

Technical Appendix 4.2: Outline Construction Environmental Management Plan

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Chapter 1

Introduction

Purpose of the Outline Construction Environmental Management Plan

1.1 The purpose of this Outline Construction Environmental Plan (OCEMP) is to provide details of the various site-specific environmental management measures that will be implemented to avoid, minimise or mitigate effects on the environment during construction of the Proposed Development. Its purpose is to provide assurance to third parties that:

- Good construction practices and site-specific mitigation measures will be adopted and maintained throughout construction of the Proposed Development;
- Agreed environmental performance criteria will be met;
- Procedures will be established for ensuring compliance with environmental legislation and statutory consents; and
- Good standards of monitoring and auditing environmental performance will be established throughout construction.

1.2 The environmental management measures included in this OCEMP are based on specialist knowledge of the Site conditions and environmental constraints (as identified through the environmental impact assessment (EIA) process), and are reflective of good practice and additional mitigation commitments made in the EIA Report which accompanies the planning application. This document should be read in conjunction with the EIA Report, specifically **Appendix 2.2: Schedule of Mitigation, Good Practice, Enhancement and Monitoring** in **Volume 4** of the EIA Report.

1.3 The Applicant or project owner will appoint a Principal Contractor to undertake the construction works. As part of the civil works contract, the Principal Contractor will have responsibility for preparing and implementing a detailed CEMP during construction. The detailed CEMP will include management measures and method statements with reference to relevant legislation, policy and good practice guidance. This document therefore provides a framework for the detailed CEMP, and has been prepared by LUC and associated topic specialists on behalf of Wind Power North Four Ltd (the 'Applicant'). The detailed CEMP will be prepared during the pre-construction period, and will be agreed with East Ayrshire Council (EAC) and other relevant stakeholders, and is expected to be secured by planning condition.

1.4 The detailed CEMP will set out the requirements for the management of environmental impacts associated with the construction phase of the project. It will include specific measures that will be taken to comply with the requirements and commitments set out in this OCEMP and planning conditions set by EAC, including general site arrangements and the control measures for each of the potential environmental effects such as noise, ecology, peat and water quality impacts alongside other related construction method statements.

1.5 The CEMP will likely contain the following management documents, which the Principal Contractor and their sub-contractors will be required to adhere to throughout the construction process:

- Pollution Prevention Plan (PPP);
- Emergency Response Plan (ERP);
- Surface Water Management Plan (SuWMP);
- Construction Method Statements (CMS);
- Site Waste Management Plan (SWMP);
- Construction Traffic Management Plan (CTMP) (also comprising Staff Travel Plan and Abnormal Load Delivery Plan) (following the principles set out in the draft CTMP presented in **Technical Appendix 11.1** in **Volume 4** of the EIA Report);
- Species Protection Plan (SPP) (following the draft included in **Technical Appendix 7.5: Outline Species Protection Plan** in **Volume 4** of the EIA Report);

- Peat Management Plan (PMP) (following the principles presented in **Technical Appendix 9.3: Outline Peat Management Plan** in **Volume 4** of the EIA Report).
- Bird Protection Plan (BPP) (following the details provided in **Chapter 8: Ornithology** in **Volume 2** of the EIA Report);
- Water Quality and Fish Monitoring Plan; and
- Site Restoration Plan.

1.6 The final CEMP will include the schedule of commitments made in EIA Report **Technical Appendix 2.2** in **Volume 4** of the EIA Report. The CEMP will also maintain a schedule of commitments required by specific planning conditions. These will form points against which compliance records will be kept.

Structure of Outline Construction Environmental Management Plan

1.7 The following structure has been adopted for this OCEMP:

- Section 1 – Introduction;
- Section 2 – Proposed Development;
- Section 3 – Roles and Responsibilities; and
- Section 4 – Management of Environmental Issues.

1.8 The Outline CEMP has been prepared using the following documents:

- Environmental Good Practice Site Guide, 5th Edition (C811), CIRIA (2023);
- The principles of ISO 14001:2026 the international standard for Environmental Management Systems;
- The Institute of Environmental Management and Assessment¹ Practitioner Volume 12: Environmental Management Plans (December 2008);
- Good practice during wind farm construction, NatureScot (Version: July 2024);
- Control of Pollution Act 1974;
- The Environmental Authorisations (Scotland) Regulations 2018;
- The Environmental Liability (Scotland) Amendment Regulations 2015; and
- Construction (Design & Management) Regulations 2015.

Change Control and Monitoring

1.9 The detailed CEMP will be a live document that the Applicant or project owner and contractor will review and update, where required, prior to and during construction. The CEMP will be updated to account for changes or updates to legislation and good practice methods throughout the construction phase. The CEMP will also be amended to incorporate information obtained during detailed ground investigations which will be undertaken post-consent and prior to construction activities.

