Agenda item	**6.4**
Report no	**PLN/061/19**

THE HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date: 31 July 2019

Report Title: 19/00775/S36 - Land 3610M NE Of Ascoile, Gordonbush. Brora

Report By: Area Planning Manager – North

1. Purpose/Executive Summary

1.1 **Applicant:** SSE Generation Limited per Ash Design and Assessment

Description of development: Section 36c Application - Amendment to consented Gordonbush Extension (reduction in number of turbines from 15 to a maximum of 11 and increase in tip height to a maximum of 149.9m)

Ward: 4 – East Sutherland and Edderton

Category: Section 36 Application (Electricity Act)

Reasons Referred to Committee: Section 36 Application

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

2. Recommendation

2.2 Members are asked to agree the recommendation to raise no objection as set out in section 11 of the report.

3. PROPOSED DEVELOPMENT

3.1 By way of background, an extension to Gordonbush Wind Farm was granted consent by Scottish Government's Energy Consents Unit in September 2017. The applicant, SSE, now seek to amend this Section 36 Consent. The consented development comprises a total of fifteen turbines; twelve of which would have a maximum tip height of 130m with the remaining 3 turbines having a tip height of 115m. **The proposed amendment seeks to reduce the overall number of turbines to 11 but increase the maximum tip height of all turbines to 149.9m.** There is no change in turbine position for the remaining 11 turbines. Additional changes to the consented development comprise:

- Reduction in length of new access tracks from 7.96km to 5.56km
- Removal of the consented additional operations building;
- Repositioning of the temporary batching plant;
- Amendment to the indicative borrow pit extraction volumes (109,00m³ proposed – a reduction of 35,000m³) – these would be reinstated following construction
- Removal of the permanent operational meteorological mast;
- Repositioning and substitution of the permanent meteorological mast to a LiDAR (light detection and ranging – to collect meteorological data) and associated access track.

The application is made under the Electricity Act and the Highland Council are a **consultee** rather than the determining body (which is Scottish Government's Energy Consents Unit).

3.2 The Environmental Impact Assessment Report (EIAR) outlines that since the granting of consent, the turbine and electricity market has changed significantly. As such increasing the tip height and rotor diameter of the turbines has the benefit of increasing turbine energy generation potential and efficiency of the site, which in turn enables a reduction in turbine numbers. The proposed turbines have a generating capacity of over 3MW (final turbine model to be confirmed) giving a total capacity of over 33MW. When combined with the existing wind farm at Gordonbush this gives a total capacity of over 50MW.

3.3 The proposed development was discussed at the Council's Major Application Pre-Application Advice Service in August 2018. The advice provided concluded that, in principle, the proposed amendments were acceptable however noted that consideration should given to the relationship with the existing wind farm and impact on Loch Fleet, Loch Brora and Glen Loth Special Landscape Area.

3.4 It is proposed to utilise existing infrastructure from the operational Gordonbush wind farm including the use of the existing operations building, grid substation, existing access tracks and two of the original borrow pits. A crane hardstanding around each turbine is proposed as well as 5.56km of new access track. Underground cabling to connect each turbine to the existing substantiation is also proposed.

3.5 The turbines have an operational life of 25 years after which time they will be decommissioned, dismantled and the site restored. A degree of site restoration will be undertaken following the initial construction for example, within borrow pits, temporary construction areas etc. Construction is estimated to take 13 months, dependent on seasons/weather. A request has been made for 50m micro-siting allowance to avoid pockets of deep peat and the project will be developed in a mater consistent with an approved finalised Construction Environmental Management Plan/Document.

3.6 The turbine parts, categorised as abnormal loads, are expected to arrive from Invergordon or Nigg to the north end of Brora on the A9, then across the Clynelish distillery road to the C6 Strath Brora road. Dependant on the final wind turbine procured, additional works to accommodate abnormal loads along the delivery route may be required.

3.7 The application is accompanied by an Environmental Impact Assessment Report. As the application is concerned with an amendment to a consented scheme, the EIAR is focused on:

- Landscape and Visual Impacts
- Traffic and Transport
- Ornithology
- Noise
- The requirements for an aviation lighting scheme

3.8 **Variations**: During processing of the application it became necessary for one of the turbines to be relocated by approximately 113m. This is following ground investigations.. The following variations are also proposed:

- Deletion of borrow pit 2
- Inclusion of borrow pit 3 search area, including use of existing access and temporary watercourse crossing;
- Relocation of batching plant
- Construction of additional access track from T12 to Lidar/Borrow Pit 1

The above variations are supported by an Addendum to the Environmental Impact Assessment Report which provides a full assessment of the aforementioned changes. This was submitted to the Consents Unit on 14th June 2019.

4. SITE DESCRIPTION

4.1 The development is on Gordonbush Estate, approximately 9.5km to the north-west of Brora. It sits to the immediate south-west of the Gordonbush wind farm which become operational in June 2012. The existing wind farm comprises a total of 35 turbines, all with a maximum blade tip height of 110m.

4.2 The site consists of a single slope of moorland that falls from approximately 330m AOD in the north-east to a low point of around 150m AOD in the south west. All sides of the site other than the west are surrounded by higher landform. To the west and south west, the slope of the site continues to fall into the valley of the Allt a' Mhuilinn before rising gently again into a series of cnocans. Immediately to the west of the site is a 275V transmission line which runs north-south through the northern part of the study area. There are several small forestry blocks on the

lower ground around the southern part of the site. To the south-west is land which was previously used for commercial forestry, this large area has been felled in accordance with the Habitat Management Plan for the existing wind farm.

4.3 To the south of the site is Strath Brora which contains Loch Brora and the minor road that links Brora to Rogart. There is scattered settlement within the strath, largely to the north of the road, loch and rier. Agriculture, forestry and tourism are key sectors important to the economy in this locality. Popular tourist and recreation activities in the area include walking, cycling and fishing.

5. PLANNING HISTORY

5.1 22.11.2013 – Environmental Impact Assessment – Scoping Response issued by ECDU

29.09.2017 – 15/02598/S36: Extension to Gordonbush Wind Farm presented to NPAC on 12th January 2016 and consented by ECDU on 29th September 2017

6. PUBLIC PARTICIPATION

6.1 The application was advertised by the applicant under the EIA Electricity Act Regulations, with public participation being via the Energy Consents Units.

6.2 Scottish Government ECDU has received 1 public comment.

6.3 Highland Council has received two representations including from the John Muir Trust who have objected. Material considerations raised in both comments are summarised below:

- Concern regarding 'needs case' and need for 'constraint payments'/ impact on bill payers
- Visual Impact including cumulatively and when viewed from Wild Land Area 35 (Ben Klibreck – Armine Forest) and in association with off shore turbines since approved
- Feeling of encirclement
- Concern noted regarding lack of consultation between SSE and the community of Strath Brora
- Construction impact – heavy traffic during this time
- Impact on protected species – golden eagles/white tailed eagles/ospreys

6.3 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam. Access to computers can be made available via Planning and Development Service offices.

7. Consultations

7.1 **Brora Community Council** have provided general comments. Its response notes that the CC agreed to not object to the application however note that it is very concerned about the visual impact of this extension particularly cumulatively with Kilbraur Wind Farm and in relation to impact on the Loch Fleet, Loch Brora and Glen Loth Special Landscape Area. The CC is a community reliant on providing

scenic beauty and tranquillity for its residents and visitors and are of the opinion that there should be no further wind farm developments consented over and above the Gordonbush Extension Wind Farm in this area.

7.2 **Rogart Community Council**: The CC note the main variation is an increase in tip height to 149.9m and do not oppose this. However the CC wish to state its concerns about the cumulative effect of any further wind farm development in the area. A Scottish Government reporter dismissed an appeal in relation to a wind farm at Craggiemore, Rogart due to detrimental visual impact.

7.3 **Environmental Health**: No objections subject to the existing noise condition for the consented extension being amended to incorporate the consent limits proposed in the updated noise assessment.

7.4 **Flood Risk Management Team**: No objections/comments

7.5 **Landscape Officer:** No response

7.6 **Transport Planning**: No objections. As with the earlier application Transport Planning's interest will relate largely to the impact of development traffic on the local road network during the construction phase of the project.

It can be expected that construction traffic associated with the current proposal will be similar to the earlier proposal,; albeit fewer and larger turbines are now proposed and a fresh review of the access route for abnormal loads will be needed.

On his basis I have, therefore, no objection in principle to the development proposed, subject to roads related conditions similar those attached to the earlier permission, ref. 15/02598/S36, being attached to any new permission granted. For ease of reference, the relevant conditions attached to the earlier permission are; Conditions 17,18,19 and 20.

Consultations Undertaken by the Consents Unit

7.8 **Scottish Natural Heritage (SNH):** No objection subject to condition. The proposal lies adjacent to the boundary of the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) and Special Protection Area (SPA). The SAC is protected for its range of peatland habitats as well as otter and march saxifrage. The SPA is protected for its range of upland breeding birds. The proposal also lies adjacent to Coir an Eoin Site of Special Scientific Interest (SSSI) protected for its blanket bog habitat and golden plover; this SSSI also forms part of the Caithness and Sutherland Peatlands Ramsar Site notified for its blanket bog, breeding bird assemblage, dunlin and greylag goose. SNH advise that conditions will be required with regards to SAC Otter. In terms of wild land, SNH advise the impacts of this proposal will not result in additional significant adverse effects on the qualities of the Ben Klibreck – Armine Forest Wild Land Area (WLA). There are however a number of landscape, visual, cumulative and wild land effects caused by this proposal. There are very limited areas of additional visibility from within the WLA which will result in a slight increase in attrition. However there are more areas where the degree of effect will be reduced, albeit slightly, as a result of the reduced spread of turbines. This is illustrated at viewpoint 11, 12 and 13. The increase in

turbine height will appear to make the turbines closer to the viewer from these locations, thereby appearing less connected with the existing wind farm. However this is not considered to result in a change to the significance of the effects.

Additional comments regarding EIA Addendum (regarding golden eagle): SNH advise that the development should be carried out strictly in accordance with the measures as set out within the golden eagle SPP. If the development is not carried out in accordance with the SPP, then the applicant may risk committing an offence.

The golden eagle SPP is comprehensive and the mitigation measures being proposed should be sufficient to allow this new eagle territory to continue into the long-term. We consider that the assessment of impacts on golden eagle has been thorough and well thought through.

This new eagle territory should benefit from the ongoing positive moorland management being delivered by the existing Gordonbush Estate Habitat Management Plan (under the S75 Agreement).

7.9 **Scottish Environmental Protection Agency:** No objections. SEPA initially raised concerns and objected to the application due to potential impact on peat. Following receipt of additional assessment, SEPA have confirmed that there is no peat present in the Borrow Pit 3 search area and have withdrawn its objection.

7.10 **Historic Environment Scotland:** No objection; HES are content that the effects of the proposed variation scheme will not be significantly greater than the effects of the previously consented scheme and will not raise issues of national interest.

7.11 **Highlands and Islands Airport Limited**: No objections. Note that red omnidirectional red aviation warning lights would be required to be fitted at the hub height of some of the turbines.

7.12 **NATS Safeguarding:** No objection, the proposal does not conflict with NATS safeguarding criteria.

7.13 **MOD:** No objection. The MOD request that the perimeter turbines are fitted with MOD accredited 25 candela omnidirectional red lighting or infra red lighting.

7.14 **Marine Scotland Science (MSS):** No objections. The proposed development area is drained by tributaries of the River Brora with both trout and salmon populations – MSS recommend that up to date fully quantitative electrofishing surveys are carried out to assess the fish populations within and downstream of the proposed development. MSS encourages the developer to adhere to UK Forest and Water Guidelines such that all felled material is removed from within and adjacent to watercourses to avoid nutrients leaching into watercourses. MSS also recommend that the developer carries out up to sate site characterisation surveys to allow appropriate site specific mitigation. The proposed monitoring programme (including MSS guidelines) could be include d in a planning condition should this proposed by given consent.

7.15 **Scotways:** No comments

7.16 **John Muir Trust**: Object. Its response highlights the following concerns;

- Uncertainty around the Needs Case for the development
- Visual and Cumulative Impact including from Wild Land Area 35 Ben Kilbreck – Armine Forest

7.17 **Transport Scotland:** No objection subject to Conditions 17 and 18 (related to Traffic Management and Abnormal Load Signage) continuing to apply.

7.18 **Visit Scotland:** Its response notes general comments on the important of tourism to the Scottish economy – with scenery and the natural environment being two important factors. No comments regarding this specific proposal are provided.

7.19 **Crown Estate:** No objections. The assets of Crown Estate Scotland will not be affected by this proposal.

