Chapter 18: Schedule of Commitments

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18 Schedule of Commitments

18.1 Introduction

- 18.1.1 The Schedule of Commitments provides:
 - a summary of mitigation and compensation measures (Table 18.1) that have been proposed throughout the Environmental Impact Assessment (EIA) Report to prevent, reduce or offset the effects of the Proposed Development on the environment; and
 - further enhancement measures (Table 18.2) committed to as part of the Proposed Development as outlined in the Nature Enhancement Management Plan (Technical Appendix 8.6). These measures do not form part of the mitigation, but provide enhancement in addition to the measures outlined in Table 18.1.
- 18.1.2 Mitigation measures applied during the construction and operation of the Proposed Development, have been integral to the design evolution of the Proposed Development as described in Chapter 2 and Chapter 3. A series of environmental and technical constraint design reviews were undertaken to minimise potential significant environmental impacts prior to finalising the design of the Proposed Development.
- 18.1.3 Mitigation measures which may need to be implemented during decommissioning would be agreed with the key stakeholders at that time via a Decommissioning Environmental Management Plan (DEMP). The detail of this is likely to be similar to the Construction Environmental Management Plan (CEMP) in line with best practice measures at that time. The DEMP is not included in Table 18.1.



18.2 Mitigation Commitments

18.2.1 Table 18.1 sets out the schedule of mitigation committed to by the Applicant for the Proposed Development.

Table 18.1 - Schedule of Mitigation Commitments

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 2: Site Description	Construction (Micrositing)	Micrositing
and Design Evolution		A 100 m micrositing tolerance of turbines and all other infrastructure will be applied to the Proposed Development (so long as infrastructure does not move into the watercourse buffers or other environmental constraints identified on-site). Within this distance, any changes within 50 m from the consented locations will be subject to approval of the Ecological Cleark of Works (ECoW), any changes within 50-100 m of the consented locations will require approval of SBC in consultation with NatureScot, Scottish Environment Protection Agency (SEPA) and Historic Environment Scotland (HES).
		 This would be secured by a suitably worded planning condition.
Chapter 3: Description of the	Pre-and during Construction	Construction Environment Management Plan
Development	(CEMP)	 Good practice measures and mitigation will be implemented during construction to avoid and reduce impacts. An outline CEMP is provided as Technical Appendix 3.1. In acknowledgement that the outline CEMP is a live document that will evolve throughout the construction phase of the Proposed Development, only the principles of the outline CEMP are outlined at this stage.
		 The final CEMP will be secured through a suitably worded planning condition.
	Construction	Abnormal Load Access
	(Access)	 The proposed abnormal load route has been assessed and verified, identifying where permanent or temporary road upgrades will be required (Technical Appendix 12.1, Annex A). Any road improvements will be undertaken within the identified route.
		 The abnormal load route will be set out in the final Construction Traffic Management Plan (CTMP) (an outline of which is within Chapter 12) and would be secured by a suitably worded planning condition.
	Construction (SWMP) Construction	Site Waste Management Plan
		 A Site Waste Management Plan (SWMP) forms part of the CEMP and will be developed for implementation during construction, as discussed in the outline CEMP (Technical Appendix 3.1). This will outline the materials, requirements and waste generation during construction and how the Applicant intends to consider the management of these aspects.
		 The SWMP will be included within the CEMP.
		Borrow Pit Search Areas
	(Borrow Pits)	 Three borrow pit search areas have been identified on-site, to provide aggregate to construct the Proposed Development. It is assumed that 100 % of aggregate for track formations and subbases can be sourced from the proposed on-site borrow pits. A Borrow Pit Assessment is included as Technical Appendix 3.2 and measures for management of these will be included in the outline CEMP.
	Construction	Construction Hours
	(Construction Hours)	The construction working hours for the Proposed Development will be 07:00 to 19:00 Monday to Friday and 07:00 to 13:00 on Saturdays. It should be noted that, out of necessity, some activities, for example abnormal load deliveries, concrete deliveries during foundation pours and also the lifting of the turbine components, may occur outside the specified hours stated. These activities will not be undertaken without prior approval from SBC. The Principal Contractor will keep local residents informed of



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 3: Description of the Development		the proposed working schedule, where appropriate, including the times and duration of any abnormally noisy activity that may cause concern, all under the terms of a traffic management plan as set out in Chapter 12 of the EIA Report.
		 Construction working hours will be set out in the construction traffic management plan (CTMP) and would be secured by a suitably worded planning condition.
	Construction	Good Practice Measures
	(Good Practice Measures)	 During the construction phase of the Proposed Development, effects will be managed in line with the Construction (Design and Management) Regulations 2015 taking into account the adoption of good practice (including Pollution Prevention Guidelines (PPGs) and replacement Guidance for Pollution Prevention (GPPs), supported by an ECoW.
		 Reference to good practice and standards, guidelines and legislation are included in the outline CEMP at Technical Appendix 3.1.
	Post Construction	Access Tracks
	(Access Tracks)	 The tracks will be left in place following construction to provide access for maintenance, repairs and eventual decommissioning of the Proposed Development. At the end of the construction period the edges of all new tracks will be restored using materials stripped from excavations.
		 This will be secured within the outline CEMP.
Chapter 7: Landscape and	Operation	Aviation Lighting
Visual	(Lighting)	 Only three of the seven proposed turbines will be visibly lit: Turbine 1, Turbine 3, and Turbine 6; each having medium intensity 2000 candela (cd) steady red lights on the the hubs (plus back-up light), that can be dimmed to 10 % when visibility exceeds 5 km. No tower lights are proposed.
		 Agreed mitigation includes the reduction of intensity of the lights during conditions of clearer visibility, such that the lights will only operate at full intensity of 2000 cd when visibility is less than 5 km; at other times they will be at 10 %, i.e. 200 cd. Meteorological data for the local area suggests that the 2000 cd lights will be at 2000 cd for 2 % of the time and at 200 cd for 98 % of the time when cloud-base is above hub height.
		 The lights used will be designed to emit a horizontal beam of light with reduced upward and downward spill of light, such that the brightness of the light emitted is decreased for viewers close to the turbines viewing the lights from below.
Chapter 8: Ecology	Pre, during and post Construction (FMP)	Fish Monitoring Plan
		 A fish monitoring plan will be implemented to record pre-, during and post- construction fish populations in watercourses on and adjoining the site, in consultation with statutory consultees.
		 The aim of the monitoring plan will be to review and where necessary, update baseline conditions prior to construction works commencing and to continue throughout the construction and operational phase to confirm that the mitigation measures with respect to fish populations, water quality, sedimentation and maintenance of potential fish passages are performing.
		 The monitoring plan would also include details of checks of the habitat mitigation (peatland compensation) and habitat enhancemment measures, and details of response and remediation measures in the event mitigation/enhancement measures are found not to be performing.
		- The fish monitoring plan will be implemented through the outline CEMP and a suitably worded planning condition.
	Pre-Construction	Pre-construction Surveys
	(Surveys)	 Pre-construction surveys for protected terrestrial mammals including otter, water vole, badger, pine marten, and red squirrel will be undertaken, within a defined period prior to the commencement of construction works. This will cover all areas within 250 m of the Proposed Development infrastructure and associated working areas.