1.10 Where changes are required then the contractor's change control process will be followed to record documentation revision requests and their final approval status. The revised CEMP and the changes will be communicated to all personnel on Site.

1.11 An appropriately qualified ECoW will be appointed with responsibility for monitoring compliance with the requirements of the CEMP and other environmental obligations (including procedures, record keeping, monitoring and auditing).

¹ Now known as the Institute of Sustainability and Environmental Professionals (ISEP).

Chapter 2

Proposed Development

Project Background

2.1 Wind Power North Four Ltd ('the Applicant') is submitting a planning application to East Ayrshire Council (EAC) under the Town and Country Planning (Scotland) Act 1997 as amended ('the Act') to construct and operate Glenouther Wind Farm ('the Proposed Development') for a period of 35 years. The Proposed Development will include up to five wind turbines. A full description of the Proposed Development can be found in **Section 2** of this document.

Location

2.2 The Proposed Development location ('the Site') is located on Glenouther Moor approximately 4.5 kilometres (km) north-east of the closest settlement, Stewarton. The Site occupies an area of approximately 205 hectares (ha) and forms part of the full land holding (Glenouther Forest, the 'blue line' boundary on **Figure 1.1** in Volume 3a of the EIA Report) comprising a total area of approximately 378 7ha and over which the Applicant has control). Corsehouse Reservoir is directly to the north and the M77 motorway is directly to the east. The Site itself is located wholly within the East Ayrshire Council (EAC) administrative area, although abuts the East Renfrewshire Council administrative boundary to the north.

Proposed Development

2.3 The Proposed Development is a wind farm comprising up to five wind turbines with associated infrastructure. A summary of the main components is provided below:

- Up to five wind turbines each with a maximum blade tip height of 200 metres (m) and an indicative combined site output capacity of 36 megawatts (MW).
- Medium intensity (2000 candela (cd)) steady red aviation warning lights installed on the hubs (nacelles) of Turbines (T)1, T3, T4 and T5 which will be reduced to 200 cd in clear weather conditions, and infra-red (non-visible) warning lights on all turbines²;
- Foundations supporting each turbine comprising a mixture of piled (for T1, T2 and T3) and excavated (for T4 and T5) construction methods;
- Permanent crane hardstandings at each turbine location comprising a mixture of piled (for T1, T2 and T3) and excavated (for T4 and T5) construction methods;
- A site access point which links to an existing track which runs alongside the M77 motorway to the unclassified road at Floak Bridge.
- Approximately 4.1 kilometres (km) of new onsite access track comprising approximately 1.3 km of excavated track and approximately 2.8 km of floated track.
- Up to 12 new crossings, which include five minor watercourses and five artificial drains not shown on the OS 1:25K mapping but mapped in the field, and two watercourses shown on OS 1:25K mapping data;
- A control building and substation;
- A network of underground cables to connect turbines to the substation; and
- A Biodiversity Enhancement Management Plan (BEMP).

² The lighting scheme has been approved by the Civil Aviation Authority (CAA) through consultation (see **Technical Appendix 4.3: Aviation Assessment** of the EIA Report);

2.4 In addition to the above permanent components associated with the operation of the Proposed Development, construction will also require the following components/works:

- A temporary construction compound including car parking;
- Approximately 0.3 km of temporary floated track north-east of the substation which will be used as a dedicated passing place for construction vehicles as they enter and exit the Site.
- Temporary auxiliary hardstandings at each turbine (comprising a mixture of excavated, piled and floated construction methods);
- The removal of approximately 105 hectares (ha) of forestry to physically construct the Proposed Development, support wider woodland management and enable forest-to-bog restoration³.

Construction Programme

2.5 It is estimated that the construction phase for the Proposed Development (including advance forestry works) will take approximately 20 months, subject to compliance with good practice construction timescales in relation to breeding birds which would be secured by the Bird Protection Plan. Where possible, construction activities will be carried out concurrently to reduce the overall length of the construction programme. Construction works will comprise of the following phases and activities:

- **Phase 1: Enabling Works and Initial Site Establishment (Months 1 to 12):**
 - Mobilisation & enabling works (including forestry felling); and
 - Creation of new onsite access tracks, watercourse crossings, and turning heads.
- **Phase 2: Main Site Construction (Months 11 -18):**
 - Construction of turbine foundations at each turbine location;
 - Construction of permanent and temporary crane hardstandings/laydown areas at each turbine location;
 - Excavation of trenches and laying of electrical cables; and
 - Construction of substation and control building.
- **Phase 3: Logistics and Erection of Wind Turbines (Months 17-19):**
 - Delivery and erection of wind turbines.
- **Phase 4: Testing, Commissioning, and Site Restoration (Months 19-20):**
 - Testing and commissioning of equipment including turbines, control building, substation; and
 - Commissioning of and site restoration.