7.20 **Scottish Water:** No objections

7.21 **BT:** No objections. The proposed development is not likely to cause interference to BT's current and presently planned radio network.

7.22 **Joint Radio Company:** No objections

7.23 **Fisheries Management Scotland (FMS):** No objections. Its response notes that the proposal falls within the district of Brora District Salmon Fishery Board and the proposals should be conducted in consultation with the Board and in accordance with FMS guidance.

8. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

8.1 Highland Wide Local Development Plan 2012

28	Sustainable Development
29	Design, Quality and Place Making
31	Developer Contributions
55	Peat and Soils
57	Natural, Built and Cultural Heritage
58	Protected Species
59	Other Important Species
60	Other Important Habitats
61	Landscape
64	Flood Risk
67	Renewable Energy

72 Pollution

77 Public Access

8.2 **Caithness and Sutherland Local Development Plan 2018**

No site specific policies

9. OTHER MATERIAL CONSIDERATIONS

9.1 **Scottish Government Planning Policy (SPP) and Guidance**

The Scottish Government policy statement continues support for onshore wind. It lists likely considerations to be taken into account, which comprise the following:

- Net economic impact
- Contribution to renewable energy targets
- Effect on greenhouse gas emissions
- Cumulative impacts
- Impacts on communities and individual dwellings
- Landscape and visual impacts, including wild land
- Natural heritage
- Carbon rich soils
- Public access
- Historic environment
- Tourism and recreation
- Aviation and defence interests
- Telecommunications
- Road traffic
- Trunk roads
- Hydrology and flood risk
- Decommissioning
- Energy storage
- Planning obligations for site restoration

9.2 **Onshore Wind Energy Supplementary Guidance**

The site falls within a Stage 2 Area of Constraint on account of carbon rich soils / peat lands.

10. PLANNING APPRAISAL

10.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

10.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

10.3 In this instance, it is important to note that consent has previously been granted by Scottish Government for the extension to Gordonbush wind farm with a total of 16 turbines. This application seeks to *amend* this consent and the planning assessment is therefore required to focus on the impact of the proposed *alterations* to the approved scheme. It is not an opportunity to revisit whether a proposed extension is acceptable given the principle of this has been established previously. The determining issues for the Council in responding to this consultation are:

- Does the proposal accord with the development plan?
- If it does, are there any material considerations for not approving the proposed development?
- If it does accord, are there any material considerations for approving the proposed development?

Assessment

10.4 To address the determining issues, the Planning Authority must consider the following:-

a) Development Plan

b) Supplementary Guidance: Onshore Wind Energy

c) Highland Renewable Energy Strategy

d) National Policy

e) Roads / Traffic Impact and Public Access

f) Water / Drainage / Peat

g) Natural Heritage

h) Design

i) Landscape Impact

j) Visual Impact

k) Cultural Heritage

l) Economic Impact, Recreation and Tourism

m) Aviation and Telecommunication Interests

n) Noise

o) Construction Impacts

p) Other Material considerations within representations

Development Plan

10.5 The Development Plan comprises the adopted Highland-wide Local Development Plan (HwLDP) and Caithness and Sutherland Local Development Plan (CASPlan). There are no site specific policies affecting this application site within the CASPlan. The Development Plan recognises the potential for renewable energy development in Highland with Policy 67 (Renewable Energy Developments) of the HwLDP that gives general support to this type of renewable energy development. It is a key policy consideration in the assessment of this application to the Consents Unit.

Policies 28 (Sustainable Design), 57 (Natural, Built and Cultural Heritage), 58 (Protected Species) and 61 (Landscape) are all relevant to this proposal and require to be given due weight.

10.6 The Development Plan supports the broad principle of renewable energy development. Where development is located, sited and designed in such a way as not to be significantly detrimental, either individually or cumulatively with other developments, proposals would accord with the Development Plan.

Supplementary Guidance: Onshore Wind Energy

10.7 The Council has developed Draft Supplementary Guidance (SG) to assist with the consideration of onshore wind energy projects. The site falls within a Stage 2 Area of Constraint on account of carbon rich soils / peat lands. SPP advises wind farms in these areas may be appropriate in these areas in some circumstances. Surrounding interests also include areas of wild land (AWL). The application needs to demonstrate how the significant effect on key qualities can be substantially overcome by siting, design or other mitigation. Policy 67 of the HwLDP therefore applies, with additional interpretation as provided within the draft SG.

Highland Renewable Energy Strategy

10.8 The Development Plan makes reference to HRES which was developed by the Council to address opportunities presented by a range of Renewable Energy technologies. In particular the document addresses additional benefits from such investment including for example 'Education and Training,' 'Community Benefit' and 'Local Content'. These are important considerations when assessing individual project proposals including proposed packages of "planning gain" and "mitigation". For the avoidance of any doubt only those parts of the Council's HRES which are compliant with Scottish Government SPP remain in force.

Scottish Planning Policy

10.9 There is strong support for renewable energy development in national policy. The Scottish Government has a target of 100% of Scotland's electricity demand to be generated from renewable resources of by 2020. These targets are not a cap. As the technology is well developed it is expected that the majority of this energy demand could be met by on-shore wind farms.

10.10 The Scottish Government's policy and advice, set out in its National Planning Framework 3 (NPF 3) and Scottish Planning Policy, which advances policies on Sustainability and Placemaking, and subject policies on a Successful, Sustainable Place; a Low Carbon Place; a Natural, Resilient Place; and a Connect Place. Policy and advice is very supportive of renewable energy development and highlights that planning authorities have a duty to contribute to sustainable development, through their development planning function. It highlights that the Development Plan continues to be the starting point of decision making on planning applications.

10.11 The content of SPP is a material consideration that carries significant weight, although it is for the decision maker to determine the appropriate weight to be afforded to it in each case. There is no indication within SPP of a lessening of policies which are focused upon protecting the natural, built and cultural environment. Criteria for the assessment of applications are as listed earlier in this report. These topics, as relevant to this application, are examined within this assessment. Of some relevance in the current SPP is the introduction of the Scottish Government's advice on "areas of wild land (AWL)" and "priority peatland habitats"

Roads, Traffic Impact and Public Access

10.12 The main traffic and transport effects in relation to the proposed development would be associated with the traffic movements during the construction period, when vehicles would access the site transporting construction staff, construction materials (aggregates, cement, steel bar etc), plant items and components. Due to the reduction in the number of turbines, the number of trips during the construction phase will be reduced however due to the increase in blade tip length; some additional modifications to the road network along the delivery route from Invergordon will be required.

10.13 From the C6 Strath Brora road at Ascoile, access to the site would be achieved by utilising the existing track infrastructure developed as part of the operational Gordonbush Wind Farm where possible – there is currently 21km of track constructed with a width of around 4.5-5m. Approximately 11.3km of these existing tracks would be used to access the proposed wind farm and the existing control and substation buildings however it is noted that localised widening may be required depending on the final model of turbine selected.

10.14 Approximately 5.56km of new tracks with a minimum 4.5m wide running surface and localised widening on corners would be required to access the turbines from the existing access tracks, for use both during construction as well as during the operational phase. The access tracks are designed to incorporate passing places that would be suitable for construction plant and 4x4 traffic.

10.15 As per the consented development, the proposed varied development proposes the same range of wider mitigation namely: a significant amount of material will be sourced from borrow pits on site and concrete will be batched on site which will significantly reduce transport requirements and traffic management measures and communications protocols to reduce adverse effects of construction traffic.

10.16 Transport Planning and Transport Scotland have both advised no concerns regarding the proposed amendment to the consent, noting that existing conditions shall continue to apply.

10.17 There is no significant recreational access resource within the site area, although public access has increased following the development of the initial wind farm. The development is however on land where access rights can be taken. Should the project be consented an updated access management plan will be expected, to be approved by the planning authority before construction starts. This will show the main access tracks to and within the development site and any access control

infrastructure (gates, fences etc.) proposed. Measures to allow unhindered public access through any gates, if they are to be locked to prevent unauthorised vehicle access, can be detailed in this plan.

Water, Drainage and Peat

10.18 The presence of peat within the site boundary formed a key consideration in the design of the consented development with the layout of the turbines designed to minimise impact on areas of deep peat. In addition, where possible, the site layout was designed to provide sufficient buffer zones from potential Ground Water Dependent Terrestrial Ecosystems (GWDTE) in accordance with SEPA guidance.

10.19 SEPA have confirmed no objection to the proposed amended scheme subject to conditions attached to the consented development continuing to apply (and as amended by the updated EIAR). This will see a Construction Environmental Management Plan (to include a Peat Management Plan) submitted and agreed with SEPA prior to any works commencing.

Natural Heritage

10.20 The EIAR advises on the likely impact of the development upon local nature conservation interests, including designated sites in the wider area. This includes assessment of valued habitat, ground water dependent terrestrial eco-systems (GWDTEs), protected mammals (otters a qualifying species of the SAC), ornithological interests e.g. golden plovers (a qualifying species of the SPA).

10.21 The applicant considers that there will be no significant impacts arising from the development and proposes to manage potential concern at construction through the employment of an Ecological Clerk of Work (ECoW). It is also proposed to extend the current Habitat Management Plan (HMP) associated with the initial project across this estate through the operation of the proposed turbines. This provides mitigation for potential effects on the wind farm on golden eagle, merlin and golden plover in particular, requiring a number of measures such as management of wild deer, grazing management, ditch blocking, bracken control and woodland management. With regard golden eagle in particular, as noted at the outset of this report, the layout of the wind farm extension has been altered so mitigate any adverse impact on this protected species; this has been through discussion between the applicant and SNH.

10.22 SNH does not consider that there would be any significant effect on any of the qualifying interests of the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) or Special Protection Area (SPA), or an adverse impact on their component SSSI. Therefore further consideration of protected areas and / or an “appropriate assessment” under the Habitats Regulations is not required. It has also considered the impacts on other natural heritage interests such as protected species, peat / peatland habitats and deer. It recommends that the mitigation and measures identified within the ES relating to nature conservation interests are secured by condition. In addition, a Species Protection Plan will ensure mitigation to golden eagles.

Design

10.23 The project extends the existing Gordonbush wind farm in a southerly direction, at a lower elevation and closer to Strath Brora. The proposed amendment to the scheme will see the removal of the four southernmost turbines and will allow uniformity to turbine sizes with all turbines being 149.9m to tip height in contrast to the consented scheme for a mix of turbine heights ranging from 110m to 130m. Following wireline analysis, the EIAR concludes that it is not necessary to include additional landscape/visual viewpoints. This position is agreed.

10.24 The appearance of the proposed variation in particular has informed its final layout and design. The EIAR outlines that the key effects arising from the removal of four turbines are:

- Reduction in visibility of the turbines from Strath Brora, including the minor Brora to Rogart road and other recreational locations such as core paths;
- Reduction in the perception of encroachment of turbines down into the landscape character of Strath Brora;
- Increase in the distance of the turbines from a number of viewpoints, particularly those in Strath Brora;
- Reduction in the extent of the proposed amendment development across views as seen at the majority of viewpoints, most notably those to the north-west and west and;
- Reduction in clustering and overlapping of turbines due to the lower number in the proposed development

The EIAR concludes, although the increased tip height and rotor diameter would be apparent or discernible in some closer views, the revised design results in a favourable option in landscape and visual terms as a result of the above 'mitigation'. Overall this position, as set out in the EIAR, is agreed particular with regard a reduction in impacts from Srath Brora as set out in the Landscape and Visual section below.

10.25 The existing wind farm at Gordonbush uses external transformers which has led to additional visual cluster. The EIAR outlines that the proposed development will make use of internal transformers to address any concerns in this regard.

Landscape Impact

10.26 The ES highlights that the site lies on the cusp of two landscape character types as defined by SNH; sweeping moorland (the western part of the site) and moorland slopes and hills (the eastern part). This boundary is not clearly defined with the site being transitional i.e. displays characteristics of both types.

10.27 The wider area includes varied coastal and interior landscapes typical of the north-eastern Highlands. The assessment identified 23 Landscape Character Types (LCTs) within the 35km study area, some of which (8) would have significant effect should the development be approved, including inland loch (Loch Brora), small farms and crofts (Balnacoil Area), Strath (Strath Brora), and sweeping moorland and hills. The significant effect from the development largely falls within this latter

classification, generally within 6km of the proposed turbines, where high visibility is available. The significance of the impact however is often offset given the effects already experienced from the existing turbines.

10.28 The ES has assessed the key impacts upon recognised landscape interests including the Ben Klibreck – Armine Forest AWL as advanced within Scottish Planning Policy and the Council's Loch Fleet, Loch Brora and Glen Loth Special Landscape Area. These are considered in turn.

