Port Dundas Battery Energy Storage System

Outline Construction Environmental Management Plan

Client:	Fig Power c/o Graham & Sibbald
Project/Proposal No:	7645
Version:	3.0
Date:	2024-12-03

Document Information

Project Name:	Port Dundas Battery Energy Storage System
Document Title:	Outline Construction Environmental Management Plan
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Document Status:	Final for Issue
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Approved:	Alasdair Baxter
Date:	2024-12-03
Version:	3.0
Project/Proposal Number:	7645
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Revision History

Version	Date	Authored	Reviewed	Approved	Notes
1.0	2024-10-15	A. Robertson	AB	AB	Issue
2.0	2024-12-03	A.Robertson	Alasdair Baxter	Alasdair Baxter	Issue with updates

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1. Introduction

1.1 Overview

This Outline Construction Environmental Management Plan (oCEMP) has been prepared to support the application for the proposed Battery Energy Storage System (BESS) development (the 'Proposed Development') on land to the south of Port Dundas Substation, Dundashill, Glasgow, within the Glasgow City Council (GCC) administrative area (the 'Site').

This oCEMP aims to:

- Ensure that relevant mitigation measures are implemented during the completion of the works;
- Ensure that any conditions relating to the works are adhered to; and
- Ensure that relevant legislation, Government and industry standards, and construction industry codes of practice and best practice standards are complied with throughout the implementation of the proposed works.

This oCEMP is a live document that will be updated throughout the pre-construction and construction periods as further detail of the construction process becomes available.

1.2 Legal Compliance

Considerable environmental legislation applies to the works to be undertaken. It is expected that all relevant legislation, including requirements for licences, permits and/or consents shall be identified. Fig Power (the 'Developer') will be required to provide details of how compliance is to be achieved, as part of the construction process.

For each significant environmental aspect, the relevant applicable environmental legislation and regulations will be identified from, but not limited to, the list provided in **Appendix 1**. The list of relevant legislation and its applicability to the proposed works will be reviewed and updated where necessary.

1.3 Structure of this Outline CEMP

This oCEMP details the environmental controls and procedures that will need to be adopted during the proposed works. It sets out roles and responsibilities for the management of these controls and procedures.

The oCEMP includes details of the following:

- **The Site**: including management structure, roles and responsibilities, location of any potentially sensitive receptors such as watercourses, trees, local residents, etc. and any designations with associated criteria;
- **Proposed Works**: a description of the works, works programme, proposed working hours and equipment to be used;
- **Environmental Management**: methods for managing environmental risks (includes mitigation), emergency procedures, waste and hazardous materials storage procedures, proposed liaison with the local neighbourhood and stakeholders, and outline specific management plans relating to dust, landscape, lighting, and noise; and
- **Legal Compliance**: a schedule of relevant and current environmental legislation and good practice, objectives and targets imposed by contract requirements.

2. Proposed Development and Site Context

2.1 Site and Surrounding Area

The Site can be found at British National Grid (BNG) Coordinate NS 59032 66717. It measures 0.6 hectares (ha) of land located less than 50 metres (m) south of Port Dundas Substation, Dundashill, Glasgow.

The local road network comprises a mix of M, A, B and minor roads. This includes the A879 which lies approximately 150 m to the west of the Site and the M8 which lies approximately 250 m to the south of the site. The Site is accessible via High Craighall Road which intercepts the A879 approximately 300 m north of the Site.

The closest house to the Site is approximately 50 m to the south and there are houses approximately 250 m to the west. The Forth and Clyde Canal (Glasgow Spur) runs along the west and south of the Site, at a distance of approximately 200 m.

2.2 Proposed Development

The proposed development comprises of the following key components:

- BESS with a capacity of 90 megawatts (MW);
- Transformers;
- Switchgear container;
- Site service container;
- CCTV cameras and security lighting;
- Internal access roads; and
- Landscaping and biodiversity enhancements.

3. Construction Programme and Management

3.1 Roles and Responsibilities

The anticipated roles and responsibilities of the parties involved in the proposed works will be confirmed prior to the commencement of construction and included within the CEMP. However, it should be noted that all members of staff are responsible for ensuring the requirements of the oCEMP, and subsequent CEMP, are met.

3.2 Construction Programme

Main construction works are anticipated to commence in March 2026 and last approximately 12 months.

4. Detail of the Proposed Works

4.1 Health and Safety/RAMS

Risk assessment and method statements (RAMS) to be reviewed and approved by the Developer. A daily brief will be read out to all members of the working party.

The work area will be barriered off for security and segregation.

4.2 Working Hours

The standard working hours for all construction activities will be:

- 8am – 5.30pm Monday to Friday; and
- 8am- 1pm Saturday.

No work and ancillary operations, which are audible at the application boundary, will be permitted outside of these hours unless fully justified to GCC on the grounds of engineering necessity or for reasons of health and safety. Any such works should be kept to an absolute minimum.

No continuous 24-hour activities are envisaged at this stage and any working on Sundays or Bank Holidays is not allowed. Any change to working hours will be agreed with the Local Planning Authority.

These hours will be strictly adhered to unless or in the event of:

- An emergency demands continuation of works on the grounds of safety; or
- Completion of an operation that would otherwise cause greater interference with the environment/general public if left unfinished.

4.3 Methods of Work

Construction Method Statement(s) will be produced by the PC and will provide details of all on site construction works. These will be held with this oCEMP within the site office and will be made available for all site personnel.