2.6 Table 2.1 shows these activities across the 20 month programme.

³ As detailed in **Technical Appendix 4.1: Wind Farm Forestry Plan** of the EIA Report which also includes long-term forestry works associated with the operation of the Proposed Development.

Table 2.1: Indicative Construction Programme

Construction Task	Construction Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Mobilisation & enabling works (including forestry felling)																				
Onsite access tracks																				
Wind turbine foundations																				
Crane hardstandings																				
Cabling and electrical Works																				
Substation and control building																				
Wind turbine delivery and erection																				
Commissioning and restoration																				

Working Hours

2.7 In general, working hours for construction of the Proposed Development will be limited to the following hours:

- Monday to Friday: 07.00 - 19.00 hours;
- Saturday: 07:00 – 13:00 hours; and
- Sundays and public holidays: no working unless agreed in advance with EAC.

2.8 Exceptions to the proposed working hours will be made for foundation pours and turbine erection, emergency works, dust suppression and testing of plant and equipment where necessary. Concrete pouring for an individual turbine foundation must take place continuously and so activity will only cease when the pour has been completed. Turbine erection can only occur during periods of low wind speeds and so to minimise the construction programme, lifting operations may need to be scheduled outwith the above hours. In addition, it could be necessary to complete a particular lifting operation to ensure the structure is left in a safe condition.

2.9 Depending on the findings of pre-construction breeding bird surveys, there may be a requirement to restrict construction activities within 500 m of the active nest locations of rare and protected species. This would be controlled via a planning condition and through the implementation of the Bird Protection Plan.

Site Security and Lighting

2.10 Access to the Site will be prohibited during construction for health and safety purposes and this will be monitored through CCTV and/or site personnel. Depending on the time of the year and the stage of the construction programme, temporary lighting may be required at the temporary construction compound and substation/control building compound during working hours. It is

not proposed that the lighting will be left on outside working hours unless time critical lifting or concrete pours are required. A temporary lighting scheme for the construction period of the Proposed Development can be controlled through a planning condition.

Consent and Permissions Required

2.11 The Proposed Development will require consents and exemptions from various regulatory bodies in advance of construction activities, such as those relating to works in the vicinity of the water environment as governed by the Environmental Authorisations (Scotland) Regulations 2018. Any additional requirements (such as planning conditions) will be met prior to works beginning on site, where required.

2.12 Copies of the legal consents, permits and licenses obtained will be held in the Site Environmental File.

Environmental Setting and Key Constraints

2.13 The environmental constraints of relevance to the OCEMP are summarised in **Table 2.1** below. For more information, please see the relevant EIA Report topic chapters.

Table 2.2: Environmental Constraints

Environmental Topic	Description
Landscape and Visual Amenity	The Site is surrounded by residential properties (38 known properties within 2 km in all directions), the closest of which is Marramead; approximately 245 m east of the nearest construction works, albeit this property is separated from the works by the A77 and M77 motorway. Further details are provided in Chapter 5: Landscape and Visual Impact Assessment in Volume 2 of the EIA Report.
Ecology (non-avian)	Ecological surveys have identified: ■ Annex 1 habitats (blanket bog and wet modified bog – M18, M19, M20 and M25), priority peatland habitats, Scottish Biodiversity List (SBL) habitats, ■ Evidence of protected species: - High collision risk bat species including common pipistrelle, soprano pipistrelle, Nyctalus spp. and Nathusius' pipistrelle. - Evidence of otter along Swinzie Burn; - Atlantic salmon were recorded at two electrofishing sites (IASB3 and IASB5, south-west of the Site), indicating that Swinzie Burn supports a population of Atlantic salmon albeit in low numbers downstream of the Site. Trout were recorded at four out of the five electrofishing sites on Swinzie Burn, with a higher distribution recorded at ISAB3, IASB5 and IASB4 (all south-west of the Site). Further details are provided in Chapter 7: Ecology and Technical in Volume 2 of the EIA Report and Appendix 7.1: National Vegetation Classification and Habitats Survey Report, Technical Appendix 7.2: Protected Species Survey Report, Technical Appendix 7.3: Bat Survey Report and Technical Appendix 7.4: Fish Survey Report in Volume 4 of the EIA Report.
Ornithology	Evidence of breeding protected species within ornithology survey area. Information is restricted to Technical Appendix 8.3: Confidential Ornithology in Volume 5 of the EIA Report.