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 8: Ecology		 Pre-construction surveys would be implemented via a suitably worded planning condition.
	During Construction	Good Practice Measures
	(Good Practice Measures)	 Good practice measures to protect retained habitats during the construction works will be implemented, including the sensitive demarcation of working areas, to be overseen by an ECoW.
		 This will be secured within the outline CEMP.
	During Construction	ECoW
	(ECoW)	 A suitably qualified ECoW will be employed for the duration of the construction and reinstatement periods, to ensure ecological interests are safeguarded, although this may not necessarily be a full-time role throughout.
		 This will be secured within the outline CEMP.
	During Operation	Precautionary Mitigation
	(Wind Turbines and Bats)	 Precautionary mitigation in the form of pitching the blades out of the wind ("feathering") to reduce rotation speeds below 2 rpm while idling, as detailed in Joint Agencies Guidance (2021) will be implemented. The reduction in speed resulting from feathering compared with normal idling may reduce bat fatality rates by up to 50 % (Joint Agencies Guidance, 2021). Feathering will therefore be implemented using automated using SCADA data for the lifetime of the Proposed Development.
		 This would be implemented via a suitably worded planning condition.
	Post Construction/ Operation (Peatland)	Peatland Compensation
		 A total of 10.04 ha of peatland (and M19a and M25) on-site has been identified for restoration as compensation for the loss of priority peatland as a result of the Proposed Development. Enhancement measures are referenced separately in Table 18.2.
		 This compensation would be secured via a suitably worded planning condition.
Chapter 9: Ornithology	Pre-Construction (Birds)	Construction Breeding Bird Protection Plan
		 Prior to the commencement of construction activities, a Construction Breeding Bird Protection Plan (CBBPP) will be prepared and submitted for agreement in consultation with SBC and NatureScot.
		The CBBPP will be informed by a pre-commencement breeding bird survey to establish the contemporary status and distribution of Schedule 1 breeding birds (and black grouse) within the site and within 500 m of any potentially disturbing activities. This will be done in the first available breeding season following receipt of consent and will be updated should construction activities not commence within three years of the survey date, and, in the absence of any existing sufficient adequate information for the site.
		 The CBBPP will detail any additional measures required on account of findings from the pre-commencement breeding bird survey, to ensure the protection of breeding birds over the course of construction works during the breeding season, updated to reflect best available species guidance applicable at the time.
		The CBBPP will also include information into discouraging species including hen harrier, black grouse, and short-eared owl from using key-holed areas created for the Proposed Development, and these areas should be managed in accordance with NatureScot guidance (SNH, 2016c). Measures will include sward management wherein areas which are not subject to restocking, within 500 m of the proposed turbines, being kept at a short sward height (≤30 cm) and tall vegetation like heather, rush and willow being cut back to avoid potential nest sites developing, and forest planting which encourages a dense more resilient tree stock to establish the forestry canopy quickly.
		 The CBBPP would be implemented via a suitably worded planning condition.



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 9: Ornithology	Pre-Construction	Pre-Construction Surveys
	(Surveys)	 Site clearance activities (including forestry works), where commenced during the core breeding bird season (01 March 2022 to 31 August 2022, inclusive), will be subject to a pre-clearance survey by a competent ornithologist to identify any active wild bird nests. Should any active nests be found, works will only proceed under the advice of the appointed ornithologist. Work exclusion buffers around identified nest sites will be implemented where necessary in accordance with best available species guidance applicable at the time and/or as agreed in consultation with NatureScot.
		 Measures to safeguard any roosting hen harriers during the non-breeding season will be implemented, if any are located during pre-construction surveys, in accordance with additional protection afforded to the species listed on Schedule 1A of the Wildlife and Countryside Act 1981 (as amended).
		 Prior to commencement of works, a suitably experienced ornithologist will undertake checks for roosting harriers in suitable areas of habitat up to 750 m from active construction areas (in accordance with maximum documented disturbance distance; Goodship and Furness, 2022). In the event that, roosting hen harriers are present, works will only proceed under the advice of the appointed ornithologist and following a disturbance risk assessment.
		 The pre-construction surveys would be implemented via a suitably worded planning condition.
	During Construction	ECoW
	(ECoW)	 A suitably qualified ECoW will be employed for the duration of the construction and reinstatement periods, to ensure ornithological interests are safeguarded, although this may not necessarily be a full-time role throughout the construction period.
		 The role of the ECoW will be set out in the CEMP.
Chapter 10: Geology,	Pre and during Construction and Operation (Watercourses)	Buffer to Watercourses
Hydrology, Hydrogeology and Soils		 In accordance with wind farm construction best practice guidelines and SEPA consultation advice, a 50 m buffer has been applied to watercourses (shown on OS 1:25,000 mapping) and any proposed construction activities or infrastructure has been located outside of this buffer. Any changes within 50 m from the consented locations would be subject to approval of the ECoW, any changes within 50-100 m of the consented locations will require approval of SBC in consultation with NatureScot and SEPA.
		 This will be implemented via the CEMP.
	Pre-and during Construction	Peat
	(Peat)	 In undertaking the assessment of potential effects from the Proposed Development, good practice measures are assumed to be embedded mitigation. As appropriate, these mitigation measures will be outlined within the CEMP or by an appropriately worded condition post determination, as required.
		Good Practice Methods - Peat Safeguarding and Management
		 The peat depth probing data has been used to accurately determine the volume of peat which will be disturbed by the Proposed Development. This data has been used to prepare a site-specific PMP (Technical Appendix 10.2) which details the volume of acrotelmic and catotelmic peat which will be disturbed and how this will be safeguarded and re-used on site.
		 As shown in the PLHRA (Technical Appendix 10.1) and the PMP (Technical Appendix 10.2), measures have been proposed to ensure the stability of peat and carbon rich soils and that peat and soils that will be disturbed by the Proposed Development can be safeguarded and beneficially re-used on site.
		Good Practice Measures Peat Management
		 A detailed review of the distribution and depth of peat at the site is contained in the PMP (Technical Appendix 10.2). The site design has largely avoided areas of deep peat and where peat will be encountered by the Proposed Development it can be readily managed and accommodated within the site layout with no significant environmental impact. No surplus peat will be