4.4 Waste and Materials Management

Waste produced on-site will be subject to a Duty of Care under the Environmental Protection Act 1990 (the EPA), amended by the Waste (Scotland) Regulations 2012. Liaison with the Scottish Environment Protection Agency (SEPA) will be undertaken to ensure that waste and materials handling on-site will be conducted appropriately.

The waste stream will be managed so far as is reasonably practicable to maximise the reuse of surplus materials and to ensure any adverse environmental effects are minimised.

The transportation of waste to and from the site will comply with the Duty of Care requirements. These include ensuring waste is transported by registered carriers, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation.

If necessary, tests will be carried out to identified waste material. If this is required, it is proposed for the material to be transferred to a depot where the material will be quarantined until classification is made and disposal agreed.

The PC will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met, including a register of waste carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream. Waste contractors who remove waste will be registered with the SEPA.

A Site Waste Management Plan (SWMP) will be produced by the Developer/PC prior to site works commencing (refer also to **Section 6.5**).

4.5 Construction Traffic Management

Access to the site will be taken via Mary Street, from High Craighall Road.

The site will be inspected prior to starting work, to ensure that the site entrance/exit is suitable for the equipment to be used and a safe route to the work position is available. Vehicles will only enter and leave the site in the agreed working hours.

Car parking area will be provided at the northwest part of the proposed substation compound.

The welfare unit will be located within the work area. There will be no access to unauthorised personnel.

4.6 Material Storage and Handling

All materials which are classed as hazardous shall be stored in suitable, secure and labelled containers.

A designated area, with plant nappies, spill kits and booms will be used when re-fuelling all plant/equipment.

Temporary construction laydown areas will be provided within the substation compound. Upon completion of construction these areas will be reinstated and seeded in line with an agreed landscape management plan.

4.7 Lighting

Construction lighting will consist of two main elements: general security and safe access/egress after dark. Additional lighting may be required on a task-by-task basis to allow safe undertaking of work after dark and will be utilised as and where necessary. General construction access/egress lighting shall, where practicable, limit illumination to periods where operation is deemed necessary. All construction lighting shall be positioned/directed so as to avoid causing nuisance to properties and sensitive ecological receptors and shall be operated at the minimum brightness necessary for adequate security and safety.

Artificial lighting can often impact the foraging and commuting behaviour of nocturnal mammals such as bats. Therefore, mitigation measures for potential impacts on bats in this respect are described in **Section 6.4.4.**

4.8 Health and Safety and Security

Only authorised persons will be allowed on the site. To prevent unauthorised access to site the following arrangement will be implemented:

- Everyone employed on the project will receive a site-specific induction to inform them of the health and safety and environment arrangements, welfare on site and to ensure they understand the requirements of the risk assessment and method statement relevant to their work. Workers will be informed of their legal obligation to comply with health and safety.

4.9 Emergency Procedures

Procedures will be set in place to respond to any emergency incidents which may occur on site. A site Pollution Incident Response Plan will be developed by the PC prior to any works commencing on site.

All appropriate staff will be trained and made aware of the spill contingency plan set in place, following the SEPA Pollution Prevention Guidelines (PPG) and Guidance on Pollution Prevention, which will ultimately replace PPGs. In the event of any incident the PD will be notified. Additionally, the SEPA and any other interested bodies will be notified as required.

In the event of an emergency, the following number in **Table 4.1** can be used to call GCC and/or SEPA:

Table 4.1 – GCCs and SEPA's Emergency Numbers

Relevant Council/Body	Out of Hours/Emergency Number
GCC	0141 287 1058

Relevant Council/Body	Out of Hours/Emergency Number
SEPA	0800 80 70 60 (free, 24-hour pollution hotline)

4.10 Contractor Training

Site specific inductions completed by the Site Management Team for all staff and contractors new to the development will include reference to the key sensitivities outlined in this oCEMP.

In order to ensure that environmental issues are communicated on site, the environmental training and on-going communication methods as detailed in **Table 4.2** will be carried out. This list is not exhaustive.

Table 4.2 – Training and Communication

Meeting/Briefing/Training	Frequency	Attendees
Induction training	On initial visit to site	All persons attending site
RAMS briefings	Every work task	All persons involved in task
Environmental toolbox talks (as relevant for work being undertaken)	Dependent on location	All persons undertaking work on site
Environmental briefings e.g. bulletins	As required	All persons undertaking work on site
Job specific training e.g. working near water	As required	Relevant persons with environmental responsibilities

5. Key Environmental Issues

5.1 Potential Significant Environmental Effects

A schedule of potential significant environmental effects relating to the proposed works is provided in **Table 5.1** below.

Table 5.1 - Potential Significant Environmental Effects

Topic	Potential Environmental Effect
Water environment	Contamination of water environment due to excavation and refuelling.
Land Contamination	Exposure to hazardous materials. Contamination of land due to refuelling or waste removal.
Ecology	Potential impacts on the foraging and commuting behaviour of bats arising from artificial lighting.
Noise	Noise from construction and vehicles.

6. Environmental Management Plans

6.1 Environmental Procedures

The Developer will ensure that all sub-contractors adhere to the relevant local policies and good practice guidelines for implementation during all site activities.

In order to avoid/mitigate against any significant environmental effects, a series of environmental procedures have been proposed and are detailed below.

Responsibilities for the implementation of each procedure will lie with the PC and EM.

6.2 Working Near Water

6.2.1 Mitigation Measures for the Works

To reduce the risk of ground contamination and water quality issues during the works the following mitigation should be followed:

6.2.2 General mitigation

- Undertake a pollution risk assessment of the site and the proposed activities;
- Identify all Controlled Waters that may be affected by the works and temporary discharge points to the on-site drainage ditches and the marine environment;
- Implement a pollution control system during earthworks and construction; and
- Monitor construction procedures to ensure management of risk is maintained.