Environmental Topic	Description
Hydrology, Hydrogeology, Geology and Peat	The Swinzie Burn is the main watercourse at the Site and flows from east to west along the southern boundary of the Site. The Burn drains a catchment of ~ 8.2 km² where it joins the Annick Water ~ 4 km west of the Site. All of the Proposed Development infrastructure lies within the Swinzie Burn catchment. The Swinzie Burn is culverted underneath the M77 motorway east of the Site. The Proposed Development includes 12 new watercourse crossings; this includes crossing five minor watercourses and five artificial drains not shown on the OS 1:25K mapping but mapped in the field and two watercourses shown on OS 1:50K mapping data. The SEPA future flood maps indicate that the main fluvial flood risk to the Site is the flood risk area associated with the Swinzie Burn, which lies along the southern Site boundary and encroaches into the south western section of the Site. There is no infrastructure proposed within the Swinzie Burn flood risk areas, except for a small section of floated access track between T4 and T5. The SEPA flood maps predict very small areas of the Site are at risk of pluvial (surface water) flooding and flooding from small watercourses. Nine private water supply (PWS) source locations supplying 11 properties were determined through review of returned postal questionnaires, council data, SEPA abstraction data and prior data collected as part of the 2015 Glenouther Renewable Energy Park ES (AECOM, 2015). Five other properties, which are potentially supplied by PWS but for which the source locations are unknown, have been identified. None of the PWS source locations are considered to be hydrologically connected to the Site infrastructure. The Site contains Class 1 peatland (corresponding to the near natural blanket bog (M18) in the north-western part of the Site) as identified by the NatureScot Carbon and Peatland (2016) Classification. The majority of the rest of the Site is Class 5. Peat surveys have been undertaken on the Site following Scottish Government (2017) peat survey guidance. Peat survey results are as follows: ■ 3.0% of probes were recorded as having a depth of less than or equal to 30 cm. These probes are not classified as peat. ■ 6.2% of probes were recorded as having a depth of between 30 – 50 cm. These probes are classified as organo-mineral soils and not formally considered to be peat. ■ 24.8% of probes were recorded as having a peat depth of between 50 – 100 cm. ■ 65.9% of the probes were recorded as having a peat depth of over 100 cm. ■ The deepest probe depth recorded on the Site was 820 cm. ■ The Site has an average Site-wide depth of 2.9 m. There are no geological or hydrological SSSI or SAC within or downstream of the Site that could be affected by the Proposed Development. Further details are provided in Chapter 9: Hydrology, Hydrogeology, Geology and Peat in Volume 2 of the EIA Report and Technical Appendix 9.2: Peat Survey Report in Volume 4 of the EIA Report.

Environmental Topic	Description
Noise and Vibration	Nearby residents could be subject to noise and dust generated by construction works and construction traffic during the 20 month construction period.

Chapter 3

Responsibilities and Management Planning

Responsibilities

3.1 To ensure that environmental standards are maintained throughout the construction works, it is necessary that every person working on the Site is aware of their responsibilities. Specific roles and responsibilities have been set out below. The Principal Contractor will have overall responsibility for implementation of the CEMP and will ensure that the provisions and commitments set out within the CEMP, including compliance audits, licences and associated mitigation measures that apply to the site work are adhered to.

3.2 Various organisations are involved in the safe and environmentally responsible delivery of this scheme. The following key roles have been identified within these organisations:

Applicant (or Project Owner)

3.3 The Applicant or project owner at the point of construction shall provide general oversight and strategic direction to the Proposed Development. Applicant or project owner representation on Site relevant to the implementation of the CEMP will include an ECoW to ensure delivery of the commitments set out in the CEMP. The ECoW will liaise with the contractor on their roles and responsibilities as described below. The Applicant or project owner shall retain ownership of the CEMP throughout construction.

Principal Contractor

3.4 The Principal Contractor shall execute the work and will have direct responsibility for implementing the CEMP. The Principal Contractor will ensure that all personnel under their supervision, including sub-contractors, comply with the procedures set out in the CEMP. The Principal Contractor will also ensure that all persons working on site are provided with sufficient training, supervision and instruction to fulfil this requirement. The Principal Contractor shall ensure that all persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

Training and Competence

3.5 The Applicant or project owner will require the Principal Contractor to employ an appropriately qualified workforce, which may include relevant employees holding a card from an appropriate competence scheme, such as the Construction Skills Certificate Scheme. The Principal Contractor will be required to operate induction schemes for all personnel to ensure that they are aware of their individual responsibility to comply with the CEMP. The Principal Contractor will be responsible for identifying the training needs of its personnel to ensure that they are appropriately qualified.

Audit and Inspection Procedures

3.6 The Principal Contractor, under the direction of the Applicant or project owner, will be responsible for the continual development of the CEMP to take account of monitoring and audit results during the construction phase and changing environmental conditions and regulations.