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 10: Geology, Hydrology, Hydrogeology	Pre-and during Construction (Peat)	generated, and the volumes of peat/peaty soil generated from the proposed excavations will be used to reinstate track verges, turbine bases, crane hardstandings and restoration of on-site borrow pits.
and Soils		Good Practice Measures Peat Landslide Hazard
		 The PLHRA (Technical Appendix 10.1), confirms, regarding peat stability, that there are very few areas of peat instability risk across the Proposed Development and the hazard impact assessment concludes that, with the employment of appropriate good practice mitigation measures, all of the areas of peat instability can be considered as an insignificant risk.
		 A Design and Geotechnical Risk Register would be compiled to include risks relating to peat instability, as this would be beneficial to both the developer and the Principal Contractor in identifying potential risks that may be involved during construction.
		 Good construction practice and methodologies to prevent peat instability within areas that contain peat deposits are identified in the PHLRA (Technical Appendix 10.1). These include:
		 measures to ensure a well-maintained drainage system, to include the identification and demarcation of zones of sensitive drainage or hydrology in areas of construction;
		 careful micrositing of turbine bases, crane hardstandings and access track alignments to minimise effects on the prevailing surface and sub-surface hydrology;
		 raising peat stability awareness for construction staff by incorporating the issue into the site induction (e.g. peat instability indicators and good practice);
		 introducing a 'Peat Hazard Emergency Plan' to provide instructions for site staff in the event of a peat slide or discovery of peat instability indicators;
		 developing methodologies to ensure that degradation and erosion of exposed peat deposits does not occur as the break-up of the peat top mat has significant implications for the morphology, and thus hydrology, of the peat (e.g. minimisation of off- track plant movements within areas of peat);
		 developing robust drainage systems that will require minimal maintenance; and
		o developing drainage systems that will not create areas of concentrated flow or cause over/under-saturation of peat habitats.
		 Notwithstanding any of the above good construction practices and methodologies, detailed design and construction practices would need to consider the particular ground conditions and the specific works at each location throughout the construction period. An experienced and qualified engineering geologist/geotechnical engineer would be appointed as a supervisor, to provide advice during the setting out, micrositing and construction phases of the proposed development.
	Pre-and during Construction	Pollution Risk and Surface Run-off
	and Operation (Water)	 Good practice measures would be applied in relation to pollution risk, and management of surface run-off rates and volumes. This would form part of the final CEMP to be implemented for the Proposed Development.
		General Measures
		 Prior to construction, a site-specific drainage plan would be produced.
		 Measures would be included in the final CEMP for dealing with pollution / sedimentation / flood risk incidents and would be developed prior to construction. This will be adhered to should any incident occur, reducing the effect as far as practicable.
		 The final CEMP would contain details on the location of spill kits, will identify 'hotspots' where pollution may be more likely to originate from, provide details to site personnel on how to identify the source of any spill and state procedures to be adopted in the case of a spill event. A specialist spill response contractor would be identified to deal with any major environmental incidents.



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 10: Geology, Hydrology, Hydrogeology		 A wet weather protocol would be developed. This would detail the procedures to be adopted by all staff during periods of heavy rainfall. Toolbox talks would be given to engineering / construction / supervising personnel.
and Soils		 Roles would be assigned to different engineering / construction / supervising personnel and the inspection and maintenance regimes of sediment and run-off control measures would be adopted during these periods. In extreme cases, the above protocol would dictate that work on-site may have to be temporarily suspended until weather/ground conditions allow.
		Environmental Clerk of Works (EnvCoW)
		To ensure all reasonable precautions are taken to avoid negative effects on the water environment, a suitably qualified EnvCoW would be appointed prior to the commencement of construction to advise the Applicant and the Principal Contractor on all ecological and hydrological matters. The EnvCoW will be required to be present on-site during the construction phase and will carry out monitoring of works and briefings with regards to any ecological and hydrological sensitivities on the site to the relevant staff of the Principal Contractor and subcontractors.
		 With respect to the water environment, the EnvCoW will also have responsibility to ensure water flow paths and quality to water dependant habitat are sustained.
		Water Quality Monitoring
		 Water quality monitoring during the construction phase would be undertaken for surface water catchments that drain from the Proposed Development to ensure that none of the tributaries of the main channels are carrying pollutants or suspended solids. Monitoring would be carried out at a specified frequency (depending upon the construction phase) on these catchments.
		Monitoring would commence prior to construction and continue throughout the construction phase and immediately post construction. Monitoring would be used to allow a rapid response to any pollution incident as well as assess the efficacy of good practice or remedial measures. Monitoring frequency would increase during the construction phase if remedial measures to improve water quality were implemented. Detailed water quality monitoring plans would be developed during detailed design stage of the project. The monitoring programme would be secured by a pre-development planning condition to be agreed with statutory consultees. It is also proposed that the spring that serves PWS05, as discussed in Technical Appendix 10.4, is included as part of the monitoring programme.
		 The performance of the good practice measures would be kept under constant review by the water monitoring schedule, based on a comparison of data taken during construction with a baseline data set, sampled prior to the construction period.
		Pollution Risk
	Pre-and during Construction and Operation (Water)	 Refuelling will take place at least 50 m from watercourses and would not occur when there is risk that oil from a spill could directly enter the water environment;
		 Foul water generated on-site would be managed in accordance with best practice and be drained to a sealed tank and routinely removed from the site;
		- A vehicle management plan and speed limit would be strictly enforced on-site to minimise the potential for accidents to occur;
		 Drip trays would be placed under vehicles which could potentially leak fuel/oils when parked;
		 Areas would be designated for washout of vehicles which are a minimum distance of 50 m from a watercourse;
		 Washout water would also be stored in the washout area before being treated and disposed of;
		- If any water is contaminated with silt or chemicals, run-off would not enter a watercourse directly or indirectly without treatment;
		 Water would be prevented as far as possible, from entering excavations;
		 Procedures would be adhered to for storage of fuels and other potentially contaminative materials in line with the CAR to minimise the potential for accidental spillage; and