10.29 The consented development was assessed has having potential to affect a defined Wild Land Area at Ben Klibreck – Armine Forest which is located around 200m to the west of the nearest turbine. This was considered as part of the previous environmental statement which concluded that the effect on the WLA as a result of the development would not be significant. A review of this assessment was carried out in light of the proposed amendments to the development which demonstrates that the overall impact on the WLA would be not significant - in particular the wirelines for viewpoints 11 and 13 which are both located within the WLA, indicate that the removal of four turbines will notably reduce the horizontal spread of the wind farm to the south, thereby reducing visual effects.

10.30 In terms of the Loch Fleet, Loch Brora and Glen Loth Special Landscape Area, the 2016 application concluded that the consented development would have a significant effect on a number of areas within the SLA boundary (including some parts of Loch Brora). Such effects are assessed as remaining significant however the amended proposal has allowed some effects previously identified as significant to now be classed as not significant – these are the areas around Killin Rock which forms part of the SLA.

Visual Impact

10.31 The anticipated visual extent of the development has been identified by the applicant through mapping of the Zone of Theoretical Visibility (ZTV). This has informed the locations of 17 viewpoints agreed with Highland Council and SNH which represent visibility from sensitive locations throughout the study area of the Landscape and Visual Assessment; the study area being a 40km radius from the proposed development. These viewpoints allow an assessment of visual impact to be made on receptors including at key locations/local roads and within local communities.

10.32 The EIAR outlines that the changes proposed would result in a minor decrease in the occurrence of significant effects, including cumulative effects. This is due to the removal of the four southernmost turbines from the consented development which has reduced the overall visibility from Strath Brora and reduced the extent of the proposed varied development across views. As such the EIAR outlines that affects that were considered 'significant' with the consented development, are now considered to be 'not significant' for the following areas:

- Approximately 1km of the eastbound Brora-Rogart minor road, between Balnacoil and the graveyard;

- Approximately 1km of Core Path SU06.02 ('Loch Brora – West Track') as it passed a property at Kilbraur;
- Approximately 1km

10.33 As with the consented development significant visual effects are identified for 7 out of the 17 viewpoints. These are discussed in turn:

10.34 **Viewpoint 1 (Beinn Smeorail)** is located 1.63km east of the proposed wind farm and represents a local hilltop within the SLA wher The 11 proposed turbines would be seen at full height from this location however the reduction in turbine numbers allows the development to be viewed as more compact than previously consented. The increase in height is likely to result in increased contrast with the operational Gordonbush wind farm as this viewpoint is located within a short range distance of the development. Overall the impact, as with the consented development, is considered to be significant but the effects are mitigated by the layout, its containment within the landform, and by the fact that the wider landscape of moorland and distant mountains remain unaffected. Whilst other wind farms are visible from each of these locations there is no significant increase in the cumulative extent of development across the wider view.

10.35 **Viewpoint 2 (Loch Brora – southwest side)** is now located 4.69km and has been selected as representative of walkers on the core path and fishermen using the loch, both activities within the SLA. The number of turbines visible from this location would reduce from 10 turbines to 9 due to the removal of turbines and the distance to the nearest turbine would increase from 3.98km to 4.69km with intervening forestry providing some screening (albeit the retention of trees is not guaranteed, although in the applicant's control). The EIAR concludes that impacts from this location will remain significant. Cumulative impacts are assessed as not significant as only one blade tip of the operational wind farm (screened by forestry) is theoretically visible from this location – no other operational, consented or application stage wind farms can be seen from this location.

10.36 **Viewpoint 5 (Strath Brora near Balnacoil)** lies 3.69km south west of the proposed development (an increase from 2.85km from the consented development) and has been selected as representative of road users and people using the area recreationally. The number of turbines theoretically visible from this location would reduce from 12 turbines to 9 (two hubs and seven blades) due to the removal of turbines. The rising landform would continue to enclose each side of the proposed development reducing the perceived turbine scale and providing a degree of containment. That said, the apparent scale and visibility of the turbines would increase in comparison to the consented development due to their increased tip height and rotor diameter. The overall effect is therefore considered to be significant from this location with the cumulative position assessed as not significant.

10.37 **Viewpoint 6 (Brora to Rogart minor road near Sciberscross)** lies 6.58km south west of the proposed development (an increase from 5.85km from the consented development) and is representative of road users. From this location a full view of the existing and proposed Gordonbush turbines will be visible with an increased contrast between the two as a result of the increased tip heights. The impact from this location is considered to be significant however will be short lived and

contained within the landform of Beinn Smeorail. The cumulative magnitude of change would increase slightly due to this increased contrast however the overall cumulative is assessed as not significant due to the level of integration between the proposed development and the operational wind farm in terms of visual association.

10.38 **Viewpoint 9 (Ben Horn)** now lies 7.81km south of the proposed development and has been selected as representative of a local hill top within the SLA where full view of the existing and proposed turbines would be seen. The increased tip height is likely to result in increased contrast with the operational Gordonbush wind farm particular given the elevated nature of the viewpoint. The overall impact would remain significant however somewhat mitigated through the layout and its containment within the landform. As with VP6, the cumulative magnitude of change would increase due to the increased tip height and contrast with the operation wind farm however the overall impact remains not significant due to the clear visual association between both schemes.

10.39 **Viewpoint 12 (Track to Ben Armine Lodge)** remains 7.8km south of the proposed development and represents a walking route within an area of wild land. From this location, a full view of the existing and proposed turbines would be obtained however due to the distance involved, the increase in tip height from the consented scheme would not be readily apparent therefore not resulting in an increased contrast between the two developments. As such it is considered that the cumulative effect remains limited and not significant due to the level of integration between the two developments.

10.40 As with the consented development, whilst recognition has been given above to the significant impacts of this application, this has to be balanced with the fact that the varied development will continue to not be seen from the main communities of the east coast (Helmsdale, Brora, Golspie and Dornoch) and inland (Rogart and Lairg). There will be no significant effects on other routes including the A9, A836, A839, A897 and A949, national cycle routes, long distance walking routes and railway lines, where there are substantially higher levels of traffic/footfall.

10.41 Areas of concern which were highlighted previously with regards the consented development in terms of impact on the Loch Fleet, Loch Brora and Glen Loth SLA have now been addressed as a result of this proposed variation, through removal of the southern-most turbines closest to Strath Brora which reduces impact particularly on key receptors using the local road south of Killin.

Cultural Heritage

10.42 The ES identifies a number of historical assets that are recorded within close proximity to the development, most notably alongside the access roads and borrow pits. The ES proposes no mitigation. The assessment in particular considers three SAM's of particular interest to Historic Environment of Scotland (HES) including at the Ascoile earthwork (Index No. 3288), Kilbraur, hut circle and clearance cairns (Index No. 1793) and Balnacoil Hill, cairn (Index No. 1769). HES is content not to raise an objection on national interest. However, of note, HES have considered the

road improvement works undertaken with the initial project at the Ascoile SAM, which sits in and adjacent to the public road. It is content that no further works / safeguards are required.

10.43 The Council's Historic Environment Team, when consulted on the previous consultation, advise there may be a risk of accidental and / or inadvertent damage, i.e. from movement of plant or the micrositing development features. It therefore expects the following historical assets to be afforded a basic level of protection (marking out) to ensure preservation in situ including - Site 15 (cairn), 27 (clearance cairns), 29 (hut circle), 38 (clearance cairns) and 54 (cairn). Furthermore Sites 63 and 71 (putative prehistoric clearance cairns) are both likely to be lost should the development obtain consent. In this case, both groups of features will require detailed survey and evaluation, leading to full excavation if features prove to be significant, in advance of development. These can be addressed using planning conditions.

Economic Impact, Recreation and Tourism

10.44 The project has highlighted the potential investment / employment benefits that it will bring to the area, both short term during construction and then longer term. Total capital investment from the project is given as £40.5m, with the potential Highland share across local businesses being around £8.2m. Annual maintenance costs would amount to some £2.4m which would result in a small number (2 - 3) of jobs locally. During the initial wind farm development, the company established a high level of engagement from local suppliers and continues to build a strong local supply chain. In addition, the company operates an apprenticeship scheme that has helped 5 young people a year in the area of Rogart, Golspie, Brora and Helmsdale.

10.45 The applicant has recognised the tourist attractions and businesses in the surrounding area based upon walking, cycling, fishing, golfing, historic attractions, whisky visitor centres, hotels and many other forms of visitor accommodation. Its assessment is that given the construction and operation of the existing wind farm which has not resulted in a negative effect on the local tourism and recreational interests of the area, the extension would similarly be absorbed. Indeed at a local level the wind farm development has brought real benefits. The estate has a greater level of investment in its fishing / angling operations and walkers are enjoying a higher level of access to the area as a consequence of the wind farm tracks. The local heritage group is also benefiting from the initial project with the expected creation of a resource centre at the old school house, on the Clynelish distillery road with the A9. This property was acquired by SSE to assist with junction improvements in association with the Gordonbush development.

Aviation and Telecommunication Interests

10.46 Turbines have the potential to interfere with electromagnetic signals due to their size. The ES highlights consultations with key aviation interests including CAA, NATS, HIAL and the MOD. No objections have been made to the application but requests have been made for planning conditions to be attached to any deemed consent. These should secure the provision of construction details to assist aviation mapping of key elements of the project and the provision of aviation

lighting. It is noted aviation authorities sought the required planning condition to outlines that all perimeter turbines should be fitted with infra red lighting and 25 candela solid red lighting on all of the cardinal turbines.

10.47 No objections have been raised on matters pertaining to TV and Radio communications from consultees.

Noise

10.48 The applicant has considered noise in association with the operational Gordonbush wind farm as well as the existing Kilbruar (and extension) wind farm, using a representative candidate turbine model that is consistent with the turbine tip height. The assessment concludes that predicted operational noise levels will be lower than that of the consented development and below the requirements of ETSU guidance both for the development on its own and cumulatively with the aforementioned wind farms.

10.49 Environmental Health have outlined no objections to the amended development subject to the existing noise condition being amended to incorporate the consent limits noted in the updated noise assessment.

Construction Impacts

10.50 As with the consented development, the applicant has highlighted its commitment to a CEMD approach, with construction method statements being tabled with the application. The CEMD approach would apply to all construction activity and site restoration works, both short term and at de-commissioning. It also needs final input from the appointed civil engineers. This is expected to ensure controls over working hours at the site and generally manage construction activities for example to minimise the risk of pollution, silting, waste and dust management.

10.51 Construction activities are to be between 07.00 and 19.00 hours Mondays to Fridays, and 07.00 to 14.00 hours on Saturdays between April and September. In winter months (i.e. between October and March), working hours are anticipated to be between 07:30 and 17:00 Mondays to Fridays and 07:30 and 14:00 on Saturdays. Requests are likely to be made for extensions to these times, when critical works are underway – such as turbine erection. These are managed in liaison with the Planning Service and would have little impact on nearby residents / communities.

10.52 Construction activities at the turbine sites are unlikely to be significant in terms of noise. Of more concern is the potential construction traffic noise to properties that lie to the west of the initial section of the site access road at Ascoile. One property in particular, Moulin Cottage lies in very close proximity to the track and at times could be affected by noise. The main source of noise will be HGV traffic. The Council has powers under the Control of Pollution Act 1974 to control noise from construction activities including traffic therefore, the use of planning conditions to duplicate those controls is not considered necessary.

10.53 However, the proximity of the access track to Moulin Cottage could result in the occupants being subjected to excessive levels of noise at times. The EHO advises that the applicant gives consideration to introducing screening to minimise noise from vehicle movements on the track. As a minimum, mitigation measures identified in Appendix 13.1 -Section 6 of the ES - Noise and Vibration document to be implemented in full as well as the recommended mitigation measures in Section 8 of the British Standard (BS) 5228-1:2009 (code of practice for noise and vibration control on construction and open sites – Part 1: Noise).

10.54 The decommissioning period for a wind farm of this size is estimated to be 12 months. Detailed decommissioning proposals would require to be agreed with relevant authorities prior to the commencement of any decommissioning activities. This is anticipated to involve:

- Dismantling and removal of the turbines and site substation;
- Removal of the turbine foundations - to 1m below ground level;
- Removal of substation building foundations; and
- Re-instatement of all land affected, in accordance with best practice at the time.

10.55 The ES suggest that that the access tracks / spine road would not be removed. Whilst it is open to the estate to apply for planning permission to retain new access tracks created by this application, any approval should require all new access tracks to be decommissioned, removed and the ground restored. It is noteworthy that this application seeks to use “new access tracks” developed for the initial wind farm project, which as part of its consent would be decommissioned in associated with that project. Given that this consent will extend beyond the operation life of the initial project, an adjustment would be required to transfer the obligation from the initial approval and decommissioning bond to any consent for this project and its associated decommissioning obligations.