3.7 The CEMP will outline a programme of environmental audits that will be undertaken as a minimum of once a year but may be undertaken at any time to record environmental management and identify actions required. The construction of the Proposed Development will be audited to the standards set out by ISO 14001:2015. Environmental audits will also cover activities undertaken by any sub-contractors. All procedures, record keeping, monitoring and auditing will be overseen by a suitably qualified and experienced individual. The auditing individual or the Applicant or project owner will provide a template for completing and reporting audits pre-construction. Any system failures will be documented and appropriate corrective actions issued and implemented.

Recording and Reporting

3.1 The CEMP will set out the requirements for recording and reporting all aspects of environmental management, such as:

- Minutes and attendance record of start-up meeting (onsite meeting prior to commencement of construction works);
- An environmental risk register;
- Minutes of meetings covering environmental (ecology, archaeology, hydrology) issues (meetings may be combined with regular construction progress meetings);
- A communication plan;
- Records of toolbox talks;
- Dust / noise monitoring records;
- Site waste and materials management plan and records;
- Water quality monitoring records; and
- Details of licensing and consents.

Environmental Management Planning

Pollution Prevention Plan

3.2 The Pollution Prevention Plan (PPP) will outline strategies and procedures to mitigate potential sources of pollution and ensure compliance with regulatory requirements. Several associating management strategies and embedded mitigation as noted by the EIA Report will be referred to within the PPP.

3.3 The PPP will look to identify key potential sources of pollution associated with activities during construction, and will look to assess the environmental risks and impacts associated with each activity, considering factors such as soil erosion, water contamination, and air quality.

Pollution prevention measures will include:

- **Spill Prevention:** Implementation of spill containment measures and establish protocols for handling and reporting spills of lubricants, fuels, and other hazardous materials;
- **Sustainable Drainage:** Implementation of temporary sustainable urban drainage systems (SuDS) at each watercourse crossing to ensure no sedimentation from construction works or pollution from plant or machinery can enter the watercourse.
- **Energy Efficiency:** Consideration and exploration of energy-efficient practices in operations, including the use of renewable energy sources for power generation and the adoption of energy-saving technologies in facilities and equipment;
- **Noise Control:** Implementation of measures to minimise noise levels from construction works and traffic to mitigate potential impacts on wildlife and nearby residents.

3.4 The preparation of the PPP will follow SEPA Guidance for Pollution Prevention (GPPs) and SEPA's general binding rules (GBR) under the Environmental Authorisation (Scotland) Regulations 2018 (EASR) (Scottish Government, 2018).

3.5 The PPP will establish monitoring programs to track key environmental indicators, which may include water quality, noise emissions, and wildlife populations.

3.6 The Emergency Response Plan (ERP) detailed below will also contribute to effectively manage pollution incidents and mitigate environmental damage in the event of spills, leaks, or other emergencies.

3.7 The PPP will highlight engagement with local communities and stakeholders to solicit feedback on pollution prevention measures and address any concerns or issues raised.

3.8 The Principal Contractor will regularly review and update the PPP in response to changing environmental conditions, regulatory requirements, and best practices in pollution prevention will be undertaken.

Emergency Response Plan

3.9 The Emergency Response Plan (ERP) is designed to ensure the safety of personnel, protect the environment, and mitigate damage to property in the event of an emergency situation. This plan will outline procedures to be followed by employees, contractors, and emergency responders in agreement with relevant stakeholders prior to commencement of construction.

3.10 The ERP will include details of emergency contact and response teams as well as their various roles and responsibilities.

3.11 Team members will be trained in emergency procedures and equipment operation where required, and communication protocols will be established in case of emergency situations. Evacuation procedures will be detailed to identify assembly points, evacuation routes and procedures and assigned responsibility for accounting of all individuals onsite. Training and Emergency Situations will be documented and used to improve the ERP as needed in addition to maintenance of up-to-date contact information. Emergency procedures will be developed and will be appropriate to the anticipated hazards and the Site layout.

3.12 The ERP will include emergency pollution control measures that will consider SEPA guidelines. The procedures will contain emergency phone numbers and the method for notifying SEPA, EAC and any other relevant statutory authorities. Contact numbers for key staff will also be included. The procedures will be displayed prominently at the site office, and all site staff will be required to follow them when appropriate.

Construction Method Statements

3.13 Prior to commencement of relevant Site activities, as appropriate, the contractors will be required to undertake risk assessments related to the activities that they are involved with and produce method statements for those activities. These should include measures to implement the CEMP in respect of particular tasks and locations. The method statements will typically include:

- Scope of Work – defining the exact work to be carried out;
- Sequence of Operations – Step-by-step instructions on how the work will be executed;
- Plant, Equipment and Materials – List of specific items and machinery to be used, inspection requirements and any operational restrictions;
- Personnel – Details of specific roles, responsibilities, required competencies and skills and training records;
- Environmental Controls – Measures to suppress dust and noise;
- Safety Measures – Health and safety protocols, including personal protective equipment (PPE) and safe working practices; and
- Emergency Procedures – Specific instructions for accidents, equipment failure and other emergencies.