6.2.3 Proposed mitigation for excavations

- Take relevant precautions to ensure no services are struck during excavations. Ensure relevant emergency response and contacts are in place in the event services are stuck which could impact the water environment, e.g. oil line, water main, sewer;
- Scan excavation areas for potential unrecorded culverts/field drains. De-watering measures to be present in the event of a leak;
- Existing culverts/field drains to be protected to prevent potentially polluted site runoff discharging to them prior to treatment;
- Plan and design dewatering activities to minimise the local drawdown of perched groundwater in peatland habitat, and maintain the hydrology of identified sensitive habitats;
- Prevent site runoff entering excavations and regularly de-water to prevent infiltration to groundwater. Ensure that dewatering of excavations is directed away from drainage ditches and the marine environment; and
- Any deep excavations (e.g. boreholes, piled foundations) must be protected to prevent infiltration of site runoff and a direct pathway to groundwater.

6.2.4 Proposed mitigation for concrete works

- If concrete is brought to site, provide dedicated concrete washout skip/basin to prevent any uncontrolled spilling of material in-site or nearby public roads;
- Concrete washout facilities to be regularly maintained and solids to be disposed of safely;
- If on-site concrete batching is needed, ensure necessary containment measures are in place and suitable disposal and cleaning methods;
- Robust emergency response in place for any concrete spillage on site;

- Correct disposal of any waste or surplus concrete in agreed suitable locations both on-site and off-site;
- Where applicable, shuttered pours should be used to prevent concrete losses to ground;
- Ensure excavations are sufficiently dewatered before concreting begins and that dewatering continues while concrete sets; and
- Cover freshly poured concrete surfaces to prevent any polluted runoff attributed with wet weather.

6.2.5 Fuel and chemical storage measures

- Maintain oil booms and absorbent pads within all work areas;
- Any fuel and oil deliveries to take place on an impermeable transfer area with a bunding facility capable of handling a major spill;
- Assign designated refuelling areas where appropriate and site them as far as practicably possible and at least 20 m from adjacent field drains and public sewers; and
- Install operational drainage as early as possible with the inclusion of oil separators.

6.2.6 Proposed mitigation for sediment management

- Control and divert surface water entering site from surrounding land (via cut-off drains) to reduce potential impacted water volumes;
- Minimise use of stockpiles and/or cover and contain stockpiles and provide sediment interception measures at their bases, e.g. silt fencing or cut-off drains and check dams;
- If topsoil is to be stored, avoid constructing stockpiles more than 2 m high. This will ensure anaerobic conditions do not occur and that the soil will remain fertile and capable of being re-seeded. It will also be less susceptible to erosion;
- Temporary drainage measures to be installed which provide filtration (filter drains or filter strips) and settlement (ponds/basins) to collect sediments prior to offsite discharge;
- Avoid mass overburden stripping on the site, expose parts of the site only when essential for operation;
- Temporary drainage measures and silt fencing to be installed around large areas of exposed soils;
- Ensure a robust site traffic management plan is in place to reduce sediment runoff risks. Good practices include; minimise turning of tracked vehicles where possible and manage dedicated turning areas appropriately (hard surfacing, silt fencing, etc.), avoid unnecessary turning of large site plant and minimise overall routes on site to better manage sediment runoff;
- Prevent/reduce offsite sediment impacts to public roads. Good practices include; wheel wash facilities, site-road sweeping, vehicles only permitted on site not to use public roads, formally surfaced site car park and separate access points for cars and plant/deliveries;
- Bowsers to be used to keep exposed earth and soils damp preventing dust generation reaching nearby watercourses (sediment build-up can be managed on-site); and
- Dedicated plant washing areas to control sediment runoff.

6.2.7 Contingency planning and emergency procedures

- All pollution prevention consumables and plant to be made readily available at all times. Keep spill kits in all vehicles to enable a rapid and effective response to any accidental spillage or discharge; and
- Train all construction staff in the effective use of spill kits and raise awareness of all preventative measures for water pollution.

6.3 Pollution Prevention Management Plan

The PC will set out any procedures to deal with contamination if any issues were to arise. Therefore, all the workers on-site will be made aware of potential contamination issues on the site and will use best practice techniques during all construction activities.

The operation of vehicles and the handling, use, and storage of hazardous materials will be undertaken as stated above and will also include the following:

- Construction vehicles and plant will be regularly maintained and supplied with spill kits and drip trays to reduce the risk of hydrocarbon contamination;
- Refuelling would be undertaken in specified areas. Drip trays will be installed to collect leaks from diesel pumps;
- The handling, use and storage of hazardous materials will be undertaken in line with the current best practice;
- Adequate bunded and secure areas are to be provided for the temporary storage of fuel, oil and chemicals, as far away from drainage as possible; and
- Provision of spill containment equipment such as absorbent material on site.

A member of staff will be nominated to control and monitor the Control of Substances Hazardous to Health (COSHH) system, in compliance with the COSHH Regulations 2002. Suppliers must send data sheets for every hazardous substance to the site. The assessment information sheet is completed in conjunction with Supervisors and Safety Managers who then brief staff members who will be using the substance, on its safe use, disposal and any emergency procedures. Written records of these briefings will be kept in the COSHH file held on the site.

Any new substances hazardous to health brought on to the site will have suitable arrangements made for their safe storage, use and disposal.

6.4 Biodiversity

Any development within the site should ensure that valuable habitat areas are protected or reinstated and, where appropriate, enhanced to ensure opportunities for net gain in biodiversity, in line with the revised National Planning Policy Framework (NPF4).