11. CONCLUSION

The Scottish Government gives considerable commitment to renewable energy and encourages planning authorities to support the development of wind farms where they can operate successfully and situated in appropriate locations. The project has the potential to contribute an additional 30MW of renewable energy capacity towards Scottish Government targets. However, as with all applications, the benefits of the proposal must be weighed against potential drawbacks and then considered in the round, taking account of the relevant policies of the Development Plan. This will include consideration of any mitigation offered to address particular environmental and construction impacts. In this instance, consent has been issued previously for an extension to Gordonbush extension which the applicant now seeks to re-visit by reducing the overall number of turbines through removal of the four southernmost turbines and increasing the height of the remaining turbines from 130m to 149.9m to tip. Consultees have indicated no concern with these amendments and although visual impact remains significant from some locations it is mitigated through the layout and its containment within the landform with visual contrast in association with the Gordonbush wind farm only perceptible in short range views.

11.1 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations. As such it is recommended that the Committee raise no objection. A list of conditions attached to the previous consent – which have been updated following this variation – are included in Section 13 below.

12. IMPLICATIONS

12.1 Resource – Not applicable

12.2 Legal –Not applicable

12.3 Community (Equality, Poverty and Rural) –Not applicable

12.4 Climate Change/Carbon Clever –Not applicable

12.5 Risk – Not applicable

12.6 Gaelic – Not applicable

13. RECOMMENDATION

Action required before decision issued	N
Notification to Scottish Ministers	N
Notification to Historic Scotland	N
Conclusion of Section 75 Agreement	N
Revocation of previous permission	N

Subject to the above, it is recommended the Committee raise no objection. The following conditions and reasons will be provided to the Energy Consents Unit.

1. Except as otherwise required by the terms of the section 36 consent and this deemed planning permission, the Development shall be undertaken in accordance with the application including the approved drawings shown in the Environmental Statement dated January 2019 and its addendum (dated June 2019), unless otherwise amended by the section 36C consent or agreed in writing with the Planning Authority.

   Reason: *To ensure that the Development is carried out in accordance with the approved details.*

2. Upon the expiration of a period of 25 years from the First Commissioning Date, the wind turbines and other infrastructure shall be decommissioned and removed from the site, with decommissioning and restoration works undertaken in accordance

with the terms of Condition 8 of this permission. Written confirmation of the Date of First Commissioning shall be submitted in writing to the Planning Authority within one month of this date.

Reason: to ensure that the Development is carried out in accordance with the approved details.

3. No development shall commence unless and until full details of the proposed wind turbines (including, but not limited to, the power rating and sound power levels, the number, size, type, and external finish and colour), the monitoring LiDAR, and all associated apparatus have been submitted to, and approved in writing by, the Relevant Planning Authority.

   The overall height of the wind turbines shall not exceed 149.9 metres to the tip of the blades in a vertical position as measured from natural ground conditions immediately adjacent to the turbine base.

   The wind turbines shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from externa l rust, staining or discolouration, until such time as the wind farm is decommissioned.

   Reason: To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.

4. The Development will be decommissioned and will cease to generate electricity by no later than the date falling twenty five years from the Final Commissioning Date, herein referred to as the Last Operational Date. The total period for restoration of the Site in accordance with this condition shall not exceed three years from the Last Operational Date without prior written approval of the Scottish Ministers in consultation with the Planning Authority.

   No later than 3 years prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier) a detailed decommissioning, restoration and aftercare plan, based upon the principles of the approved decommissioning, restoration and aftercare strategy, shall be submitted to the Planning Authority for written approval in consultation with SNH and SEPA. The detailed decommissioning, restoration and aftercare plan will provide updated and detailed proposals for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environment management provisions.

   The Development shall be decommissioned, site restored and aftercare thereafter undertaken in accordance with the approved plan, unless otherwise agreed in writing in advance with the Planning Authority in consultation with SNH and SEPA.

   Reason: To ensure the decommissioning and removal of the Development in an appropriate and environmentally acceptable manner and the restoration and aftercare of the site, in the interests of safety, amenity and environmental protection.

5. There shall be no Commencement of Development unless the Company has delivered a bond or other form of financial guarantee in terms acceptable to the Planning Authority which secures the cost of performance of all decommissioning, restoration and aftercare obligations contained in condition to the Planning Authority.

The value of the financial guarantee shall be determined by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning, restoration and aftercare obligations contained in Condition 8. The value of the financial guarantee shall be reviewed by a suitably qualified independent professional no less than every five years and increased or decreased to take account of any variation in costs of compliance with restoration and aftercare obligations and best practice prevailing at the time of each review.

Thereafter, the Company shall ensure that the bond or other financial provision is maintained throughout the duration of this consent;

Each review shall be:

- conducted by a suitably qualified independent professional; and
- approved in writing by the Planning Authority without amendment or, as the case may be, approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part (b) above recommends that the amount of the bond or other financial provision should be altered (be that an increase or decrease) the Company shall do so within one month of receiving that written approval, or another timescale as may be agreed in writing by the Planning Authority, and in accordance with the recommendations contained therein.

Reason : To ensure financial security for the cost of the restoration of the site to the satisfaction of the Planning Authority.

6. The Company shall, at all times after the Date of First Commissioning, record information regarding the monthly supply of electricity to the national grid from each turbine within the development and retain the information for a period of at least 12 months. The information shall be made available to the Planning Authority within one month of any request by them. In the event that:

a. any wind turbine installed and commissioned fails to supply electricity on a commercial basis to the grid for a continuous period of 12 months , then unless otherwise agreed, the wind turbine, along with any ancillary equipment, fixtures and fittings not required in connection with retained turbines, shall, within 3 months of the end of the said continuous 12 month period, be dismantled and removed from the site, or

b. the wind farm fails to supply electricity on a commercial basis to the grid from 50% or more of the wind turbines installed and commissioned and for a continuous period of 12 months, then the Company must notify the Planning Authority in writing immediately.

All decommissioning and reinstatement work required by this condition shall be carried out in accordance with the finalised Decommissioning and Restoration Plan (DRP), or as otherwise specified in writing by the Planning Authority.

Reason: In the interests of safety, amenity and environmental protection.

7. The turbines, access tracks, cables and crane hard-standing areas may be micro sited but no more than 50 metres from the positions shown in the approved plan (Figure 4.1 of Volume 3 of the EIA Report) unless otherwise agreed in writing with the Planning Authority in consultation with SEPA. Micro-siting will also be constrained to ensure 50m buffers are retained from all watercourses, except in the vicinity of the approved water crossings.

Reason: In order to allow some flexibility in respect of the pre development assessment of deep peat and of Groundwater Terrestrial Dependent Eco- systems on the site.

Unless there is a demonstrable health and safety or operational reason, none of the wind turbines substation buildings I enclosures or above ground fixed plant shall display any name, logo, sign or other advertisement without express advertisement consent having been granted on application to the Planning Authority.

Reason: To ensure that the turbines are not used for advertising, in the interests of visual amenity.

No development shall commence until full details of the location, layout, external appearance, dimensions and surface materials of all additional buildings, compounds and parking areas, as well as any external lighting, fuel storage, fencing, walls, paths and any other ancillary elements of the development, have been submitted to, and approved in writing by, the Planning Authority (in consultation with SEPA, as necessary). Thereafter, development shall progress in accordance with these approved details.

Reason: To ensure that all ancillary elements of the development are acceptable in terms of visual, landscape noise and environmental impact considerations.

No development shall commence until a site specific scheme for the working and restoration of the borrow pits forming part of the development has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The scheme shall include;

a. A detailed working method statement based on site survey information and ground investigations;

b. Details of the handling of any overburden (including peat, soil and rock);

c. Drainage, including measures to prevent surrounding areas of peatland, water dependant sensitive habitats and Ground Water Dependant Terrestrial Ecosystems (GWDTE) from drying out;

d. A programme of implementation of the works described in the scheme; and

e. Full details of the reinstatement, restoration and aftercare of the borrow pit(s) at the end of the construction period, to include topographic surveys of pre-construction profiles, and details of topographical surveys to be undertaken of the restored borrow pit profiles.

The approved scheme shall thereafter be implemented in full.

Reason: To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and the environment and to secure the restoration of borrow pit(s) at the end of the construction period.

Any blasting on site shall only take place on the site between the hours of 10.00 to 16.00 on Monday to Friday inclusive and 10.00 to 12.00 on Saturdays with no blasting taking place on a Sunday or on National Public Holidays, unless otherwise approved in advance in writing by the planning authority. Ground vibration from blasting shall not exceed a peak particle velocity of 6mm/second at agreed blasting monitoring locations. The measurement shall be the maximum of three mutually perpendicular directions taken at the ground surface.

Reason: To ensure that blasting activity is carried out within defined timescales to control impact on surrounding communities of interest.

No turbine can be erected until a scheme of aviation lighting is submitted to, and approved in writing by, the Planning Authority after consultation with the Ministry of Defence. Thereafter the approved scheme of aviation lighting shall be fully implemented on site. The Company shall provide both the Ministry of Defence and the Defence Geographic Centre (AIS Information Centre) with a statement, copied to the Planning Authority and Highland and Islands Airports Limited, containing the following information:

(i) The date of Commencement of the Development;

(ii) The exact position of the wind turbine towers in latitude and longitude;

(iii) A description of all structures over 300 feet high;

(iv) The maximum extension height of all construction equipment;

(v) The height above ground level of the tallest structure; and

(vi) Finalised details of an aviation lighting scheme, unless otherwise required, as agreed with the MOD and other aviation interests and the Planning Authority. This is expected to provide for all perimeter turbines being fitted with infra-red lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practicable point; and 25 Candela red lighting on all of the cardinal wind turbines at the highest practicable point.

Reason: To ensure that the erected turbines present no air safety risk.

There shall be no Commencement of the Development until a finalised Traffic Management Plan, founded upon a detailed assessment of relevant roads, of the expected use of the local road network by all general construction traffic and

abnormal load movements, with an appropriate package of mitigation I improvement works is agreed by the Planning Authority in consultation with the Local Roads Authority. This will include: -

(i) The provision of a wear and tear agreement including the posting of a financial bond for all delivery periods during construction, significant repairs and decommissioning. The agreement shall require joint (Company and Highland Council) before and after road condition surveys and regular monitoring of traffic levels and road conditions during the construction phase of the development.

(ii) A risk assessment for transportation during daylight hours and hours of darkness.

(iii) Traffic management and mitigation measures on the access route for example measures such as temporary speed limits, suitable temporary signage, road markings and the use of speed activated signs.

(iv) A procedure for the regular monitoring of road conditions and the implementation of any remedial works required during the construction period.

(v) A detailed delivery programme for abnormal load movements, which shall be made available to Highland Council and, as required, community representatives. This should be informed by a structural assessment of bridges, culverts and any other affected structures along the route shall be undertaken in consultation with the Council's Chief Structural Engineer.

(vi) A detailed protocol for the delivery of abnormal loads/vehicles, prepared in consultation and agreement with interested parties, including Highland Council, the Police, Transport Scotland and, as required, community representatives. The protocol shall identify any requirement for convoy working and/or escorting of vehicles and include arrangements to provide advance notice of abnormal load movements in the local media. A contingency plan prepared by the abnormal load haulier. The plan shall be adopted only after consultation and agreement with the Police and the respective roads authorities. It shall include measures to deal with any haulage incidents that may result in public roads becoming temporarily closed or restricted.

(vii) Measures to ensure that all affected public roads are kept free of mud and debris arising from the development.

The approved Traffic Management Plan and requirements of the Trunk Road Authority shall thereafter be implemented in full, unless otherwise agreed in advance and in writing with the Planning Authority.

Reason: In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.

During the delivery period of the wind turbine construction materials any additional signing or temporary traffic control measures deemed necessary on the Trunk Road Network due to the size or length of any loads being delivered or removed must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland before delivery commences.

Reason: In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.

Temporary signage, in the form of demountable signs or similar approved, shall be established, when required, to alert road users and local residents of expected abnormal load movements. All such movements on Council maintained roads shall take place outwith peak times on the network, including school travel times, and shall avoid local community events.

Reason: In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.

The Company shall establish a community liaison group, in collaboration with the Highland Council and affected local Community Councils. The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the wind farm has been completed and is fully operational.

Reason: To assist with the provision of mitigation measures to minimize potential hazards to road users, including pedestrians, travelling on the road networks.