Site Waste Management Plan

3.14 A Site Waste Management Plan (SWMP) for the Proposed Development will be developed at an appropriate time to be agreed with EAC and will be updated as necessary as the construction phase progresses.

3.15 The purpose of the SWMP is to demonstrate that measures will be put in place to sustainably manage waste generated during construction to aim to meet Scottish Government targets for recycling, construction and demolition waste. The SWMP will be used to record waste management performance throughout the construction period.

3.16 The SWMP will aim to reduce material wastage onsite, and measures to ensure the efficient re-use and handling of. The procurement of turbines and associated equipment for the Proposed Development will also, where appropriate, include prioritisation of sustainable construction methods and materials.

3.17 A Foul Drainage Strategy will be produced and submitted to EAC prior to commencement and will form part of the SWMP. Disposal of foul waste arising from the welfare facilities on Site during construction will be taken and disposed of by a licenced waste carrier. The treatment works of choice will be identified at the time of developing both the Foul Drainage Strategy and the Site Waste Management Plan and agreed with EAC ahead of any welfare facilities being placed on the Site.

Surface Water Management Plan

3.18 A Surface Water Management Plan (SuWMP) will detail proposed surface drainage measures and will be required to effectively manage the surface runoff from the Site. The SuWMP will be designed in accordance with Sustainable Drainage Systems (SuDS) principles, all best practice guidance and recognised industry standards. The SuWMP will highlight potential contaminants and suspended sediment which could originate from the Site and may affect the receiving watercourses and priority habitats.

3.19 The SuWMP will set out appropriate surface water safeguarding protocols to be carried out prior to and during the construction phase. Specifically, the SuWMP will include;

- Provision for protection measures to control silt and other run-off within the construction site footprint (e.g. silt fencing, earth bunds etc, including the two specific locations identified in **Chapter 9** in **Volume 2** of the EIA Report and **Technical Appendix 9.1: Watercourse Crossings and Buffer Assessment** in **Volume 4** of the EIA Report – Buffer Encroachments E and F).
- Temporary works requirements in containing, managing and treating surface-water runoff as it leaves the construction site, including any necessary attenuation, settlement and treatment prior to water discharge;
- Requirement for works sequencing, soils management etc. in order that the effects of each section of works are minimised;
- Proper storage and use of oils, fuels and construction chemicals;
- Provision of site-worker accommodation and sanitation facilities; and
- Management and removal of waste materials.

Construction Traffic Management Plan

3.20 A Construction Traffic Management Plan (CTMP) will be provided prior to the commencement of any construction works in agreeance with EAC, Transport Scotland (TS) and Ayrshire Roads Alliance (ARA) (**see Chapter 11: Transport and Access** in **Volume 2** of the EIA Report). The CTMP will detail such matters as a travel plan for construction workers and the routing of their vehicles.

3.21 Contractors will be required to comply with the provisions of the CTMP, which will be updated as necessary as construction progresses.

3.22 ARA, EAC and TS 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 will be recorded to provide a baseline of the condition of the road prior to any construction work commencing. This baseline will provide evidence of any change in the road condition during the construction phase. Any necessary repairs will be coordinated with ARA, EAC and TS. Any damage caused by traffic associated with the Proposed Development during the construction period, that would be hazardous to public traffic, will be repaired immediately.

3.23 Damage to road infrastructure caused directly by construction traffic will be remediated, and street furniture that is removed on a temporary basis will be fully reinstated. There will be a regular road condition review, and any debris and mud will be removed from the carriageway using an onsite road sweeper to ensure road safety for all road users.

Abnormal Indivisible Load Transport Management Plan

3.24 An Abnormal Load Transport Management Plan will be prepared to cater for all movements to and from the Proposed Development Site. This will 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 would form a means of communicating and updating on forthcoming activities and dealing with any potential issues arising.

3.25 Before the AILs traverse the proposed delivery route, the following tasks will 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.

Staff Travel Plan

3.26 A Staff Travel Plan will be deployed where necessary, to manage the arrival and departure profile of staff and to encourage sustainable modes of transport, especially car-sharing. A package of measures could include:

- Appointment of a Travel Plan Coordinator (TPC);
- Provision of public transport information;
- Mini-bus service for transport of Site staff;
- Promotion of a car sharing scheme;
- Car parking management; and
- Restrictions on parking, for example on the public road network and verges in the vicinity of the Site entrance.

Species Protection Plan

3.27 The aim of the SPP will be to ensure all reasonable precautions are taken by the Applicant and their contractors to safeguard protected species from disturbance, injury and death and to protect any structure or place, which any such protected species uses for growth, breeding, resting, shelter or protection during the construction and decommissioning of the Proposed Development.