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
		 A plan for dealing with spillage incidents would be designed prior to construction, and this would be adhered to should any incident occur, reducing the effect as far as practicable.
		Site investigation (e.g. trial pits and/or boreholes) would be undertaken prior to any construction works where excavation will be required to establish the wind farm and it will inform detailed design and construction methods to ensure pollution risk is further considered prior to construction.
		These methods will be specified in the final CEMP.
Chapter 10: Geology,	Pre-and during Construction	Erosion and Sedimentation
Hydrology, Hydrogeology and Soils	(Water)	 All stockpiled materials would be located outwith a 50 m buffer from watercourses, including on up-gradient sides of tracks and battered to limit instability and erosion;
		 Stockpiled material would either be seeded or appropriately covered, minimising the area of exposed bare ground;
		 Monitoring of stockpiles/excavation areas during rainfall events;
		 Water would be prevented as far as possible, from entering excavations through the use of appropriate cut-off drainage;
		 Where this is not possible, water that enters excavations would pass through a number of silt/sediment traps to remove silt prior to discharge into the surrounding drainage system. Detailed assessment of ground conditions would be required to identify locations where settlement lagoons will be feasible;
		 Clean and dirty water on-site would be separated, and dirty water will be filtered before discharge and entering the stream network;
		- If the material is stockpiled on a slope, silt fences would be located at the toe of the slope to reduce sediment transport;
		 The amount of ground exposed, and time period during which it is exposed, would be kept to a minimum and appropriate drainage would be in place to prevent surface water entering deep excavations;
		 A design of drainage systems and associated measures to minimise sedimentation into natural watercourses would be developed - this may include silt traps, check dams and/or diffuse drainage;
		 Silt/sediment traps, single size aggregate, geotextiles or straw bales would be used to filter any coarse material and prevent increased levels of sediment. Further to this, activities involving the movement or use of fine sediment would avoid periods of heavy rainfall where possible; and
		 Construction personnel and the Principal Contractor would carry out regular visual inspections of watercourses to check for suspended solids.
	Pre-and during Construction	Fluvial Flood Risk
	(Flooding)	Sustainable Drainage Systems (SuDS) shall be incorporated as part of the Proposed Development.
		SuDS techniques aim to mimic pre-development run-off conditions and balance or throttle flows to the rate of run-off that might have been experienced at site prior to development. Good practice in relation to the management of surface water run-off rates and volumes and reducing these to mitigate localised fluvial flood risk would include the following:
		 drainage systems would be designed to ensure that any sediment, pollutants or foreign materials which may cause blockages are removed before water is discharged into a watercourse;
		 on-site drainage would be subject to routine checks to ensure that there is no build-up of sediment or foreign materials which may reduce the efficiency of the original drainage design causing localised flooding;
		 appropriate drainage would attenuate run-off rates and reduce run-off volumes to ensure minimal effect upon flood risk;



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 10: Geology, Hydrology, Hydrogeology		 where necessary, check dams would be used within cable trenches in order to prevent trenches developing into preferential flow pathways and trenches shall be backfilled with retained excavated material; and
and Soils		 as per good practice for pollution and sediment management, prior to construction, section specific drainage plans would be developed and construction personnel made familiar with the implementation of these.
	Pre-and during Construction (Water)	Water Abstractions Any water abstraction (for example, for dust suppression during construction) would only be made with authorisation from SEPA and in accordance with the CAR. Good practice that will be followed in addition to the CAR includes:
		 water use would be planned so as to minimise abstraction volumes;
		 water would be re-used where possible;
		 abstraction volumes would be recorded; and
		 abstraction rates would be controlled to prevent significant water depletion in a source.
	Pre-and during Construction	Watercourse Crossings
	and Operation (Watercourses)	 One existing watercourse crossing may need to be upgraded (as detailed within Table 10.10 of Chapter 10 and shown on Figure 10.1).
		 Should the watercourse crossing be upgraded, the crossing would be designed to pass the 200-yr flood event plus an allowance for climate change and the design and construction details would be agreed with SEPA and SBC as part of the final CEMP.Two new small watercourse crossings will be required for the proposed recreational heritage trail.
		The water crossing requirements for the recreational heritage trail will be assessed in advance of construction commencing and any required authorisations will be gained from SEPA in accordance with the CAR prior to works commencing. It is expected that all works will be able to be completed under appropriate General Binding Rules set out in the CAR.
		 All proposed crossing locations and methodologies would be reviewed and approved by the EnvCoW, prior to any works being undertaken.
	Pre-and during Construction	Battery Energy Storage System (BESS)
	and Operation (Fire)	 The proposed BESS would be sited within the Scottish Power Energy Networks (SPEN) construction compound, following installation of the wind turbines. This is discussed further in Chapter 3.
		The BESS compound would be constructed with an impermeable lining and with stormwater storage provided above this. This will include an automatic fire suppression system with a control point or shut off valve so that in the unlikely event of a leak or pollution event occurring it can be retained within this area. Contained pollution or firewater would be pumped to a tanker and removed from the site for treatment and disposal at a suitable licenced facility.
		 The risk of contamination to the water environment will be detailed in the final CEMP and confirmation of management of firewater will be agreed during the detailed design stage. It is expected this would be secured by a suitable planning condition post determination.
Chapter 11: Cultural	Construction	Protection of Archaeological Sites
Heritage and Archaeology	(Archaeology)	There are three Scheduled Monuments (Assets 1-3) recorded within the site The Proposed Development has been designed to avoid any direct impact upon these remains. To mitigate against the potential for accidental incursions into the Scheduled Monument areas by plant movement during construction, a buffer of 50 m will be placed around the extent of each of the Scheduled Monuments and the monuments and their buffers will be fenced off under archaeological supervision prior to construction. This fencing will be maintained throughout the construction (and also the decommissioning period to ensure the preservation of these assets.



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 11: Cultural Heritage and Archaeology		There are four non-designated heritage assets (Assets 10, 18, 21, 203) which extend within 50 m of the Proposed Development infrastructure. These assets will be fenced off under archaeological supervision in advance of construction works to prevent accidental damage by plant movement and forestry activities. Assets 16 and 17 are also located close to an area proposed for woodland restocking planting (Figure 15.5) and as such will also be fenced off to ensure their protection.
		 Fencing around archaeological monuments will be maintained throughout the construction, restocking and decommissioning periods to prevent accidental damage by plant. The fences will be removed during operation as it is assumed that all vehicle traffic will be restricted to access tracks and thus the risk of damage to archaeological monuments will be very low.
		 A toolbox talk will be provided to the construction team prior to the commencement of construction to ensure that any unexpected archaeological remains encountered, are reported and recorded correctly.
		 This mitigation would be secured by a suitable planning condition.
	Pre-and during Construction	Archaeological Works
	and Operation (Archaeology)	 Details of mitigation will be agreed with the Archaeology Officer at SBC through a Written Scheme of Investigation (WSI). This would be secured via an appropriately worded planning condition.
		 It is anticipated, due to the proximity of the compound, BESS and substation to Asset 19, that any ground-breaking works for these will require archaeological investigation. This will take the form of a watching brief during the ground works required for construction. In the case that significant archaeological remains were identified, further archaeological mitigation such as excavation and post-excavation analysis may be required.
		The proposed Turbines 3, 4 and 5 are also located in previously undisturbed locations beyond the extent of forestry plantations and infrastructure. These proposed turbine locations are all above 400 m AOD and therefore there is a relatively lower potential for archaeological remains to be present. An archaeological watching brief will be undertaken during construction works in these previously undisturbed areas remains. In the case that significant archaeological remains were identified further archaeological mitigation such as excavation and post-excavation analysis may be required.
		 The potential for archaeological remains within previously afforested areas not close to known assets is considered low but a toolbox talk will be provided to the construction team prior to the commencement of construction to ensure that any unexpected archaeological remains encountered, are reported and recorded correctly.
		Turbine 3, Turbine 4 and Turbine 5 are also located in previously undisturbed locations beyond the extent of forestry plantations and infrastructure. These proposed turbine locations are all above 400 m AOD and therefore there is a relatively lower potential for archaeological remains to be present. A toolbox talk will be provided to the construction team prior to the commencement of construction in this area to ensure that any unexpected archaeological remains encountered, are reported and recorded correctly. It is possible that additional archaeological works may also be requested and may include a programme of trial trenching prior to construction work or a watching brief or programme of monitoring during construction works. In the case that significant archaeological remains were identified further archaeological mitigation such as excavation and post-excavation analysis may be required.
		 Any archaeological fieldwork commissioned in order to mitigate direct effects will result in the production and dissemination of a professional archive, which will add to the understanding of the cultural heritage of the site.
Chapter 12: Site Access,	c, Construction (CTMP)	Construction Traffic Management Plan (CTMP)
Traffic and Transport		A CTMP will be in place to actively mitigate effects, and an outline CTMP has been prepared and is included in Chapter 12.
		The following measures will be implemented during the construction phase through the CTMP:
		 agree Abnormal Indivisible Loads (AIL) route modifications and improvements with SBC and other relevant stakeholders. Works which would be required to facilitate turbine deliveries are outlined in the respective delivery route options Route Survey Report (Technical Appendix 12.1 Annex A);