Best practice guidelines should be followed throughout all stages of any development to protect existing wildlife within the site. Where applicable, this includes obtaining appropriate species licences prior to the commencement of works and implementing mitigation strategies to ensure compliance with relevant wildlife legislation.

Specific requirements for mitigation within the site would include standard embedded ecology measures (EEMs):

- Undertaking clearance works outside the breeding bird season (the breeding season is generally considered to be March to August inclusive) or following a survey for nesting birds immediately before work commences (not more than 24 hours prior);
- If an active bird nest is recorded, this must be left in place and works halted under nest has successfully fledged;
- All work in relation to or in proximity of trees must be carried out in accordance with the guidance provided within the Streetworks UK (National Joint Utilities Group) Volume 4: 2007;
- The site will also be inspected by a competent person (i.e. tree surgeon) before any works on existing trees will be carried out;
- Toolbox talk to be delivered ahead of the vegetation clearance and supervision of operations by a competent person;

- Preventing unnecessary harm to wild mammals, as per UK legislation;
- Ensuring that, overall, a net gain in biodiversity is achieved through habitat creation, enhancement and protection measures included in any development plans;
- The implementation of standard pollution prevention measures across the site.

It is assumed that no further arboricultural work is required to facilitate the Proposed Development and that stand-off distances from all trees and hedges would be as per the approved scheme drawings.

6.4.1 Arboricultural Assessments

A tree survey was undertaken on 5th September 2024. A total of 13 trees on and around the Site were recorded. The survey found no presence of individual veteran or ancient trees, nor any Tree Preservation Orders or Conservation Area designations.

No trees were found that present an imminent and serious hazard to life or property.

No parts of the site comprise woodland of sufficient size and density to be relevant to Government policies on woodland removal if removal were proposed.

Prior to commencement of any work on site protective fencing must be erected around existing trees to be retained in accordance with BS5837:2012 'Trees in Relation to Design, Demolition & Construction - Recommendations'.

All tree works to be carried out in accordance with BS 3998:2010 'Recommendations for Tree Work' as well as be carried out by a qualified and fully insured arboricultural contractor.

6.4.2 Ecological Assessments

An ecological survey was undertaken on 2nd October 2024. A UK Habitat Classification survey identified five primary habitats, including developed land, buildings, built linear features, woodland (including lines of trees), and mixed scrub, all of which are of Site importance. The presence of invasive non-native species (INNS) was also detected, the most notable being buddleia which was abundant along the southern perimeter of the Site.

No evidence was found of any protected species, but suitable habitat exists for bats, hedgehog, birds, and invertebrates on-Site, and within the locale. No further surveys are recommended at this time, but this may change depending on future development plans. Ecological data is considered valid for a period of 12 months.

The main potential negative impacts that may occur, without mitigation, as a result of the proposed works include:

- Pollution of the Forth and Clyde Canal and Hamiltonhill Claypits Local Nature Reserve from surface run-off if not properly managed during and post-construction;
- The spread of buddleia within and beyond the Site;
- Loss of the woodland, if removed to facilitate the works; and
- Reduction in foraging and commuting habitats available for bats, hedgehog, birds, and invertebrates, if removal or alteration of woodland is undertaken to facilitate the works;

Mitigation recommendations include:

- An INNS management plan should be produced in order to effectively remove the buddleia on-Site;
- Site important woodland should be retained and enhanced where possible;
- Appropriate compensatory planting should be provided utilising native species;
- Implementation of sensitive lighting scheme which is wildlife friendly; and
- Any vegetation clearance should be scheduled to occur outside of the main nesting bird season (March to August inclusive).

6.4.3 Designated Sites

No statutory or non-statutory designated sites, or ancient/native woodland, were identified within or directly adjacent to the Site during the desk study. There were, however, seven statutory designated sites identified within 5 km from the Site, and three non-statutory designated sites identified within 2 km from the Site. It is not expected that the works will impact the designated features of any of these statutory and non-statutory designated sites. However, pollution as a result of surface run-off may flow into the Forth and Clyde Canal Site of Importance for Nature Conservation and subsequently reach Hamiltonhill Claypits Local Nature Reserve, if not appropriately managed during works and post-construction. The site is also located within a designated B-line, whereby it is within an important corridor for pollinators.

There are no listed buildings or scheduled monuments within or directly adjacent to the Site boundary. However, there are 4277 listed buildings and 11 scheduled monuments within 5 km of the Site boundary.

6.5 Waste and Materials Management

The Site Waste Management Plan (SWMP) for the development will set out the practices to be put in place to ensure the control of waste on site, in a manner that is not detrimental to the local and wider environment. This encompasses the minimisation of waste and the removal of waste from site where necessary. Prior to commencement of the works, a SWMP will be prepared by the Developer/Principal Contractor.

The plan will identify ways of minimising waste and maximising reuse and recycling, as well as the responsibilities of the Principal Contractor, subcontractors, and site team to ensure the waste management strategy is upheld.

The environmental control measures defined within the plan will apply to all personnel including the Principal Contractor staff, sub-contractors, suppliers and third parties; and all activities and operations associated with the project.

The waste management plan will set out measures to ensure compliance with the Duty of Care responsibilities as prescribed in Section 34 of the Environmental Protection Act 1990 and amended by The Waste (Scotland) Regulations 2012 including;

- Implementation of the waste hierarchy;
- Classification and segregation of waste;
- Waste storage; and
- Waste documentation and transport.