No development shall commence until an Outdoor Access Plan is submitted to and approved in writing by the Planning Authority. The purpose of the Outdoor Access Plan shall be to avoid restricting public outdoor access as a result of the proposed development. The Outdoor Access Plan shall be implemented as approved.

Reason: To ensure public access to the countryside is not unnecessarily impeded as a result of this development.

No development shall commence until a programme of work for the evaluation, preservation and recording of any archaeological and historic features affected by the proposed development, including a timetable for investigation, shall be submitted to and agreed in writing by the Planning Authority. The agreed proposals shall be implemented in accordance with the agreed timetable for investigation.

Reason: In order to protect the archaeological and historic interest of the site.

There shall be no Commencement of Development unless a Construction and Environmental Management Plan ("CEMP") outlining site specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with details of their timetabling, has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA.

The CEMP shall include (but shall not be limited to)

a. a site waste management plan (dealing with all aspects of waste produced during the construct ion period other than peat);

b. details of the formation of the construction compound welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;

c. a dust management plan;

d. site specific details for management and operation of any concrete batching plant (including disposal of pH rich waste water and substances);

e. details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;

f. a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;

g. soil storage and management;

h. a peat management plan, to include details of vegetated turf stripping and storage, peat excavation (including volumes), handling, storage and re-use;

i. a drainage management strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources;

j. a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water;

k. sewage disposal and treatment;

l. temporary site illumination;

m. the construction of the access into the site and the creation and maintenance of associated visibility splays;

n. the method of construct ion of the crane pads;

o. the method of construction of the turbine foundations;

p. the method of working cable trenches;

q. the method of construction and erection of the wind turbines and meteorological masts;

r. details of watercourse crossings;

s. post-construction restoration/ reinstatement of the working areas not required during the operation of the Development, including borrow pits, construction compound, storage areas and laydown areas;

t. Environmental Incident and Emergency Plan including details of contingency planning in the event of accidental release of materials which could cause harm to the environment; and

u. Details of species and habitat protection measures to be implemented for the construction period and details of appropriate relevant reporting and monitoring programmes.

The development shall be implemented thereafter in accordance with the approved CEMP unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH and SEPA.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.

There shall be no Commencement of Development unless the Planning Authority has approved in writing the terms of appointment by the Company of an independent Ecological Clerk of Works (ECoW) in consultation with SNH and SEPA. The terms of appointment shall;

a. Impose a duty to monitor compliance with the ecological and hydrological commitments provided in the EIA Report and other information lodged in support of the application, the Construction and Environmental Management Plan, the Habitat Management Plan approved in accordance with condition 25, and other plans approved in terms of condition 23;

b. Require the EcoW to report to the Company's nominated construction project manager any incidences of non-compliance at the earliest practical opportunity;

c. Require the ECoW to submit a monthly report to the Planning Authority summarising works undertaken on site; and

d. Require the ECoW to report to the Planning Authority any incidences of non-compliance at the earliest practical opportunity.

The EcoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post construct ion restoration works approved in terms of condition 8.

No later than 18 months prior to decom missioning of the Development or the expiration of this consent (whichever is the earlier), the Company shall submit details of the terms of appointment by the Company of an independent ECoW throughout the decommissioning, restoration and aftercare phases of the Development to the Planning Authority for approval in consultation with SNH and SEPA. The ECoW shall be appointed on the approved terms throughout the decommissioning, restoration and aftercare phases of the Development.

Reason: To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development.

Prior to Commissioning of the Development a draft habitat management plan shall be amended, as necessary, and submitted to and approved in writing by the Planning Authority in consultation with SNH. The habitat management plan shall set out proposed habitat management measures during the operational period of the site to mitigate significant environmental impacts identified in the EIA Report .

The Applicant should investigate the opportunity to align and consolidate the Gordonbush Estate HMP and any proposed HMP for the Proposed Varied Development.

Unless otherwise agreed in advance in writing with the Planning Authority, the approved habitat management plan shall be implemented in full.

Reason: To ensure protection of habitat and ensure the development proceeds in accordance with the detailed provided in the EIAR.

The rating level of noise immissions from the combined effects of the wind turbines hereby permitted and those of the existing Gordonbush Wind Farm (including the application of any tonal penalty) , when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed the values for the relevant integer wind speed set out in or derived from the tables attached to this condition at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

a. Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the Company shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction and include a statement as to whether, in the opinion of the Local Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

b. The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (a), and such others as the independent consultant considers likely to result in a breach of the noise limits.

c. Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the Company shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant’s dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from Table 1 having regard to Table 2, and specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant’s dwelling. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling. Where the proposed measurement location is close to the wind turbines, rather than at the complainants property (to improve the signal to noise ratio), then the operators submission shall include a method to calculate the noise level from the wind turbines at the complainants property based on the noise levels measured at the agreed location (the alternative method). Details of the

alternative method together with any associated guidance notes deemed necessary, shall be submitted to and agreed in writing by the Local Authority prior to the commencement of any measurements. Measurements to assess compliance with the noise limits set out in the Tables attached to these conditions or approved by the Local Authority pursuant to paragraph (C) of this condition shall be undertaken at the measurement location approved in writing by the Local Authority.

The Company shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (a), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions.

d. Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c), the Company shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit for the submission of the further assessment has been extended in writing by the Local Planning Authority .

Table 1

Property	Standardised wind speed (m/s)								
	4	5	6	7	8	9	10	11	12
Ascoile	30	30	30	30	30	30	30	n/a	n/a
Home Cottage	30	30	30	30	30	30	30	n/a	n/a
Keepers Cottage	30	30	30	30	30	30	30	n/a	n/a
Gordonbush Lodge	30	30	30	30	30	30	30	n/a	n/a
Moulin Cottage	30	30	30	30	30	30	30	n/a	n/a
Kilbraur	30	30	30	30	30	30	30	n/a	n/a

Note 1 to Table 1: The standardised wind speed at 10 metres height within the site refers to wind speed at 10 metres height derived from those at hub height, calculated in accordance with the method given in the Guidance Notes.

Note 2 to Table 1: As in the simplified assessment method of ETSU-R-97, no limit values are included at the higher wind speeds of 11 and 12 m/s

Table 2

Location	Easting	Northing
Ascoile	282388	911191
Home Cottage	283540	910178
Keepers Cottage	284462	909584
Gordonbush Lodge	284596	909817
Moulin Cottage	282480	910888
Kilbraur	282377	910024

Note 1 to Table 2: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

Note:

For the purposes of this condition, a “dwelling” is a building within Use Class C3 and C4 of the Town and Country Planning (Use Classes) Order 1987 which lawfully exists or had planning permission at the date of this consent.

Reason: To protect the amenity of the area

Guidance Notes for Noise Conditions

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

a) Values of the $L_{A90,10\ minute}$ noise statistic should be measured at the complainant's property, using a sound level meter of EN 60651/BS EN 60804 Type I, or BS EN 61672 Class I quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

b) The microphone should be mounted at 1.2 - 1.5 metres above ground level, fitted with a two-layer wind shield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field"

conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the Company shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

c) The $L_{A90,10\ minute}$ measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

d) To enable compliance with the conditions to be evaluated, the Company shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres . It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10- minute increments thereafter.

e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 (b)

b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (b) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1.

c) For those data points considered valid in accordance with Guidance Note 2(b), values of the $L_{A90,10\ minute}$ noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, “best fit” curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

Guidance Note 3

a) Where, in accordance with the approved assessment protocol under paragraph (b) of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

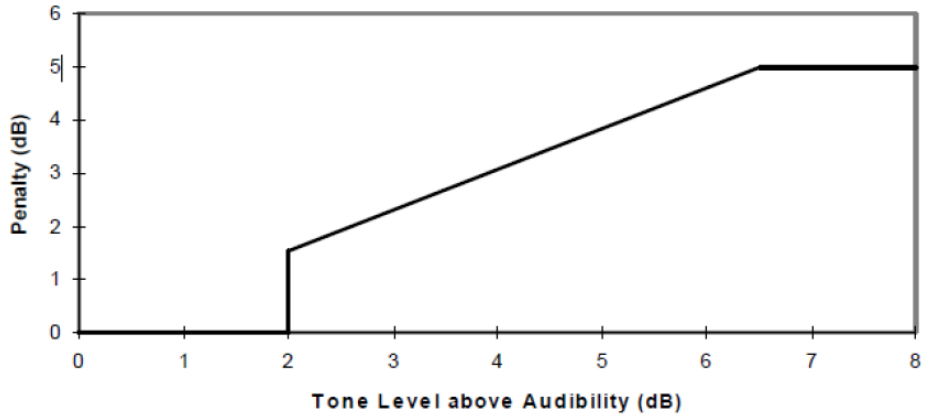
b) For each 10 minute interval for which $L_{A90,10\ minute}$ data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data are available (“the standard procedure”). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

c) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104109 of ETSU-R-97.

d) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104109 of ETSU-R-97.

e) A least squares "best fit" linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.

f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



Guidance Note 4

a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Guidance Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the Local Planning Authority in its written protocol under paragraph (b) of the noise condition.

b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.

c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (c) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

d) The Company shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment The further assessment shall be undertaken in accordance with the following steps:

e) Repeating the steps in Guidance Note 2, with the wind farm switched off, or using data gathered prior to the construction of the wind farm, and determining the background noise (L3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.

f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log\left[10^{L_2/10} - 10^{L_3/10}\right]$$

g) The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.

h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note 3 above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (c) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (c) of the noise condition then the development fails to comply with the conditions.

Designation:	Area Planning Manager - North
Author:	Gillian Pearson
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Plan 1 – Location Plan (Figure A1.1)
	Plan 2 – Proposed Varied Development (Figure A1.4)
	Plan 3 – Site Layout (Figure A4.1)
	Plan 4 – Consented Layout (Figure 1.2)
	Plan 5 – Indicative Turbine Dimensions (Figure 4.2)
	Plan 6 – Typical Turbine Foundation Plan (Figure 4.3)
	Plan 7 – Typical Access Track Details (Figure 4.4)
	Plan 8 – Proposed LiDAR Unit Plan (Figure 4.5a)
	Plan 9 – Proposed LiDAR Unit Elevation (Figure 4.5b)
	Plan 10 – Construction Compound (Figure 4.6)

sse

Key

Site Boundary

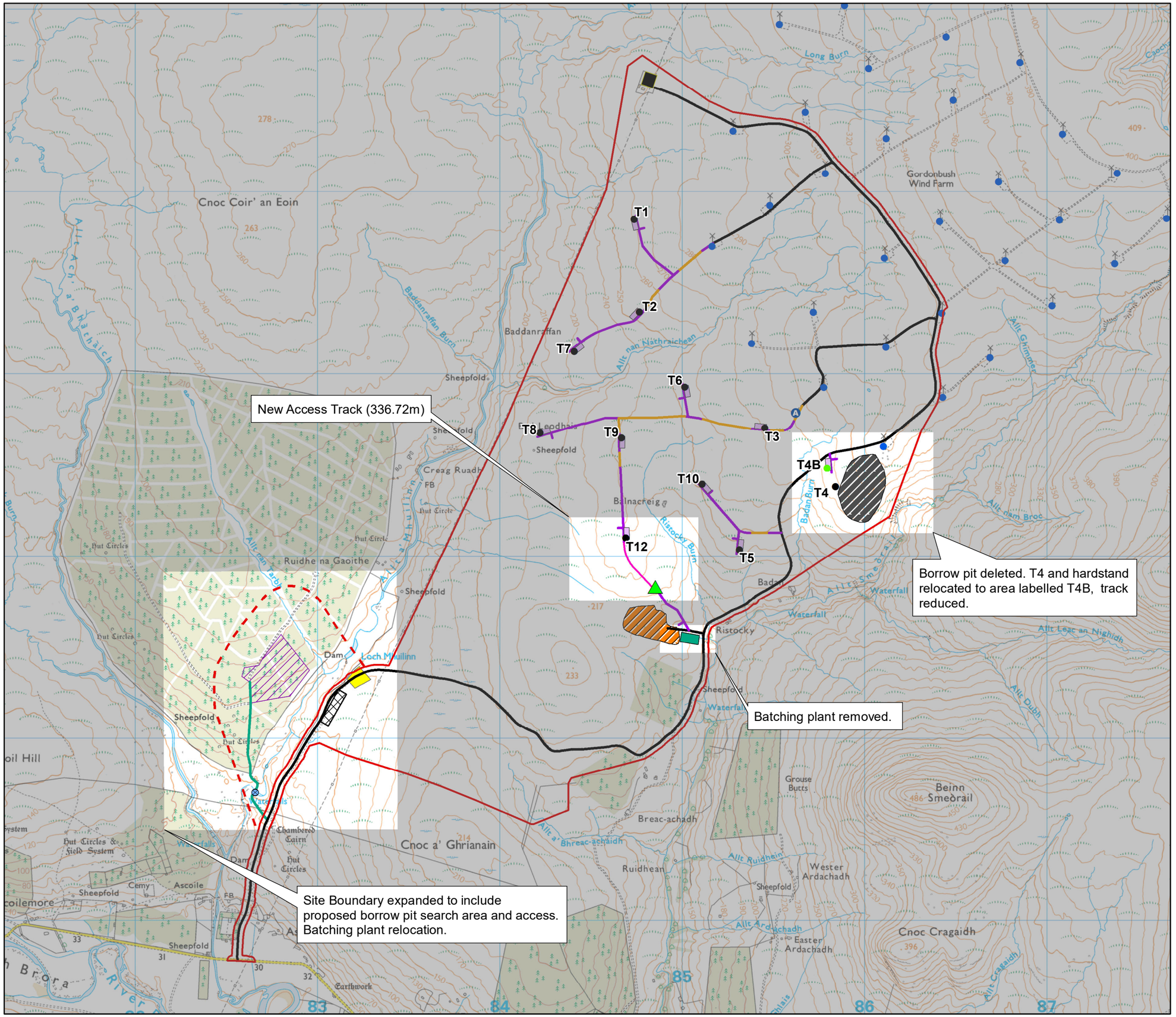
Scale 1:250,000@ A3

0 5 10 Km

N

Figure A1.1
Site Location

Gordonbush Extension Wind Farm
EIA Report S36C Addendum



sse

Key

- Site Boundary
- Extension of Site Boundary
- Tubine
- Relocated Turbine T4B
- Operational Turbine
- Operational Met Mast
- Watercrossing (Temporary Bridge)
- Proposed LiDAR