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 12: Site Access, Traffic and Transport	Construction (CTMP)	 where possible, the detailed design process would minimise the volume of material to be imported to site to help reduce Heavy Goods Vehicle (HGV) numbers;
		- a Staff Travel Plan, including transport modes to and from the worksite (including pick up and drop off times);
		 a Transport Management Plan for AIL deliveries;
		- all materials delivery lorries (dry materials) should be sheeted to reduce dust and stop spillage on public roads;
		 specific training and disciplinary measures should be established to ensure the highest standards are maintained to prevent construction vehicles from carrying mud and debris onto the carriageway;
		 wheel cleaning facilities may be established at the site entrance, depending on the views of SBC;
		 normal site working hours will be limited to between 07:00 and 19:00 (Monday to Friday) and 07:00 and 13:00 (Saturday), though component delivery and turbine erection may take place outside these hours;
		 appropriate traffic management measures would be put in place on the A701, to avoid conflict with general traffic, subject to the agreement of SBC. Typical measures would include HGV turning and crossing signs and/or banksmen at the site access and warning signs;
		 provide construction updates on the project website and or a newsletter to be distributed to residents within an agreed distance of the site;
		 adoption of voluntary reduced speed limits at locations to be agreed with SBC; and
		 all drivers would be required to attend an induction to include:
		 a toolbox talk safety briefing;
		 the need for appropriate care and speed control;
		o a briefing on driver speed reduction agreements (to slow site traffic at sensitive locations through the villages); and
		 identification of the required access routes and the controls to ensure no departure from these routes.
		Roads authorities may request that an agreement to cover the cost of abnormal wear and tear on its road network is made. Video footage of the pre-construction phase condition of the abnormal loads access route and the construction vehicles route would be recorded to provide a baseline of the condition of the road prior to any construction work commencing. This baseline would provide evidence of any change in the road condition during the construction phase. Any necessary repairs will be coordinated with the appropriate roads team. Any damage caused by traffic associated with the Proposed Development during the construction period, that would be hazardous to public traffic, would be repaired immediately. Any damage to road infrastructure caused directly by construction traffic would be made good, and street furniture that is removed on a temporary basis would be fully reinstated.
		There would be a regular road review, and any debris and mud would be removed from the carriageway using an on-site road sweeper to ensure road safety for all road users.
		Before the AILs traverse the routes from the Port of Entry, the following tasks would be undertaken to ensure load and road user safety:
		 ensure any vegetation which may foul the loads is trimmed back to allow passage;
		 confirm there are no roadworks or closures that could affect the passage of the loads;
		- check no new or diverted underground services on the proposed route are at risk from the abnormal loads; and
		 confirm the police are satisfied with the proposed movement strategy.

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
Chapter 12: Site Access,	Construction	Abnormal Load Transport Management Plan (TMP)
Traffic and Transport	(CTMP)	 All AIL deliveries would be undertaken at appropriate times (to be discussed and agreed with the road authorities and police) with the aim to minimise the effect on the local road network. It is likely that the AIL convoys would travel in the early morning periods before peak times while general construction traffic will generally avoid the morning and evening peak periods.
		 Advance warning signs would be installed on the approaches to the affected road network. The location and numbers of signs would be agreed post consent and would form part of the Traffic Management Proposal for the project.
		The AIL Transport Management Plan would also include:
		 procedures for liaising with the emergency services to ensure that police, fire and ambulance vehicles are not impeded by the loads. This is normally undertaken by informing the emergency services of delivery times and dates and agreeing communication protocols and lay over areas to allow overtaking;
		- a diary of proposed delivery movements to liaise with the communities to avoid key dates such as local events;
		 a protocol for working with local businesses to ensure the construction traffic does not interfere with deliveries or normal business traffic; and
		 proposals to establish a construction liaison group to ensure the smooth management of the project/public interface with the Applicant, the construction contractors, the local community, and if appropriate, the police forming the committee. This committee will form a means of communicating and updating on forthcoming activities and dealing with any potential issues arising.
Chapter 13: Noise	Operation (Wind Turbines)	Turbine Model Trailing Edge Serrations
		 In terms of operational noise generated by the Proposed Development, the turbine modelled includes for trailing edge serrations which have the effect of reducing source noise levels as compared with turbine blades which do not have such modifications. Turbines of the size and scale considered for the Proposed Development typically include this feature as a matter of course, and it is expected that the actual turbine for potential installation at the site will have similar blade modifications.
		Nevertheless, noise associated with the operation of the Proposed Development will be required to meet any consented planning condition noise limits in this respect, regardless of the specific design of turbine. Planning condition noise limits will be imposed on the Proposed Development, which take into account the other wind energy developments, such that overall noise levels will not breach the overall requirements of ETSU-R-97. Satisfactory control of cumulative noise immission levels would be achieved through enforcement of the individual consent limits for each of the individual wind farms.
	Construction (Noise)	Good Practice Measures Construction Noise To reduce the potential effects of construction noise, the following good practice measures are proposed and where appropriate are to be included in the outline CEMP:
		Those activities that may give rise to audible noise at the surrounding properties and heavy goods vehicle deliveries to the site will be limited to the hours 07:00 to 19:00 Monday to Friday and 07:00 to 13:00 on Saturdays. Turbine deliveries will only take place outside these times with the prior consent of SBC and the Police. Those activities that are unlikely to give rise to noise audible at the site boundary will continue outside of the stated hours.
		 All construction activities will adhere to good practice as set out in BS 5228-1.
		 All equipment will be maintained in good working order and any associated noise attenuation such as engine casing and exhaust silencers will remain fitted at all times.
		- Where flexibility exists, activities will be separated from residential neighbours by the maximum possible distances.
		- A site management regime will be developed to control the movement of vehicles to and from the Proposed Development site.