Additionally, the disposal of all waste or other materials removed from the site will be in accordance with the Control of Pollution Act (COPA) 1974, Environment Act 1995, the Duty of Care Regulations 1991; and Environmental Permit requirements.

It is the responsibility of the Developer to ensure that waste produced on-site is disposed of in accordance with legislation.

The generation of construction waste will, as the first priority, be avoided. Any packaging used for transporting of construction materials delivered to site will be sent back with the delivery vehicle whenever practicable. If waste is generated on-site, it will be sent for reuse and recovery in preference to disposal. Where practical, spoil, excavation materials and surplus construction materials or clean concrete arising from the works on site will be reused.

Waste for final disposal will be transported by Licensed Waste Carriers to local sites which operate in accordance with the appropriate Waste Management Licenses issued by the SEPA. Under the Duty of Care Regulations, the receiving site must be authorised to accept the type and quantity of waste generated. Transport of wastes will be minimised by the selection of local licensed sites where available. The only exception to this principle may be for the disposal of hazardous wastes (e.g. contaminated soil) where suitable landfill or other disposal sites may only be found further afield. No disposal of waste by open burning will be permitted on-site.

The Developer will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met. A register of waste carriers, disposal sites (including transfer stations) and relevant licensing details will be produced and maintained on site.

All relevant contractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
- Implementation of a 'just in time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste;
- Attention to material quantity requirements to avoid over-ordering and generation of waste materials;
- Segregation of waste at source where practical;
- Re-use of materials on-site wherever feasible. The Government has set broad targets of the use of reclaimed aggregate, and in keeping with current guidelines and relevant legislation, contractors will be required to maximise the proportion of materials recycled; and
- Re-use and recycling of materials off-site where re-use on-site is not practical (e.g. through use of an off-site waste segregation facility and re-sale for direct re-use or reprocessing).

Materials and waste will be stored in appropriate conditions to prevent damage or contamination of storage areas. All hazardous materials including chemicals, cleaning agents, solvents and solvent containing products will be properly sealed in containers at the end of each day, prior to storage in appropriately protected and bunded storage areas. Containers should be sited away from drains or unsurfaced areas and should be regularly maintained and inspected for damage.

Waste will be sorted into different waste types such as timber, copper, metal, paints, etc. and either disposed of into larger skips, or if suitable, placed into a compactor to reduce the volume of the waste before it is taken off-site.

Any spoil from excavations must be stored on areas of hardstanding, short grassland or bare ground adjacent to the works. If anything needs to be stored on vegetation (long grassland or scrub) then the spoil must be wrapped to prevent animal ingress and an Ecologist will be required to check the area first.

6.6 Construction Noise Management

The works will comply with BS 5228-1:2009 "Code of practice for noise and vibration control on construction and open sites. Noise" and BS 5228-2:2009 "Code of practice for noise and vibration control on construction and open sites. Vibration" and the following mitigation measures will be considered:

6.6.1 Plant and Equipment

- Plant will be certified to meet relevant current EU legislation and should be no noisier than would be expected based on the noise levels contained in BS 5228-1:2009;
- The following threshold noise levels have been set using the 'ABC method' provided in BS 5228 (British Standards Institution, 2014): Weekday daytimes (weekdays 07:00–18:00 and Saturdays 08:00–13:00)–65 dB;
- Noisy plant or equipment will be situated as far as possible from site boundaries and will be fitted with exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. Plant will comply with the relevant statutory requirements; and
- Equipment and vehicles to be shut down when not in use.

6.7 Construction Dust and Air Quality Management

The Developer will be required to control and limit dust, air quality, odour and exhaust emissions during the construction works as far as reasonably practicable and in accordance with best practice measures. This will include reference to publications on best practice including the following:

- Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance, Institute of Air Quality Management, January 2014 (IAQM 2014);
- Air Quality Monitoring in the Vicinity of Demolition and Construction Sites, Institute of Air Quality Management, November 2012 (IAQM 2012); and
- Directive 2012/46 Requirements (amending EU Directive 97/68/EC) relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (NRMM).

6.7.1 Dust Management

A number of mitigation methods will be implemented to minimise the nuisance and impact arising from dust produced during construction and site preparation activities and maintain suitable air quality levels. These include the following:

- Utilise all reasonable means available to keep dust to a minimum, especially during dry weather conditions;
- Water sprays or sprinklers will be used when undertaking dust generating activities on-site, to suppress the levels of dust generated. Water runoff from dust suppression activities will be controlled;
- Sweeping of the road and footway will be completed following any delivery or waste removal as necessary, to ensure they are kept clear of any dust and debris from the site;
- Lorries removing materials from site will be properly covered to prevent spoil/dust from escaping;
- Burning of any material will be prohibited anywhere on-site;
- Vehicles on site will use hardstanding areas for deliveries and removal of material(s) from site. These surfaces will be kept clean to avoid the build-up of dust and regularly damped down;
- Deposits of dust on external parts of the plant will be cleaned off at the end of each working day in order to minimise the potential for wind entrainment.
- Daily on-site and off-site inspections will be undertaken to monitor dust;
- Record all dust and air quality complaints and/or incidents, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken in the log book;
- Make the complaints log and/or daily logs available to local authority, when asked;
- As far as possible, fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period; and
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site.