3.28 The aim of the SPP will be fulfilled by the Applicant or project owner adopting the following objectives throughout the construction of the Proposed Development:

- Objective A – Implement a monitoring and protection plan for protected species;
- Objective B – Follow an approved procedure if an active feature is found; and
- Objective C – Ensure adequate education and awareness of Site personnel.

3.29 The procedures to be followed to ensure compliance with these objectives are detailed in **Technical Appendix 7.5: Species Protection Plan** in **Volume 4** of the EIA Report.

3.30 The ECoW will have the specific remit of monitoring compliance with the SPP during construction and reporting any breaches to the Principal Contractor.

3.31 The ECoW's role shall involve direct monitoring of all activities on the Site to the extent the ECoW considers this to be required, and/or training of nominated personnel to carry these out in a manner likely to minimise the potential for impact on the protected species. The ECoW will also agree changes to construction operations to prevent breaches of the SPP.

Peat Management Plan

3.32 The Peat Management Plan (PMP) will follow the principles set out in **Technical Appendix 9.3: Outline Peat Management Plan** in **Volume 4** of the EIA Report.

3.33 The scope of the PMP will generally be as follows, and will reflect the latest guidance at the point of construction:

- Introduction – defining the project context and regulatory requirements, including reference to the planning condition which specifies the requirement for the PMP.
- Roles and Responsibilities – setting out who has the main responsibility of ensuring conformance with the PMP and its review.
- Peat Survey and Site Characterisation – providing details of previous peat survey undertaken across the Site including mapping and peat characteristics and any additional survey requirements.
- Avoidance and Minimisation Measures – details of the mitigation hierarchy and design measures to be implemented to avoid peat excavation, such as piling foundations and permanent hardstandings for T1-T3 and floating auxiliary hardstandings at T1-T3 and floating tracks (see **Chapter 3: Site Selection and Design Strategy** and **Chapter 4: Development Description** in Volume 2 of the EIA Report) as dictated by the planning permission and detailed design works.
- Peat Excavation and Volume Estimates – detailed calculations of expected peat excavation volumes based on detailed design.
- Peat Re-use and Restoration Strategy – details of how excavated peat and soil are to be reinstated or re-used across the Site to achieve a net peat balance, following the proposals set out in **Technical Appendix 9.3**.
- Good Practice Measures – information on all good practice measures to be followed relating to excavation and handling, storage and reinstatement and restoration.
- Monitoring and Inspection – details of procedures to be followed during and after construction in areas where peat is stored and re-used such as mitigation recommendations, and a monitoring programme to review the effectiveness of peatland related works.

Bird Protection Plan

3.34 The Bird Protection Plan (BPP) will apply across the full landholding (the 'blue line' boundary shown on **Figure 1.1** in **Volume 3a** of the EIA Report), rather than being restricted to the red-line planning boundary, to ensure that all relevant bird interests are appropriately safeguarded. The BPP will describe survey methods for the identification of sites used by protected birds and will detail protocols for the prevention, or minimisation, of disturbance to birds as a result of activities associated with the Proposed Development. To avoid direct impacts to breeding birds during construction, removal of all vegetation will take place outside of the bird nesting season in the first instance i.e. undertaken between September and March inclusive. Where vegetation clearance cannot reasonably be scheduled outside the breeding season, the ECoW will undertake a pre-works nest check to ensure no active nests are present before works proceed.

3.35 To conform with the Wildlife and Countryside Act 1981, surveys to locate nests of birds will be undertaken prior to construction during the breeding season (between April and August) as part of the BPP, which will be overseen by an ECoW. If it is judged that these activities are likely to disturb breeding attempts, then appropriate exclusion zones (NatureScot, 2022) or other protection measures will be agreed with NatureScot prior to recommencing works. The BPP will clearly set out the protocol for agreeing such measures with NatureScot.

3.36 The BPP will describe surveys to locate the nests or other key sites (e.g. roosts) of birds listed in Schedules 1 and 1A of the WCA, in advance of construction works progressing, drawing upon the findings of the EIA Report (including confidential information presented in **Technical Appendix 8.3: Confidential Ornithology** in **Volume 5**). In the event that an active nest or roost of a Schedule 1 or Schedule 1A species is discovered within distances given by NatureScot guidance (2022) (or within a 500 m radius for Schedule 1 species not listed), a disturbance risk assessment will be prepared under the BPP. The disturbance risk assessment will detail any measures considered necessary to safeguard the breeding attempt or roost (e.g., exclusion zones or restrictions on timing of works) and will be submitted to NatureScot before recommencing work.