OLIVER FOREST WIND FARM

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
		 Construction plant capable of generating significant noise and vibration levels will be operated in a manner to restrict the duration of the higher magnitude levels.
	Construction	Borrow Pits If blasting is used at the proposed borrow pits, the following additional measures will also be implemented through the outline CEMP:
		 blasting should take place under controlled conditions with the agreement of SBC;
		 good practices during the setting and detonation of charge should be followed, in order to control air overpressure, in line with guidance set out in PAN50 and BS 5228-2; and
		 vibration levels at the nearest sensitive properties are best controlled through on-site testing processes, with progressively increased charges, carried out in consultation with SBC. Ground vibration caused by blasting operations at the nearest sensitive locations, should not exceed 6 mm/s for 95 % of all blasts measured over any 6-month period, and no individual blast exceeding a PPV of 12 mm/s.
Chapter 14: Socio- economics, Recreation, Tourism and Land Use	Construction (AMP)	Access Management Plan A Preliminary Access Management Plan (PAMP) is provided as Technical Appendix 14.1. The PAMP will be developed into an AMP to be delivered via an appropriately worded planning condition.
		During construction, access restrictions and limitations would be kept to a minimum, although it is acknowledged that due to the nature of works needing to upgrade the existing forestry tracks, when those works are taking place no public access would be possible. Public access through the site will only be through the eastern gate away from the majority of the construction works and only when construction of the recreational heritage trail and car parking spaces is not happening.
		During construction, measures would be required to ensure that the public understand that restricted access to the forestry tracks would be in place throughout the works. Plans for temporary access management, including traffic management and access restrictions, would be communicated with the public prior to taking place, where feasible.
		The final version of the AMP would include detailed information on how access would be managed by the Applicant. Mitigation measures would need to be implemented prior to, or during construction of the Proposed Development and in outline such measures would include:
		 details of the provision of signage and other information alerting the public to construction works;
		 sufficient temporary advance signage would be erected at key access locations both within and outwith the Proposed Development working area prior to the start of construction, to inform all access users of the location and timing of the construction activities;
		 signage (compliant with Traffic Signs Manual Chapter 8 (Dft et. al 2009)) would also be employed on-site, for both site personnel and the public, to clearly define the boundary of the works and any crossing points where they coincide with areas accessible to the public;
		 details of any fencing or barriers to be provided during the construction period to ensure seperation from construction traffic, including the type of fencing and gate access to be used, where access is not precluded on the basis of health and safety. Access would be maintained for the landowner and forestry management team but locked for members of the public where applicable;
		 the Principal Contractor will ensure that speed limits are always adhered to by their drivers and associated subcontractors. Advisory speed limit signage will also be installed on approaches to areas where path users may interact with construction traffic. Signage will be installed on the site exits that makes drivers aware of local speed limits and reminding drivers of the potential presence of pedestrians and cyclists in the area. This will also be emphasised in the weekly tool box talks;

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
		 details of a communication and liaison strategy (as outlined in Technical Appendix 3.1) to advise local communities and other users of construction works and vehicle movements prior to any construction starting on-site and communication would be maintained on a regular basis until construction is complete and the Proposed Development is operational. This would be aimed at walkers, runners and cyclists;
		 further consultation with stakeholders including SBC's Access Officer. These meetings would be closely aligned with the commencement of construction of the Proposed Development;
		 the community liaison strategy could be designed not just to establish processes to keep the community informed, but also to review incidents that have occurred and how these have been / should be resolved and to discuss the forthcoming programme of work; and
		 The final AMP, together with the final CEMP and CTMP (see Technical Appendices: 3.1 and Chapter 12 for outlines), would be used by the Principal Contractor to ensure that appropriate access and environmental management is implemented throughout the construction phase of the Proposed Development.
		 The final AMP would set out measures to ensure that recreational users of the site are informed of the construction work and directed into safe areas where there would be no conflict with plant and machinery.
		 Compliance with the CEMP is the key control measure required during construction to ensure mitigation is appropriately addressed. It documents the principles and processes to be followed to implement all relevant agreed environmental mitigation.
		The personnel who would implement, monitor and respond to the CEMP and final AMP would be the Applicant's construction team and the Principal Contractor. The Principal Contractor would be required to prepare a series of method statements in accordance with the CEMP. These method statements would detail how the contractor intends to implement the mitigation set out in the CEMP and would be integrated into detailed Construction Method Statements. The method statements and construction works would be overseen by the Ecological Clerk of Works (ECoW) to ensure compliance.
		 The Applicant and Principal Contractor would also ensure that during construction of the Proposed Development, the requirements of both the Land Reform Act (Scotland) 2003 (as amended) and the Scottish Outdoor Access Code are met or are exceeded.
Chapter 14: Socio- economics, Recreation, Tourism and Land Use	Operation & Maintenance	 During the operational phase of the Proposed Development, all access restrictions and limitations would be removed, and general recreational public access rights under the right to roam, would be restored. The final version of the AMP (to be agreed) would include detailed information about how access would be managed by the Applicant during the lifespan of the Proposed Development as well as the following aspects:
		details of a communications campaign linked with the end of the construction period; and
		 details of the proposed recreational heritage trail which will include details of the path surfacing (which will be partly multifunctional in usage), car parking facilities, signage and interpretation boards including map orientation.
		 In order to control vehicular access to the site, and prevent joy riding or off-road rallying, it would be a necessity to install locked, access barrier gates to restrict non-Proposed Development / forestry related vehicle users, but would still allow for non-vehicular access, as per the Land Reform (Scotland) Act 2003.
		 As part of the development of the final AMP, a maintenance plan and programme of works would be prepared for the lifetime of the Proposed Development. It is anticipated that route inspections and reasonable maintenance would be implemented by the Applicant.

Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
		 It is anticipated that maintenance would be carried out on a yearly basis following path and infrastructure inspection. Reasonable maintenance of the recreational heritage trail would be considered and agreed with the Applicant and all other access stakeholders.
Chapter 15: Forestry	Construction (Forestry)	Forestry
		 The Proposed Development includes the felling of an area of up to 50.4 ha of mixed plantation forest and replacement planting within the site of approximately 26.1 ha.
		 Additional compensatory planting of 24.3 ha will be required.
		- The on-site and off-site compensatory replanting would be secured via a suitablty worded planning condtion.
Chapter 16: Aviation	Operation	NATS En Route (NERL) Radars
	(Aviation)	 The Applicant is in dialogue with NERL who has confirmed that mitigation is possible using the capabilities of the Indra Lanza radar. The implementation of this mitigation solution will be progressed with NERL.
	Operation	MOD Physical Obstruction Concern
	(Aviation)	 The Proposed Development will be fitted with MOD accredited aviation safety lighting in accordance with the Air Navigation Order 2016. The Proposed Development will also be fitted with Infra-Red lighting to the MOD specification.
		- CAA approval for the reduced lighting scheme (visibly lighting only Turbines 1, 3 and 6) has been received.
Chapter 17: Other	Operation (Shadow Flicker)	Wind Farm Shadow Flicker Protocol
Considerations		 Although shadow flicker levels are likely to fall to below the 30-hour per annum significance threshold based on the average sunshine hours expected at the site (with the exception of Hopehead), the Applicant is nonetheless committed to promptly investigating any complaints of shadow flicker and taking appropriate action as required.
		The Applicant proposes that prior to the operation of the first turbine, a Wind Farm Shadow Flicker Protocol would be submitted to and approved by SBC. This would set out the protocol to be followed should a shadow flicker complaint be received from a receptor within the study area, and potential mitigation measures. Should a complaint be received these mitigation measures would include using the turbine's shadow flicker control module to be programmed to minimise impacts at the receptor(s). Operation of the Proposed Development would be undertaken in accordance with the Wind Farm Shadow Flicker Protocol.
		 If a complaint is made regarding shadow flicker, an investigation would take place which considers the weather conditions at the time of the alleged shadow flicker, to determine which turbines were, or were not, creating the effect and the extent of the shadow flicker created. If the investigation confirms a loss of residential amenity at any location, the technical mitigation measures built into these turbines would be activated.
		Shadow flicker control modules, consisting of light sensors and specialised software, will be installed on the turbines that can prevent operation during periods when shadow flicker can be experienced at nearby properties. The installation of a programmable shadow flicker module will allow the control of turbines in order to eliminate shadow flicker. The correct operation of the installed shadow flicker control measures will ensure that there will be no impact from shadow flicker. The operation and performance of the shadow flicker control measures will be monitored on an ongoing basis.
		The shadow flicker control module consists of bespoke software, a clock, a timer, a switch, a wind direction sensor and a light sensor. The module can control a specific turbine (or turbines) which will be programmed to shut down on specific dates at specific times when the sun is bright enough, there is sufficient wind to rotate the blades and the wind direction is such that nuisance shadow flicker could occur.
		 It is proposed that a planning condition would provide an appropriate form of mitigation to ensure that any complaints would be investigated within a reasonable timescale and that the rectification of any substantiated shadow flicker issue would be implemented promptly and effectively.



Chapter	Type of Mitigation or Compensation	Mitigation or Compensation Measure
	Operation (Shadow Flicker)	
	Construction and Operation	Major Accidents and Disasters: Public Safety and Access
	(Safety and Access)	 Site security and access during the construction period will be governed under Health and Safety at Work Act 1974 and associated legislation. Public access along the existing forestry access road would remain in place as far as possible during construction (subject to temporary health and safety restrictions during certain construction activities) and would re-open to the public fully once construction of the Proposed Development is complete.
	Construction	Health and Safety
	(Health and Safety)	 The construction works for the Proposed Development would be undertaken in accordance with primary health and safety legislation, including the Health and Safety at Work Act 1974 and the Construction (Design and Management) (CDM) Regulations 2015 which will include a requirement to produce emergency procedures in a Construction Phase (Health & Safety) Plan in accordance with the Regulations.
	Operation	Extreme Weather
	(Health and Safety)	 As far as the risk of turbine failure during high winds is concerned, the turbines will cut-out and automatically stop as a safety precaution in wind speeds over 25 m/s.
		Wind turbines can be susceptible to lightning strike due to their height and appropriate measures are taken into account in the design of turbines to conduct lightning strikes down to earth and minimise the risk of damage to turbines. Occasionally however, lightning can strike and damage a wind turbine blade. Modern wind turbine blades are manufactured from a glass-fibre or wood-epoxy composite in a mould, such that the reinforcement runs predominantly along the length of the blade. This means that blades will usually stay attached to the turbine if damaged by lightning and in all cases turbines will automatically shut down if damaged by lightning.
		Ice build-up on blade surfaces occurs in cold weather conditions. Wind turbines can continue to operate with a very thin accumulation of snow or ice, but will shut down automatically as soon as there is a sufficient build up to cause aerodynamic or physical imbalance of the rotor assembly. Potential icing conditions affecting turbines can be expected two to seven days per year (light icing) in Scotland (WECO, 1999). In the event that a turbine is shut down during conditions suitable for ice formation, there is potential for ice throw to occur after start-up. There are monitoring systems and protocols in place to ensure that turbines that have been stationary during icing conditions are re-started in a controlled manner to ensure public safety. The risk to public safety is considered to be very low due to the few likely occurrences of these conditions along with the particular circumstances that can cause ice throw.



18.3 Enhancement Commitments

18.3.1 Table 18.2 sets out the schedule of enhancement committed to by the Applicant through the outline NEMP (Technical Appendix 8.6) and implementation of the recreational heritage trail through the AMP (Technical Appendix 14.1). A final NEMP and AMP would be agreed through an appropriately worded planning condition.

Type of Enhancement	Enhancement Measure
Operation	Enhance Peatland Habitats within Glenmuck Bog
(Outline Nature Enhancement Plan)	 Up to 3.62 ha peatland will be restored in order to enhance habitat within the site. This area could potentially be increased further within suitable areas which are felled for the Proposed Development.
	 Measures to be implemented, where possible, to improve the quality of the bog habitats within Glenmuck Bog:
	 blocking and infilling of the ditch within the bog;
	 managing deer numbers in Glenmuck Bog (likely through the use of exclusion fencing or increased culling, and should be agreed with stakeholders and the success of the measure reviewed as part of the monitoring);
	 control of Sitka spruce scrub that is encroaching on the bog habitats; and
	 bracken control within the eastern spur of Glenmuck Bog that follows the burn i the east.
	A programme of monitoring of the management measures will be undertaken to assess habitat condition of the Glenmuck Bog. The programme will include surveys prior to enhancement works, and then repeat surveys over the course of the Proposed Development's lifespan. The programme (including the frequency of surveys) will be agreed through consultation with NatureScot and the SBC. Survey results will be shared with NatureScot and the SBC to provide updated information for condition assessments of the non-statutory site.
	Enhance and Manage Grassland in the River Tweed Valley
	 Detailed habitat surveys will be undertaken within the grassland prior to the adoptior of specific management prescriptions. Depending on the results the following will be adopted:
	 If more detailed surveys show that the grassland is mostly clearly acid in character, management could involve reduction in grazing.
	 If more neutral in character, the field could be managed as hay meadows. This will include the following measures where practicable:
	 use of cut hay from donor area to increase diversity of seed bank; and
	 undertake a hay cut between mid-July and September, to allow late flowering species to seed.
	 The success of the grassland management will be monitored on a regular basis for a ongoing period during the operational phase of the Proposed Development. An initia trial period of up to five years from implementation is proposed, after which the effectiveness of the management in promoting increased invertebrate and ground- nesting bird diversity, will be re-assessed in consultation with SBC (and additional relevant stakeholders).
	Enhancement of Fisheries Habitats
	 Opportunities to enhance and/or create fish habitats, including fish cover, riparian planting and any opportunities for the removal of barriers to fish movement will be identified by a suitably competent and qualified ecologist, in consultation with the River Tweed Commission (RTC). Prescriptive measures for inclusion within the NEMP will then be agreed with SBC (and additional relevant stakeholders).
	Improve Opportunities for Nesting and Foraging Birds
	 Native-tree planting will be undertaken and as well as along riparian habitats along the edges of commercial forestry, to help 'soften' the effect of the commercial conifer on adjacent open habitats. The precise locations of the native planting will be the focus of on-site investigation to ensure the most suitable locality is chosen without compromising other key features such as deeper areas of peat and ground-nesting waders (as well as avoiding increased 'edge-effect').
	 The creation of linear habitat features like hedgerows and tree-lines, as well as improving the condition of existing hedgerows through in-filling, will provide opportunities for a variety of bird species. Hedge and tree species of local provenance (prioritising fruit-producing species) which will provide nesting and foraging resources for many bird species will be chosen.