6.7.2 Vehicle and Plant Emissions

Measures will also be implemented to limit emissions from construction plant and vehicles. These measures will include:

- NRMM compliant equipment;
- All construction plant will be appropriately sized, vehicles and equipment will be maintained in good working order;

- Low emission vehicles will be used where possible and fit plant with catalysts filters or similar devices. Low sulphur fuels will be used where possible;
- Construction vehicles to conform to the current emissions standards pursuant to the Directive 2012/46 Requirements during any works;
- Vehicle and construction plant exhausts to be directed away from the ground and positioned at a height to facilitate appropriate dispersal of exhaust emissions;
- All plant when not in use and do not need their engines to be running will be turned off. There will be no idling;
- Operation of plant in accordance with the manufacturer's written recommendations; and
- Vehicle, plant and equipment maintenance records will be kept on site and reviewed regularly.

7. Auditing, Monitoring and Review

Reporting procedures will be defined by the Developer who will hold overall responsibility for providing feedback on the environmental performance of the works.

All injury accidents occurring as a result of the Proposed Development's work activities or conditions are to be reported to the PM and recorded in the site Accident Book. First aid will be provided and where necessary, arrangements will be made to get the injured person to hospital.

The PM will report all injury accidents, 'near misses' and dangerous occurrences to Developer's representative Health and Safety Department who will carry out an investigation of all notifiable injury accidents and incidents as scheduled under The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013. Minor injury accidents will be investigated where it is deemed beneficial.

The Developer will hold the responsibility for maintaining a register of all environmental monitoring, which will be made available for auditing and inspection.

7.1 Incident Response

The PM will advise the Developer within 24 hours of any incidents of non-compliance with the oCEMP and will respond to any reported incidents within 24 hours, or as soon as reasonably practicable. In the event of working practices being deemed dangerous either by the Developer's representative or the Health and Safety Executive (HSE), immediate remedial action will be taken.

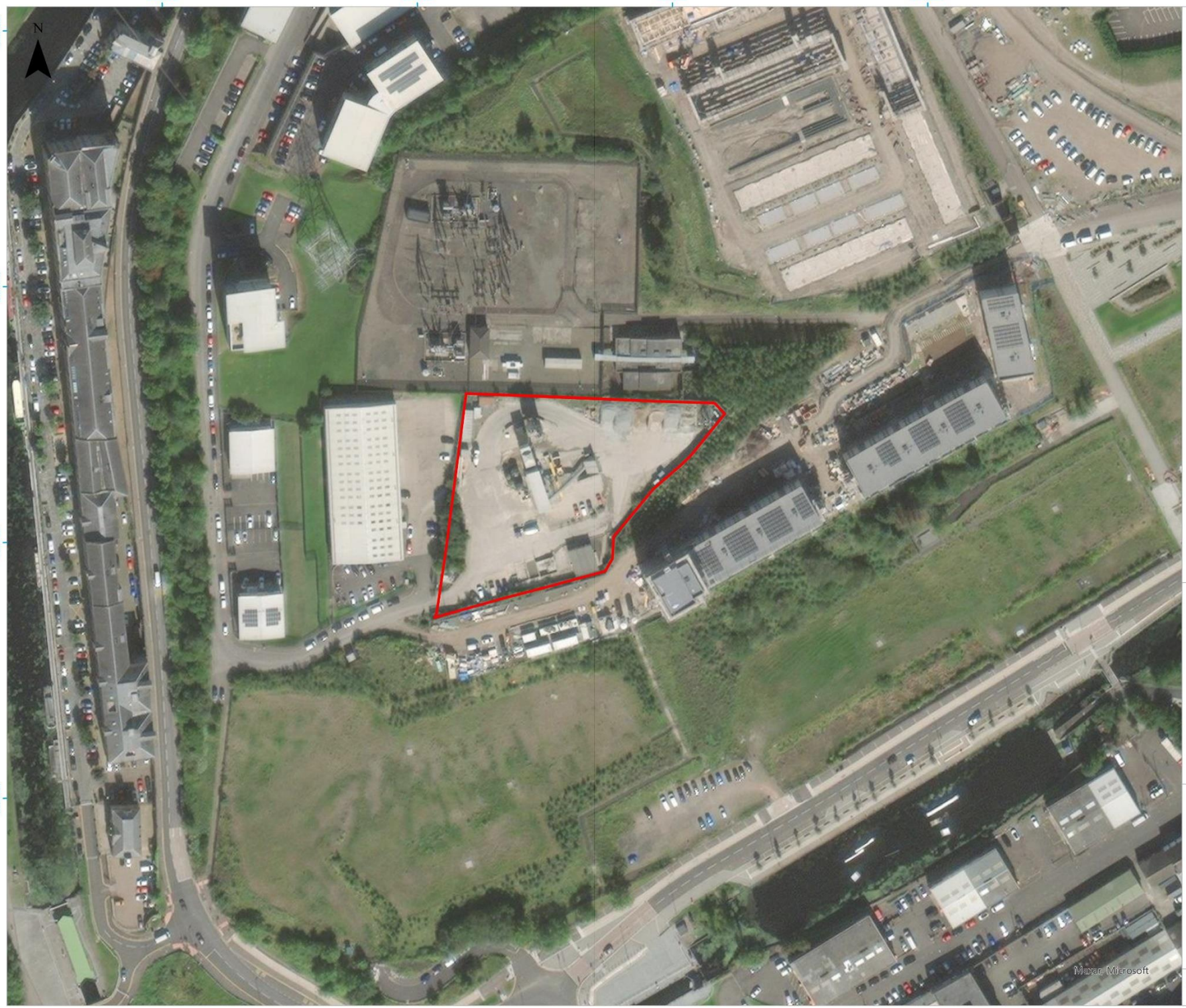
The formal procedure for handling Environmental Incidents will be developed and agreed by the Developer/PC but may include a procedure similar to that detailed below:

- Environmental Incidents are to be reported to PM;
- The PM (or nominated representative) will record full details of the Environmental Incident and ensure that they are responded to as soon as reasonably practicable (preferably within one hour but always within 24 hours);
- The PM (or nominated representative) will monitor and ensure that appropriate action is taken; and
- The PM (or nominated representative) will undertake an investigation to assess what corrective and preventive action, or further investigation is necessary to avoid recurrence of the Environmental Incident.