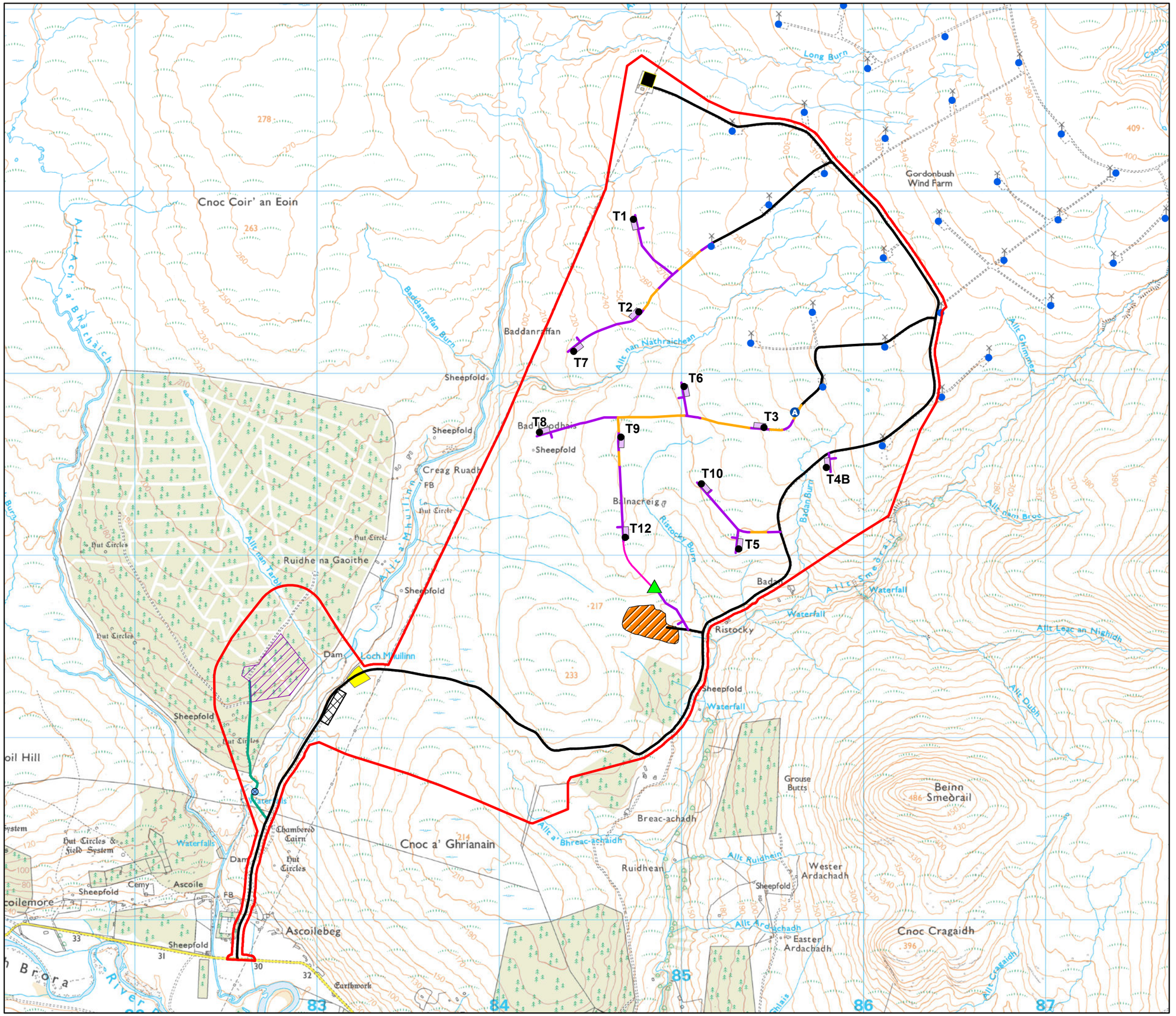
Access Track

- Existing
- Cut
- Float
- New Access Track
- Existing Track to Proposed Borrow Pit Search Area
- Indicative Hardstanding
- Existing Substation
- Removed Batching Plant
- Relocated Batching Plant
- Borrow Pit
- Deleted Borrow Pit
- Proposed Borrow Pit Search Area
- Construction Compound

Figure A1.4

Proposed Varied Development - Addendum

Gordonbush Extension Wind Farm
EIA Report S36C Addendum



sse

Key

- Site Boundary
- Turbine
- Operational Turbine
- Operational Met Mast
- Watercrossing (Temporary Bridge)
- Proposed LiDAR

Access Track

- Existing
- Cut
- Float
- New Access Track (Cut)
- Existing Track to Proposed Borrow Pit Search Area
- Indicative Hardstanding
- Existing Substation
- Relocated Batching Plant
- Borrow Pit
- Proposed Borrow Pit Search Area
- Construction Compound

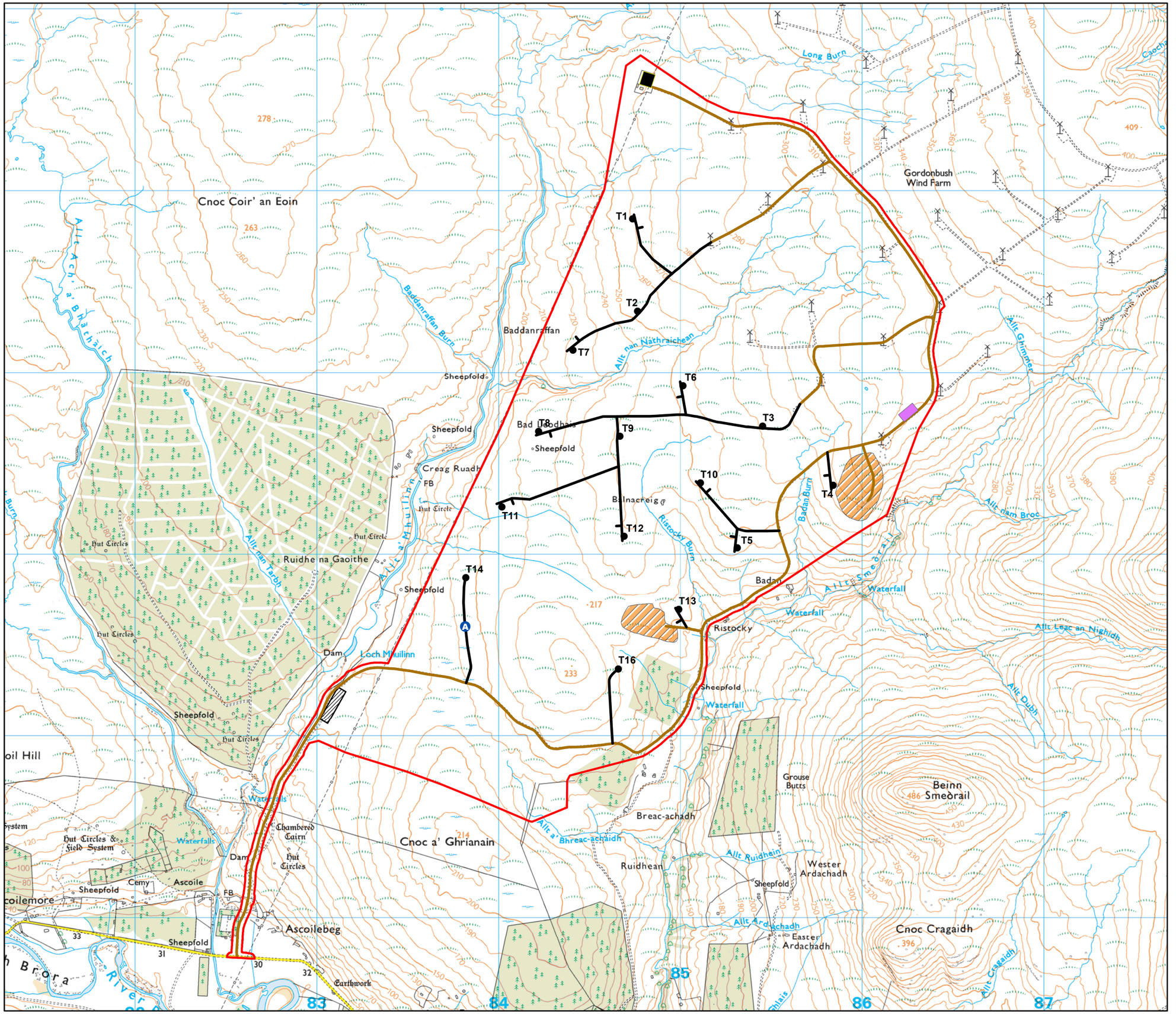
Scale 1:20,000 @ A3

0 0.5 1 Km

N

Figure A4.1
Site Layout

Gordonbush Extension Wind Farm
EIA Report S36C Addendum



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sse

Key

- Site Boundary
- Turbine
- Permanent Met Mast
- Access Track
- Operational Access Track to be Reused
- Operational Substation
- Batching Plant
- Borrow Pit Search Area
- Operations Building & Temporary Construction Compound Area