	Enhance Habitats for Black Grouse
	 Tree planting (including riparian planting) has potential to benefit black grouse. Tree
Operation (Outline Nature Enhancement Plan)	The planting (including inplanting) that planting) has potentiat to back grouse. The planting to be prescribed will include both continuous and discontinuous shrub and tree dominated planting. Discontinuous areas of planting will ensure that extensive shading of existing food plants (e.g. grasses, heathers and bilberry (<i>Vaccininum myrtillus</i>), where present) for black grouse does not occur, with tree and shrub species planted selected for their preference by black grouse such as (amongst others) birch (<i>Betula</i> spp.), juniper (<i>Juniperus communis</i>), willow (<i>Salix</i> spp.), and rowan (<i>Sorbus aucuparia</i>). Such plant species will provide additional food sources for black grouse in the spring and winter, together with suitable cover from predation for both adults and broods.
	Provide more Opportunities for Nesting and/ or Roosting Species
	 Measures for improving and/ or creating opportunities for other nesting birds to be explored will comprise the installation of nest boxes, suitable for a range of species.
	 A bird nest box plan within the site boundary will be designed by a suitably competent and qualified ecologist for incorporation into the outline NEMP, with the number, type and location of boxes identified in consultation with relevant stakeholders and relevant to the species assemblage at the locality.
Operation	Recreation
(Recreational Heritage Trail)	 The Proposed Development would include a recreational heritage trail starting in the south-eastern part of the site and linking into the Proposed Development access tracks and wider forestry tracks, as set out on Figure 3.13.
	A stretch of wheelchair accessible path (approximately 1.2 m wide) (to allow for all abilities' access including wheelchairs and buggies) will be created at the start of the trail approximately 380 m in length, focusing on interpretation of the two Scheduled Monuments within the site, finishing just before the Hallow Burn. Two small single span wooden bridges will be installed over the Hallow Burn (and its tributary) and a new path (approximately 1.2 m wide) (not suitable for wheelchair use or buggies) will be created of locally sourced stone (approximately 620 m) leading to the Proposed Development access tracks to the west.
	 Interpretation boards would be provided at various points along the route to describe environmental features in and around the site focusing on those of heritage and ecological interest. Some examples of the information to be included are shown on Figure 3.13 as follows:
	 A map of the recreational heritage trail and provide information on the two Scheduled Monuments adjacent to the accessible path, cremation cemeteries and prehistoric burial practices in the local area.
	2. Provide information on the defence of the Tweed Valley in the prehistoric and later periods and wildlife of interest.
	3. Provide information on Prehistoric settlements in the Tweed Valley, focused on the Weird Law platform settlement.
	 Provide information on the Glenmuck Local Biodiversity Site, the formation of peat, why it's important and what the Applicant is doing on site to protect it.
	 Provide information on current uses of the site e.g. commercial forestry and electricity generation.
	6. Provide information on work the Applicant is doing for biodiversity enhancement.
	 The exact information to be provided is subject to agreement, and further interpretation panels could also be designed and installed at points of interest along the trail. These could be identified in cooperation with stakeholders and people with detailed local knowledge providing information on linkages to the wider area.
	 A Preliminary Access Management Plan (AMP) is provided as Technical Appendix 14.1. The trail will be implemented via the final AMP.
	Heritage
	 The trail would enable access to the two separate elements of the Scheduled Menzion Farmhouse enclosed cremation cemeteries (Asset 2) utilising, where possible, existing tracks.
	 The trail would avoid any direct impact on the extent of known heritage assets and placement of interpretative material will avoid adverse settings effects on the designated assets.
	The trail is proposed in recognition of the fact that physical and intellectual access to the cremation cemeteries are currently limited to a select few. To ensure that people benefit from heritage, an understanding and appreciation of its cultural significance must reach beyond specialist understanding to the wider public. The overriding aim of the heritage trail will be to reveal the cultural significance of the cremation cemeteries to non-experts and enable a better understanding of their placement within a valley rich in evidence for prehistoric activity.
	 Interpretation boards will be placed at the start of the trail within a small car park and also in the vicinity of the two Scheduled Monuments and other non-designated
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	heritage assets in the vicinity of the trail to provide further information about the assets to any visitors and also signpost to where further digital information about the assets can be found. Signposts or information regarding other prehistoric monuments in the Tweed Valley will also be included.
	The location and remains of Weird Law, platform settlement (Asset 3) will be identified as part of physical and/or digital dissemination associated with the heritage trail which will be designed to better explain the relationship between the settlement and other assets within the valley and therefore improve the way in which the asset is understood, appreciated and experienced in its setting.
	The trail would also provide links and information about other initiatives designed to improve access to heritage in the wider Tweed Valley such as that presented at the nearby Logan Iron Age Fort and hosted by the Tweedsmuir Community Company and the heritage aspects that will be developed as part of the Destination Tweed project currently being developed by the Tweed Forum.
	 The exact details of this enhancement will be developed in association with the the Archaeology Officer at the SBC and HES.
Operation (Heritage)	Additional enhancement which could be developed in association with the recreational heritage trail and as a consequence of archaeological works within the site may include a programme of community survey designed to better understand and map the upstanding remains at Weird Law and along the trail as well as providing professional, and/or amateur digital or/and physical visualisations of the modern or historic landscape.