7.2 Communications and Complaints

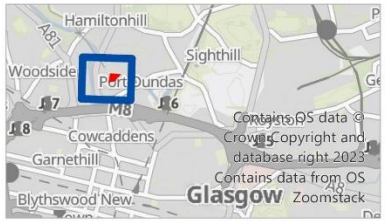
The PM will define procedures for managing incidents. A centralised register of all reported complaints and incidents will be maintained by the PM.

Figures



KEY

Site Boundary



Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere

0 0.010.03 0.05 0.08 0.1 0.13
Kilometres

1:2,500

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7645 - Port Dundas BESS
Construction Environmental Management Plan

Figure 1
Site Location

Date:	Lead:	Review:	Version:
15/10/2024	AR	GS	1.0

Appendix 1- Relevant Legislation

Environmental Legislation	Summary of Relevance to the Site
Hazardous Substances	
Control of Substances Hazardous to Health (COSHH) Regulations 2002 (and amended 2003, 2004)	The COSHH regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substances and apply to all places of work. There are various requirements including an assessment of the risk to the health of employees arising from their work and what precautions are needed, introduction of appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to health and safety), use of control measures and maintenance of equipment.
Waste	
The Waste (Scotland) Regulations 2012	These Regulations provide for the collection, transport and treatment of dry recyclable waste and food waste, and for related matters.
Environmental Protection (Duty of Care) Regulations 1991 (amended 2003)	A legal duty of care is imposed on anyone – from producers, to carriers and disposers of waste, to ensure that: ▪ Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; ▪ Waste is transferred only to an 'authorised person', i.e. a local authority, registered carrier or a licensed disposer; and ▪ When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations.
Environmental Protection Act (EPA) 1990: Part 2 – Waste on Land (amended 2010)	This Act builds on the system put in place by the Control of Pollution Act with stricter licensing controls and other provisions aimed at ensuring waste handling, disposal and recovery operations do not harm the environment. It reorganised Local Authority responsibilities for waste management, introduced a duty of care for producers and handlers of waste and described the offences of unauthorised storage, treatment and disposal of waste.
Environmental Protection Act (EPA) 1990: Part 2a	The section of the EPA created by the Environment Act 1995 setting out the legislative framework for identifying and dealing with contaminated land.
Environment Act 1995	Inserted Part '2a' to the EPA 1990 giving powers and responsibilities to Local Authorities regarding contaminated land.
Discharge to Water / Land	
Water Industry Act 1999	The Act prohibits certain discharges to sewers including: Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents;

Environmental Legislation	Summary of Relevance to the Site
	Liquid waste or steam at a temperature higher than 110ºF or any other chemical waste which is dangerous, a nuisance or prejudicial to health; ▪ Any petroleum spirit; and ▪ Calcium carbide. ▪ Trade effluents may be discharged into public sewers only with the consent, or by agreement with, the sewerage undertaker (i.e. local water company). The consent may stipulate conditions relating to: ▪ Nature or composition of the effluent; ▪ Maximum daily volume allowed; ▪ Maximum daily rate of flow; and ▪ Sewer into which the effluent is discharged.
Water Resources (Scotland) Act 2013	An Act of the Scottish Parliament to make provision for the development of Scotland's water resources; to bring large-scale water abstraction under Ministerial control; to extend Scottish Water's functions and to authorise grants and loans in favour of related bodies; to permit the taking of steps for the sake of water quality; to create contracts for certain non-domestic water and sewerage services; to protect the public sewerage network from harm and to allow for maintenance of private sewage works; to enable the making of water shortage orders; and for connected purposes.
Water Environment and Water Services (Scotland) Act 2003	An Act of the Scottish Parliament to make provision for protection of the water environment, including provision for implementing European Parliament and Council Directive 2000/60/EC; to amend the Sewerage (Scotland) Act 1968 and the Water (Scotland) Act 1980 in relation to the provision of water and sewerage services; and for connected purposes.
Groundwater Regulations 1998 (amended 2009)	The Regulations transpose the requirements of the Groundwater Directive into UK legislation. The Regulations aim to prevent and limit the pollution of groundwater by certain listed substances or groups of substances. The listed substances are the same as those in the Groundwater Directive. The Regulations aim to prevent entry of List I substances into groundwater and prevent groundwater pollution by List II substances. The direct or indirect discharge of List I or II substances must be subject to prior investigation and authorisation. The Regulations also allow notices to be served to control activities which might lead to an indirect discharge of List I substances or groundwater pollution by an indirect discharge of substances in List II.
Emissions to Air / Noise	
Control of Pollution Act (COPA) 1974 (Sections 60, 61) (amended 1989)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution. Control is by service of an abatement notice (under S60) on the person responsible for the noise requiring specific controls to