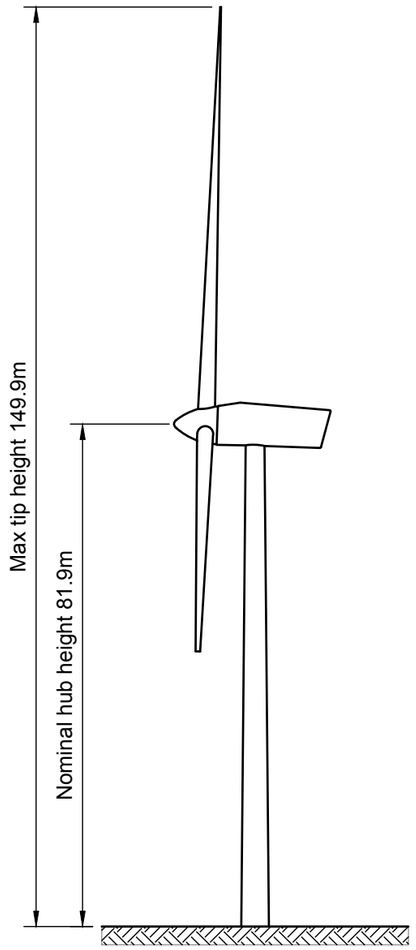
Scale 1:20,000 @ A3

0 0.5 1 Km

N

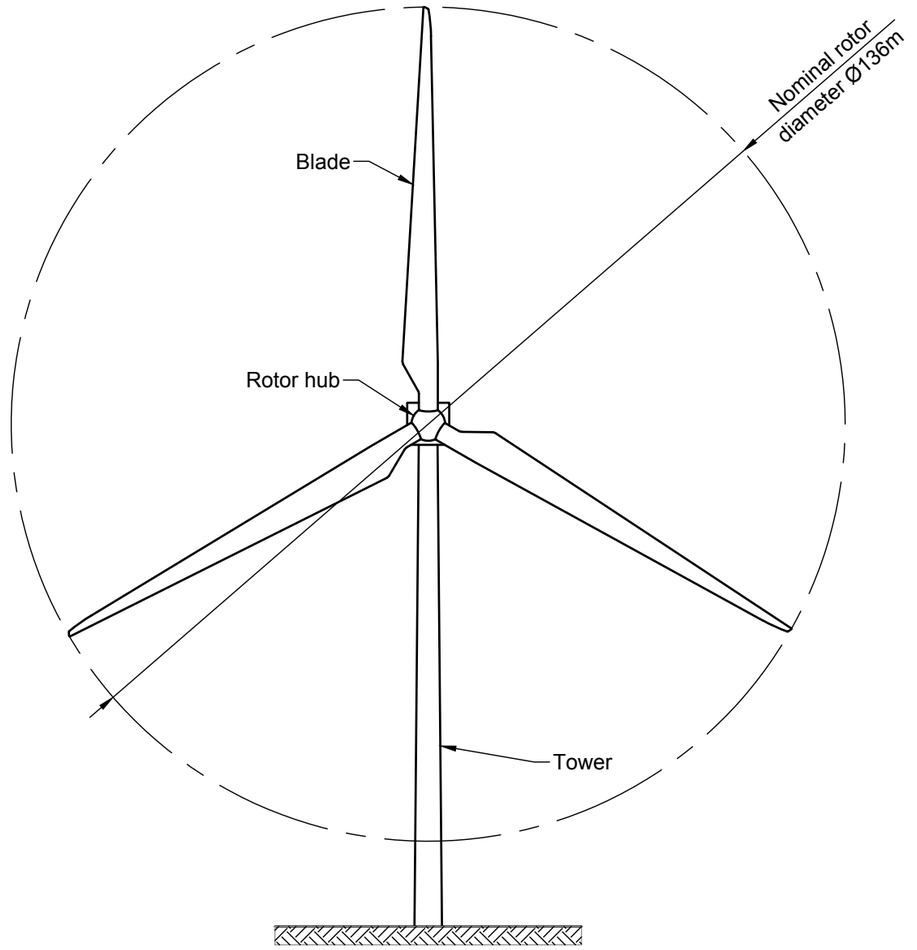
Figure 1.2
Consented Layout

Gordonbush Extension Wind Farm
EIA Report



SIDE ELEVATION

Scale: 1:1000



FRONT ELEVATION

Scale: 1:1000

Notes

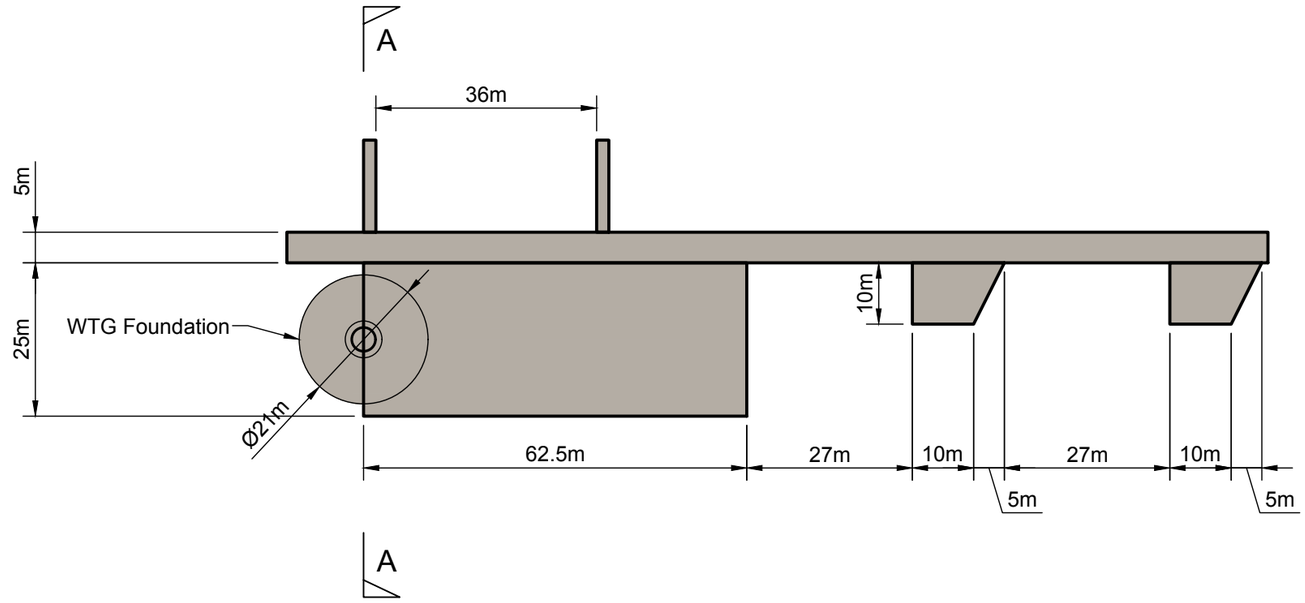
1. All dimensions are based on the largest components considered.

Scale 1:1000 @ A3

0 10 20 30 40 m

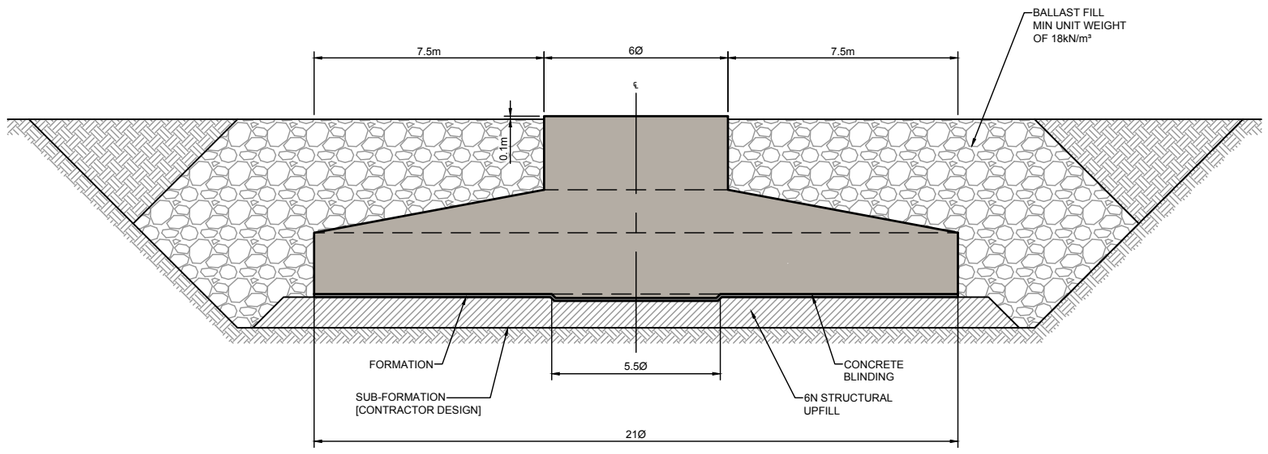
Figure 4.2
Indicative Turbine Dimensions

Gordonbush Extension Wind Farm
EIA Report



TYPICAL WTG HARDSTANDING

Scale: 1:1000 @ A3



A
-
SECTION THROUGH TURBINE FOUNDATION

Scale: 1:200

Notes

1. All dimensions are in metres (m) unless stated otherwise.
2. All dimensions are indicative.
3. Piled base option may be used dependent on site ground conditions.

Scale 1:200 @ A3

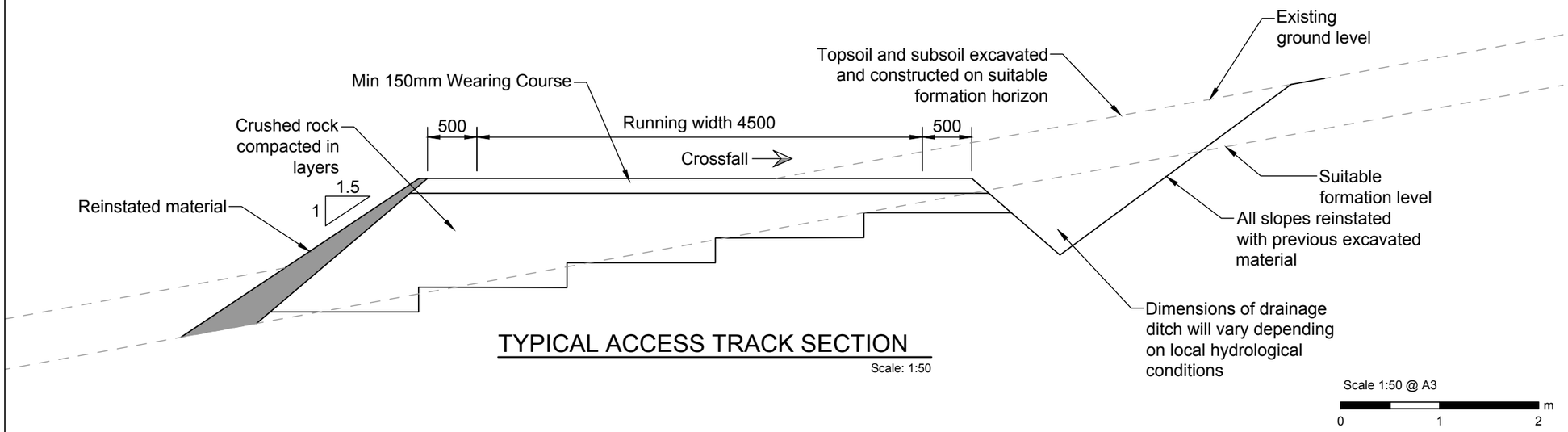
0 2 4 6 m

Scale 1:1000 @ A3

0 10 20 30 40 m

Figure 4.3
Typical WTG Foundation

Gordonbush Extension Wind Farm
EIA Report

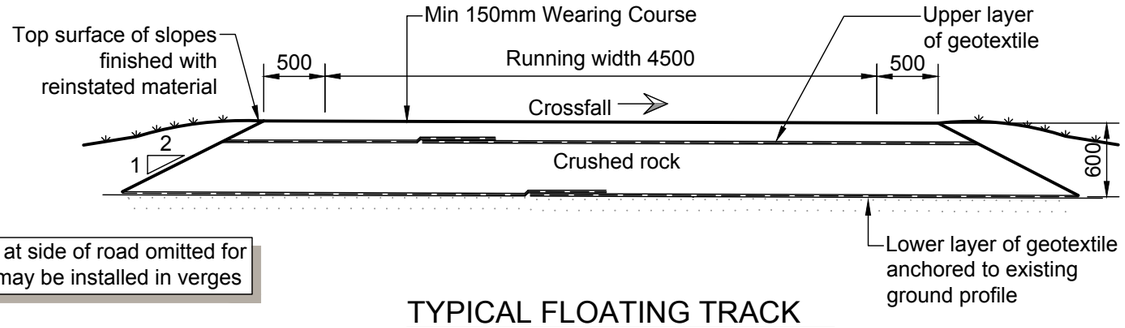


TYPICAL ACCESS TRACK SECTION

Scale: 1:50

Scale 1:50 @ A3

0 1 2 m



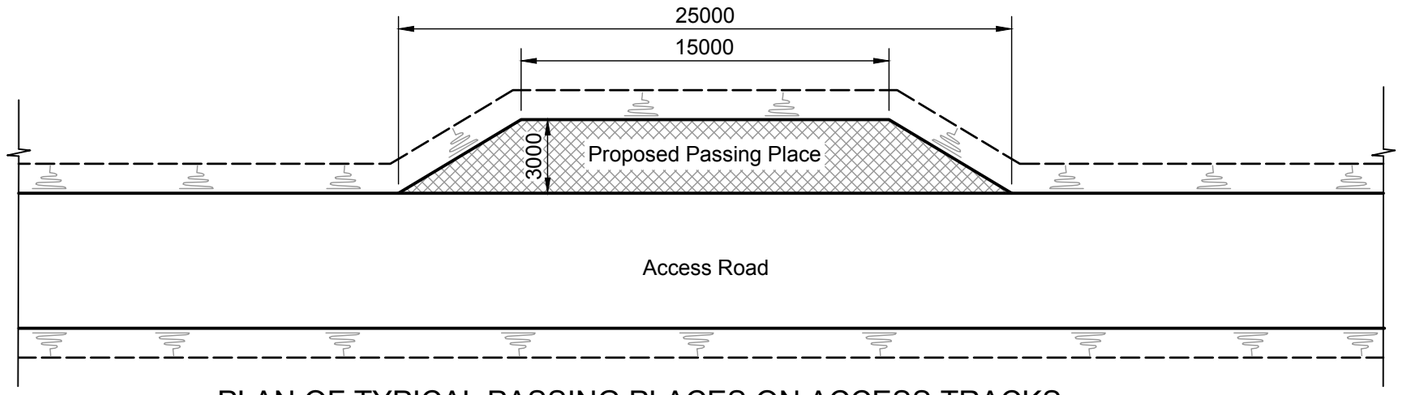
Cable trenches at side of road omitted for clarity. Cables may be installed in verges