Water Quality and Fish Monitoring Plan

3.37 A detailed Water Quality and Fish Monitoring Plan will be submitted in advance of construction for agreement with SEPA and EAC, and will follow the guidance prepared by Marine Scotland Science (2021). Based on the findings of the EIA, it is recommended that water quality monitoring is carried out on the Swinzie Burn downstream of the Proposed Development during construction, as well as at selected locations downstream of new watercourse crossings and buffer encroachments, as detailed in **Technical Appendix 9.1** in **Volume 4** of the EIA Report. With regards to fish populations, it is recommended that pre-construction surveys including electrofishing and macroinvertebrate surveys be undertaken, in addition to during-construction and post-construction monitoring surveys.

3.38 The WQFMP will typically include the following details:

- Purpose and scope - including reference to the planning condition which specifies its requirement.
- Objectives – including maintaining compliance with environmental standards, to prevent sedimentation pollution and habitat degradation, monitor fish populations and aquatic ecosystem health and enable rapid response to any adverse impacts.
- Roles and Responsibilities – setting out who has responsibility of ensuring conformance with the WQFMP and its review, and who will be appointed to undertake fish and macroinvertebrate surveys and collect and analyse water samples from defined survey locations.
- Monitoring Schedule – providing details of proposed fish population surveys and water quality sampling at each phase of development, including frequency, methods and locations.
- Trigger Levels and Actions – detailing the parameters which will be monitored and the associated trigger levels which will necessitate action.
- Mitigation Measures – setting out the proposed measures to be implemented should trigger levels be reached.
- Reporting – setting out the frequency of reporting and to whom this should be sent.
- Emergency Response – providing details of the emergency procedures to be followed should a major pollution event occur with reference to the Emergency Response Plan (noted above).

Site Restoration Plan

3.39 The Site Restoration Plan will typically include the following details:

- Introduction – Stating the purpose of the Site Restoration Plan.
- General Principles of Site Restoration - detailing the principles and best practices for each phase of development (pre-construction, construction, post-construction reinstatement and post-reinstatement monitoring) such as material storage, protection of ecological features, and methods for reinstatement at each phase.
- Monitoring – outlining the roles and responsibilities of environmental specialists i.e. ECoW, ornithologist etc in monitoring and advising on restoration activities.
- Schedule of Site Restoration Requirements - providing all details of restoration requirements for different site features (e.g., temporary hardstandings, laydown areas, construction compound etc) and key issues to address in method statements.
- Good Practice – detailing all relevant good practice measures to be adhered to in accordance with the latest guidelines and industry practices at the time.

Chapter 4

Management of Environmental Issues

4.1 The Proposed Development will be constructed in accordance with all applicable legislation and following current best practice, where feasible, for minimising the adverse effects of construction on the environment. The detailed CEMP will set out more extensively described measures to minimise and, where appropriate, mitigate, the potential environmental impacts of construction identified, drawing upon the findings of the EIA Report (specifically **Technical Appendix 2.2: Schedule of Mitigation, Good Practice, Enhancement and Monitoring**).

4.2 In this regard, the full CEMP is anticipated to include good practice measures relating to the following which can be found in **Technical Appendix 2.2**:

- Noise;
- Ecology and Ornithology;
- Landscape and Visual;
- Cultural Heritage;
- Hydrology, Hydrogeology, Geology and Peat; and
- Access, Traffic and Transport.

4.3 Additional mitigation measures required to address likely significant effects have been identified in **Chapter 9: Hydrology, Hydrogeology, Geology and Peat** and **Chapter 11: Access, Traffic and Transport** in **Volume 2** of the EIA Report. These are recorded below. These measures should be addressed fully in the CEMP, specifically through the preparation and implementation of the Surface Water Management Plan, Water Quality and Fish Monitoring Plan and Construction Traffic Management Plan (including Abnormal Load Transport Management Plan and Staff Travel Plan).

Table 4.1: Likely Significant Effects and Mitigation Requirements

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Construction			
Effects during construction on surface and ground water quality and quantity	Moderate (significant) (at buffer encroachment F)	F - The temporary floating hardstanding will be microsituated to maintain a 10 m buffer distance from the headwater channel, if possible. If this cannot be achieved, the channel will be temporarily culverted under the floating hardstanding during construction. Additional Mitigation (e.g. silt fences/additional SuDS) will be installed between the hardstanding areas and the watercourse to reduce the risk of sediment/silt runoff during construction.	Minor (not significant)
Construction			
Floak Road Users and Residents			

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Severance	Major (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Driver Delay	Moderate / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Non-motorised User Amenity	Major / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Fear and Intimidation	Major (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Road Safety	Major / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Large Loads	Major (Significant)	Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier.	Minor (Not significant)
A77 Users and Residents			
Road Safety	Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier.	Minor (Not significant)

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
		Staff Travel Plan – will be delivered by the Principal Contractor.	
Large Loads	Major (Significant)	Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier.	Minor (Not significant)