Environmental Legislation	Summary of Relevance to the Site
	minimise noise and vibration. The notice may specify types of plant and machinery, hours of work, boundary noise levels, etc. Section 61 provides for OCU to apply to the Local Authority for consent before works commence. This protects the contractor from action by the local authority under S60, but not from individual residents' complaints.
Clean Air Act 1993	The Act prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant likely to be causing air pollution, taking into account the possible relevance of statutory exemptions.
Noise and Statutory Nuisance Act 1993	This Act amends the Environmental Protection Act (EPA) 1990 to make noise emitted from vehicles, machinery or equipment in the street a statutory nuisance. It gives the Local Authority powers to serve an abatement notice on the person responsible.
Noise Act 1996	Introduces a new procedure for Local Authorities to seize noisy equipment, in relation to statutory nuisance offences under the EPA 1990.
Control of Noise at Work Regulations 2005	Requires that all employers must conduct an assessment of the exposure and therefore of the risk of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
Construction Plant and Equipment (Harmonisation of Noise Emission Standards) Regulations 1985 (as amended 1995)	Provides for examination and certification of construction plant that comply with noise emission standards. The Regulations require that plant is certified by approved bodies. Various types of plant manufactured after the dates of the regulations are to meet noise emission standards and are certified as such.
Environmental Protection Act (EPA) 1990: Part 3 – Statutory Nuisance (section 80)	When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority has to take steps to investigate the nuisance. Statutory nuisances include any premises maintained in such a state to be prejudicial to health or a nuisance; any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance. Noise emitted from premises so as to be prejudicial to health or a nuisance.
BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites. Noise	Recommends basic methods to control noise on construction and open sites with significant noise levels arising from work activities/operations.
BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites. Vibration	Recommends basic methods to control vibration on construction and open sites with significant vibration levels arising from work activities/operations.
Health and Safety at Work Act 1974	The primary piece of legislation covering occupational health and safety in Great Britain. It's sometimes referred to as HSWA, the HSW Act, the 1974 Act or HASAWA. It sets out the general duties which:

Environmental Legislation	Summary of Relevance to the Site
	▪ employers have towards employees and members of the public; ▪ employees have to themselves and to each other; and ▪ certain self-employed have towards themselves and others.
Air Quality Monitoring in the Vicinity of Demolition and Construction Sites (IAQM, 2012)	This document provides updated guidance on air quality monitoring in the vicinity of demolition and construction sites.
Vehicles	
Road Vehicles (Construction and Use) Regulations 1986 (as amended 2020)	It is an offence to use a vehicle if it is emitting 'smoke, visible vapour, grit, sparks, cinders or oily substances' in such a way as is likely to cause 'damage to any property or injury to any person'. It is an offence to use a vehicle in such a way as to cause excessive noise.
Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 (as amended 2002 and 2003)	These Regulations give powers to Local Authorities to enforce vehicle emission standards at the roadside as part of the implementation of the national air quality strategy. Under the Regulations, Local Authorities may issue fixed penalty notices to users of vehicles that do not comply with emissions standards set in the Road Vehicles (Construction and Use) Regulations 1986 as amended. Appropriately trained Local Authority officers can test emissions from vehicles with the help of a uniformed police officer to stop the vehicle. The Local Authority officer may also issue a fixed penalty notice to drivers who leave their engines running unnecessarily.
EU Directive 97/68/EC Requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery	This Directive makes provision on emission standards and type-approval procedures for engines to be installed in non-road mobile machinery.
EU Directive 98/69/EC Relating to measures to be taken against air pollution by emissions from motor vehicles	Amends the Annexes to Directive 70/220/EEC relating to measures to be taken against air pollution by emissions from motor vehicles.
Biodiversity	
Wildlife and Countryside Act 1981	The Act deals with the protection of certain animals, birds and species of flora, as well as providing power to protect habitats, and sites of special scientific interest. It lists the protected animals and plants. Any activity that could result in the killing or injuring of animals or plants could breach the Act. When developing any site, care and caution must be taken to ensure habitats are not damaged. **Invasive non-native species** It is an offence to release or allow to escape into the wild, any; ▪ animal; ▪ plants or otherwise cause to grow in the wild any plant.

Environmental Legislation	Summary of Relevance to the Site
	Details are set out in Schedule 9, this includes species of crayfish, Japanese knotweed and Himalayan Balsam. When these species are present you must take reasonable steps to control them to stop them spreading.
Conservation of Habitats and Species Regulations SI 2017/1012	These Regulations provide for the: ▪ designation and protection of European sites; ▪ protection of European protected species; ▪ adaptation of planning and other controls to protect European sites. They provide for the safeguarding of protected European animals and plants in Great Britain. In particular, they make it an offence, subject to exceptions, to: ▪ capture, injure or kill any wild animal of a European protected species; ▪ deliberately disturb wild animals of any such species; ▪ deliberately take or destroy the eggs of such an animal; or ▪ damage or destroy a breeding site or resting place of such an animal.
Conservation (Natural Habitats etc.) Regulations SI 1994/2716	The Regulations designate sites as special areas of conservation and introduce management agreements which maintain these sites and remove the threat of their degradation and destruction, by restricting potentially damaging operations. They also provide powers to make bylaws which prevent the entry or movement into a site and the killing or taking of wildlife protected by European law and the disturbance of their habitats, breading grounds and surrounding vegetation. Similar provisions are also issued for plants. There are exemptions to certain regulations, which are fully outlined.
The Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 2010	Tree preservation orders can be created under the Town and Country Planning Act. The Regulations contain, amongst other things, the procedure connected to making appeals against such orders as well as the procedure connected to applying for consent to cut down, top, lop or uproot trees protected by a tree preservation order. Applications for consent must be on a form issued by the Secretary of State and must include the required details and documents.
Protection of Badgers Act 1992	The Act establishes provisions relating to badgers, which make it an offence to intentionally kill, injure, ill-treat or take them, unless under strict conditions.
Wild Mammals (Protection) Act 1996	This Act makes it an offence to mutilate, kick, beat, nail (or otherwise impale), stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

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