TYPICAL FLOATING TRACK

Scale: 1:50

Scale 1:50 @ A3

0 1 2 m



PLAN OF TYPICAL PASSING PLACES ON ACCESS TRACKS

Scale: 1:250

Scale 1:250 @ A3

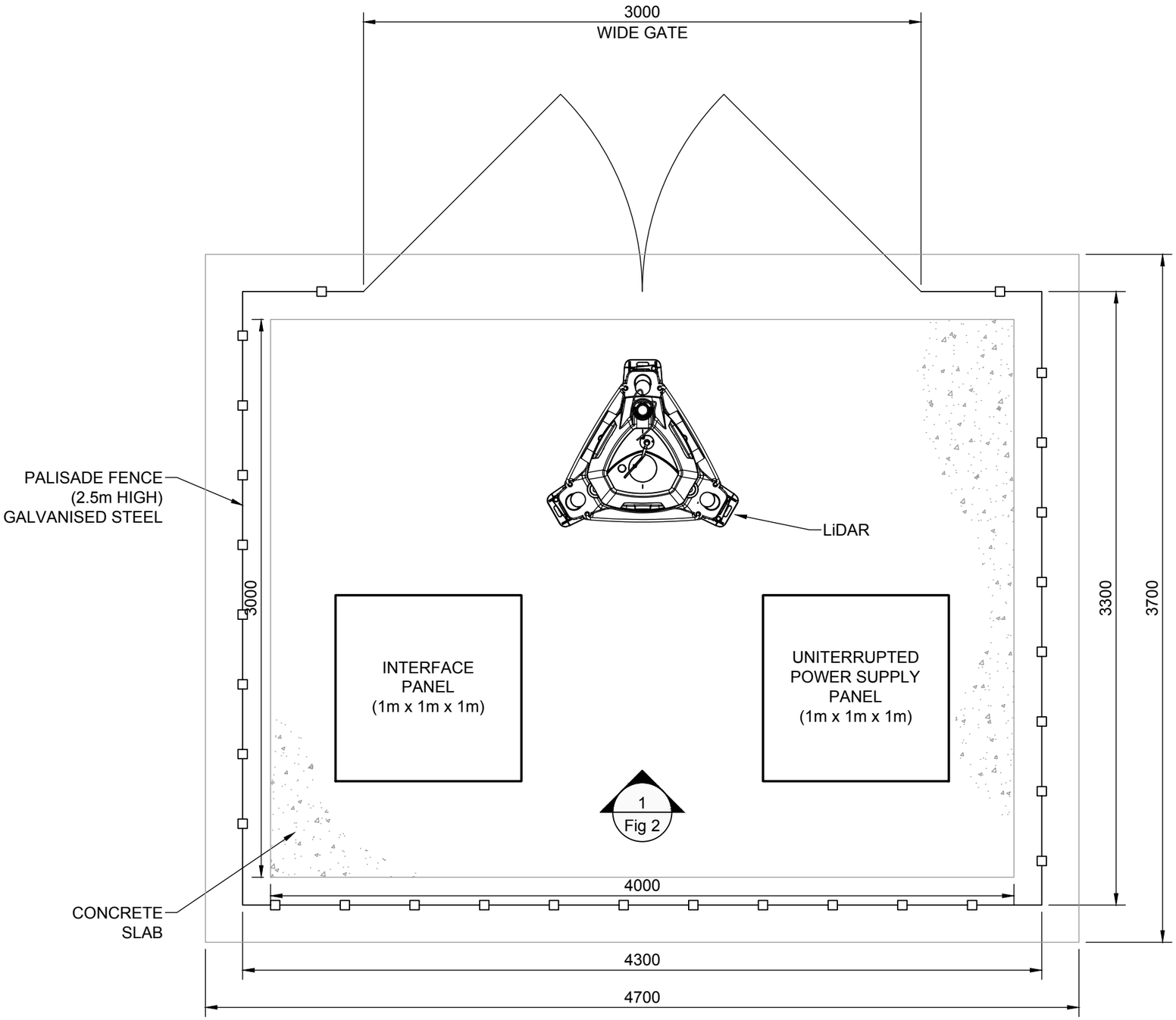
0 5 10 m

Notes

1. All dimensions are in millimetres (mm) unless stated otherwise.

Figure 4.4
Typical Access Track Details

Gordonbush Extension Wind Farm
EIA Report

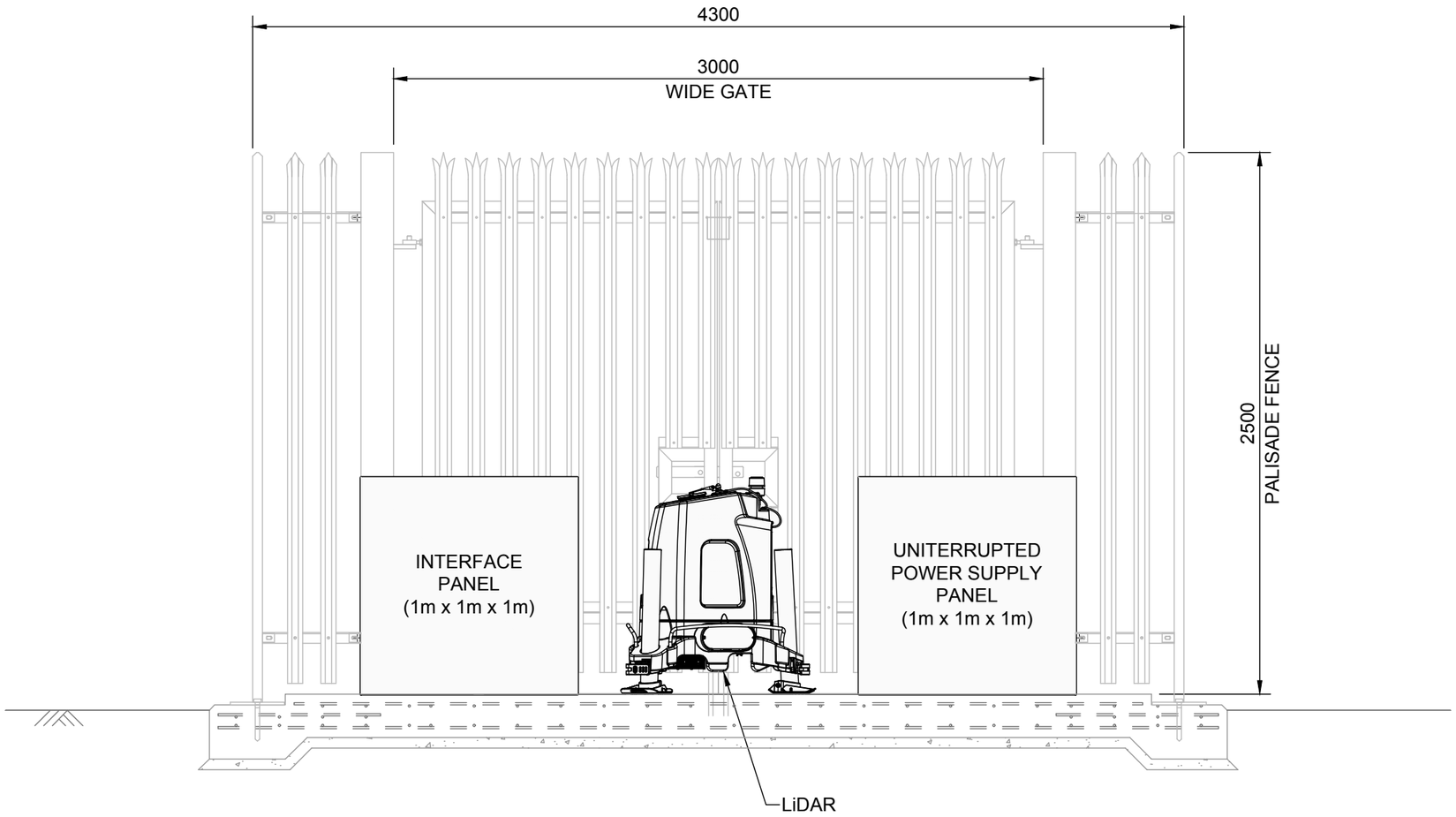


Notes

1. All dimensions are in millimetres (mm) unless stated otherwise.

Figure 4.5a
Proposed LiDAR Unit Plan

Gordonbush Extension Wind Farm
EIA Report



1
Fig 1

ELEVATION

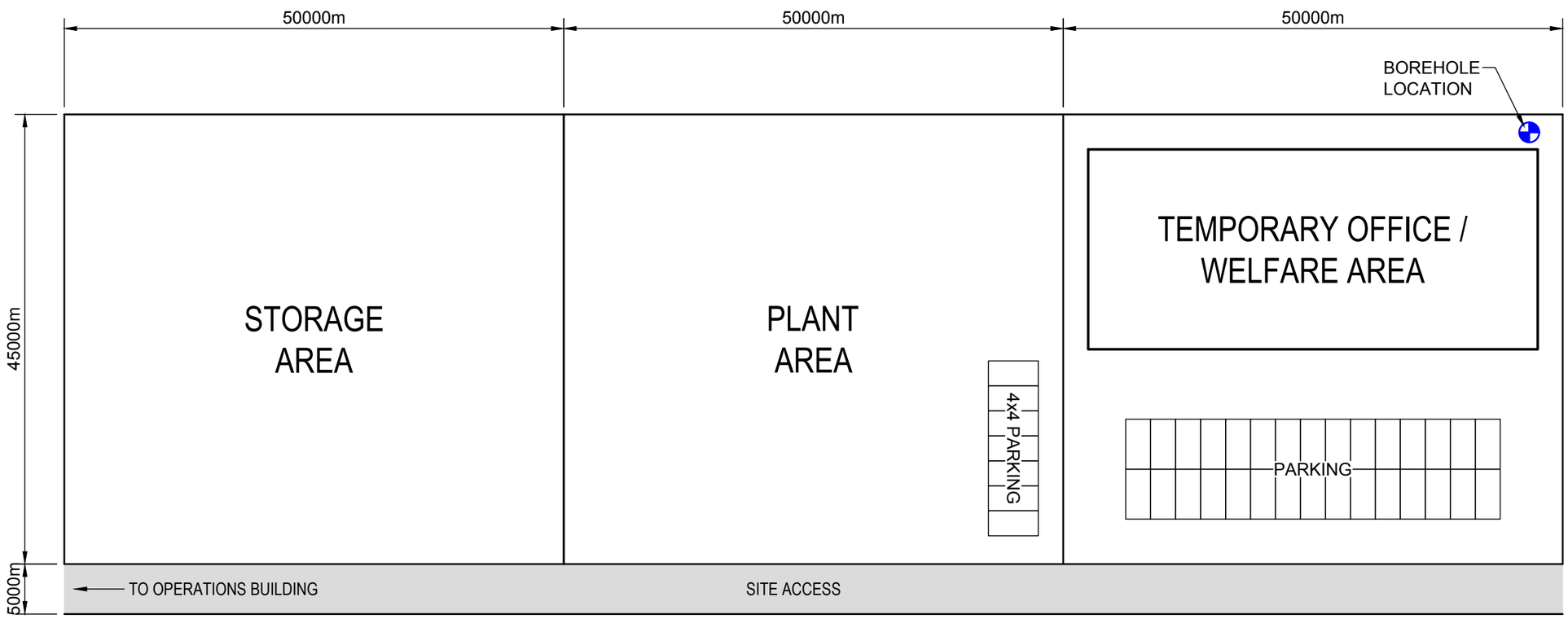
Scale: 1:25

Notes

1. All dimensions are in millimetres (mm) unless stated otherwise.

Figure 4.5b
Proposed LiDAR Unit Elevation

Gordonbush Extension Wind Farm
EIA Report



Notes

1. All dimensions are in metres (m) unless stated otherwise.
2. Layout is indicative only.

Scale 1:500 @ A3

0 5 10 15 20 m

Figure 4.6
Construction Compound

Gordonbush Extension Wind Farm
EIA Report