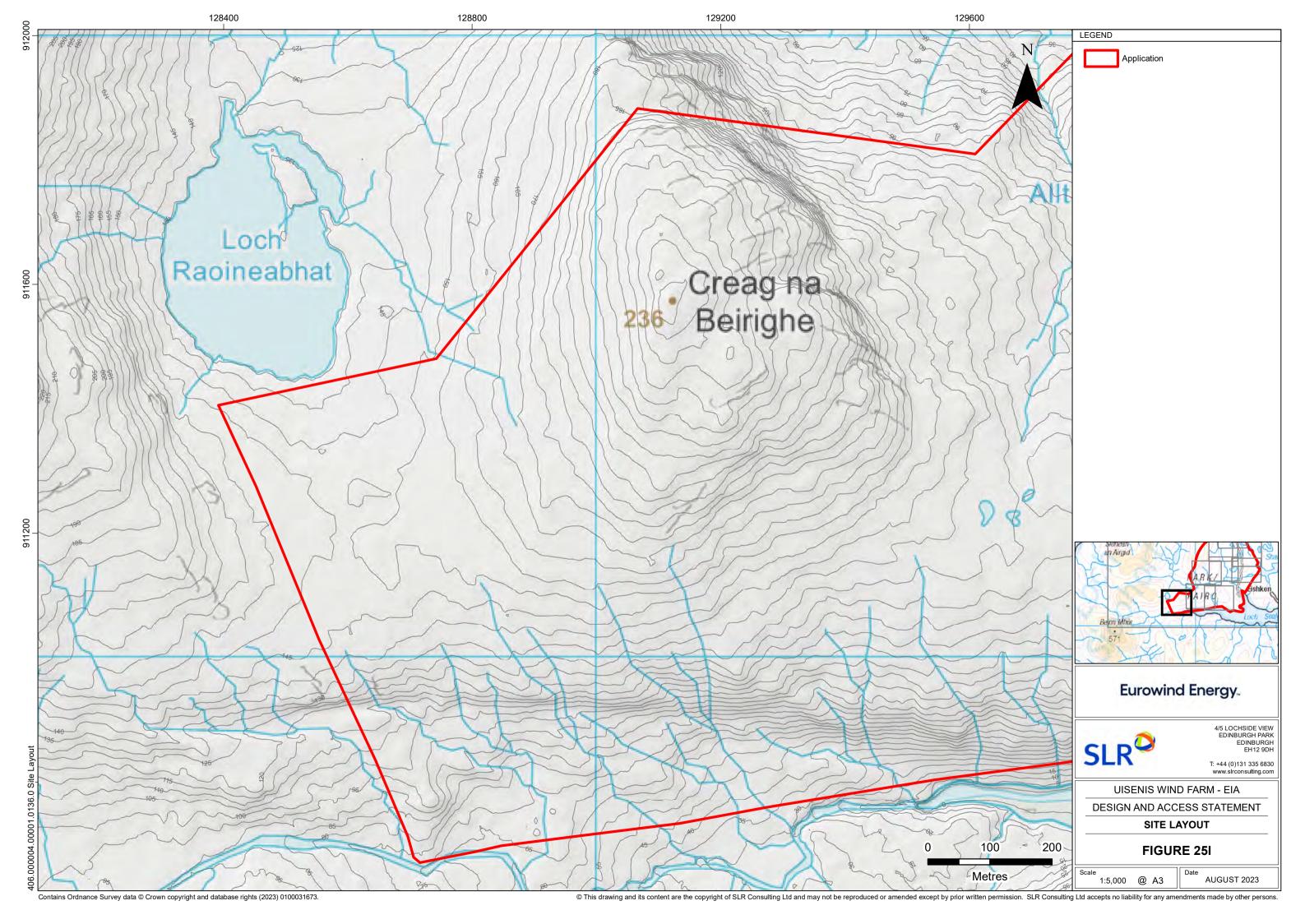












EUROPEAN OFFICES

AYLESBURY

T: +44 (0)1844 337380

GRENOBLE

T: +33 (0)6 23 37 14 14

BELFAST

belfast@slrconsulting.com

T: +44 (0)113 5120293

BIRMINGHAM

T: +44 (0)121 2895610

KILKENNY

kilkenny@slrconsulting.com

T: +49 (0)176 60374618

LONDON

T: +44 (0)203 8056418

BRADFORD-ON-AVON T: +44 (0)1225 309400 MAIDSTONE

T: +44 (0)1622 609242

BRISTOL

T: +44 (0)117 9064280

MANCHESTER

T: +44 (0)161 8727564

T: +44 (0)2920 491010

NEWCASTLE UPON TYNE

T: +44 (0)1844 337380

CHELMSFORD

NOTTINGHAM

T: +44 (0)115 9647280

T: +44 (0)1245 801630

SHEFFIELD

T: +44 (0)114 2455153

T: ++353 (0) 21 240 9000

DUBLIN

SHREWSBURY

T: +353 (0)1 296 4667 T: +44 (0)1743 239250

EDINBURGH

T: +44 (0)131 335 6830

STIRLING

T: +44 (0)1786 239900

EXETER

T: +44 (0)1392 490152

WORCESTER

T: +44 (0)1905 751310

FRANKFURT

frankfurt@slrconsulting.com

GLASGOW

glasgow@slrconsulting.com

