# Hylton Castle 275/66kV Substation

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| **Title:** | **Construction Environmental Management Plan (CEMP)** |
| **OTW Doc No:** | **VB0022-VEJV-XXXX-XX-PL-EEN-080001** |
| **National Grid Doc No:** | **09_VE_5004** |
| **Document Owner:** | **Dawn Love** |
| **Document Author:** | **Dawn Love** |
| **Revision/Status:** | **Revision B / Issued for Review** |
| **Revision Date:** | **08/04/2024** |
| **This Document Supports:** | The OTW Integrated Management System applies to all OTW businesses in the UK. |
| **Responsibility for this Document:** | The functional responsibility for the development, review and maintenance of this document rests with the SHEQ Manager. |

## Revision History

| Revision | Date | Purpose | Prepared | Checked | Approved |
|---|---|---|---|---|---|
| A | 07/03/2024 | First issue | Dawn Love | Alan Hartfield | Craig Davies |
| B | 08/4/2024 | Second issue | Dawn Love | Alan Hartfield | Craig Davies |
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**Contents**

## Purpose, Scope and Application

This plan describes the Environmental Management System (EMS) that shall be established to control the activities to be undertaken during the Hylton Castle 275kV substation works.

This Construction Environmental Management Plan (CEMP) identifies the project management structure roles and responsibilities with regards to managing and reporting environmental risks to align with both National Grid's requirements *(e.g. Construction Environment Management - NG/ET/SR_215 Issue 2)* and to discharge the planning conditions from Sunderland City Council.

All personnel including contractors engaged by the Omexom Taylor Woodrow (OTW) of their own work and shall perform their duties in accordance with the requirements of this EMP.

### 1.1 Project Description

OTW has been engaged under the framework agreement to build and install Hylton Castle 275kV Substation, a new development to be wholly owned and operated by National Grid.

The development is located approximately 2km SSW from the National Grid West Boldon substation on land to the north of the Nissan Sunderland Plant. The new substation will sit within the "International Advanced Manufacturing Park" (IAMP) alongside a new 66kV substation. Both the Hylton Castle substations are required to meet future demand projections in the locale. The developments are driven from a connection application from Sunderland County Council (SCC) for an anticipated demand of 255MVA. To meet this demand the new 275/66 kV substation will be designed, installed and commissioned incorporating multiple disciplines including civil engineering, primary HV engineering with HV cables, all LV protection & control schemes along with LV supplies and distribution for both AC and DC requirements.

### 1.2 Location

The Proposed Development is located on the land adjacent to Downhill Lane and International Drive to facilitate works for an expansion of (IAMP) International Advanced Manufacturing Park The Proposed Development is part of the wider IAMP development. The site is greenfield with access is possible from International Drive via several previously installed bell mouths. The site contains a mixture of grassland habitat.

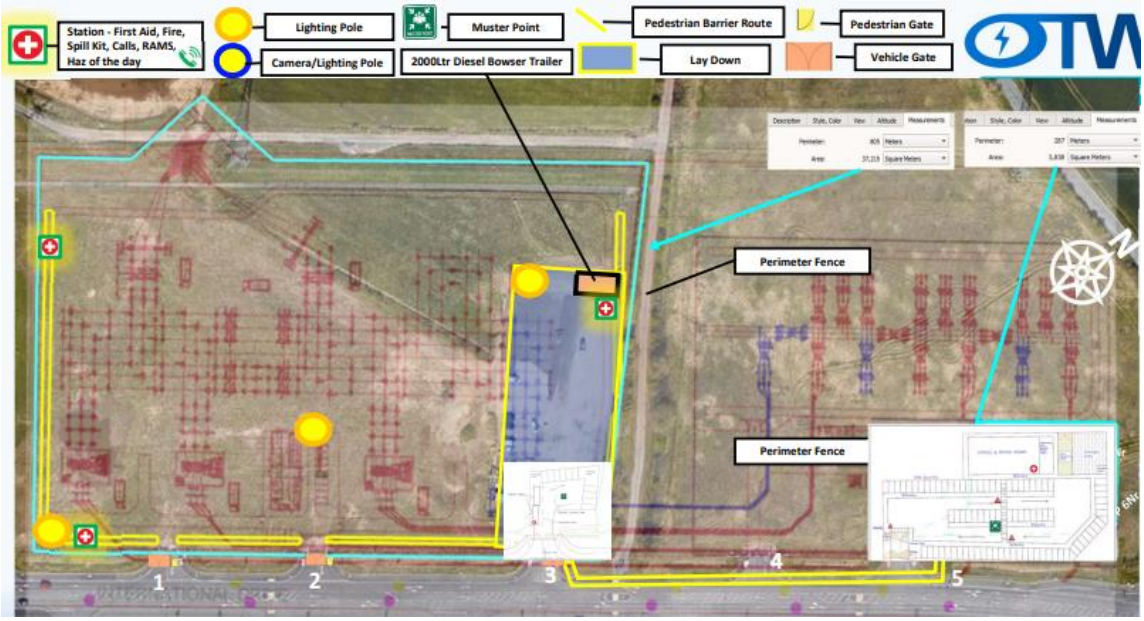
**Figure 1 – Location of the site off International Drive**





*** Documents on the Intranet are "controlled" version. Uncontrolled when printed. ***

**Figure 2 – Site Plan**




## 2 Project Environmental Management System

This section describes the Environmental Management System (EMS) complying with ISO 14001:2015, which will be established to control the activities to be undertaken during the Hylton Castle works, hereafter called 'the Project'.

Compliance with the environmental management system shall be monitored and audited by appropriate personnel throughout the duration of the works. Any system non-compliance shall be documented, and appropriate corrective actions issued and implemented.

### 2.1 Project Personnel

| Name | Position |
|---|---|
| Mark Brennan | Client Project Manager |
| Dawn Love | OTW Environmental Manager |
| Lewis Fouweather | OTW Senior Engineer (Environment) |
| Ali Siddiqi | OTW Project Director |
| Craig Davies | OTW Senior Project Manager (Civils) |
| Michael Thirlwell | OTW PCSM (Project Contractors Site Manager) |

### 2.2 Documentation

The environmental management system documentation for the Hylton Castle project will be established as follows:

## 2.3 HSE Policy

OTW issues a combined Health, Safety and Environmental (HSE) Policy on an annual basis. This document demonstrates a high level of commitment to managing environmental responsibilities. The document is displayed on project Notice Boards.

## 2.4 Legal Compliance

OTW subscribes to *Simplify Legislation* register. These registers are specific to OTW and provide an online maintained database which can be accessed by required personnel via the internet.

## 2.5 Training, Awareness and Competence

- A site specific induction is briefed to all staff and subcontractors prior to working on site which contains specific environmental information
- Method statements will be communicated as part of the 'Setting to Work' briefing along with the relevant risk assessments.
- OTW will provide a briefing of relevant procedures with site staff throughout the contract, including through the use of tool box talks.
- OTW will undertake on-going monitoring of the effectiveness of mitigation and procedures and update as required.
- Project specific SHEQ training will be undertaken in form of Tool Box Talks (TBT) and spill awareness training to relevant operatives. The TBT will address current environmental issues and act as reminders on good environmental practice.

Any specific environmental training will be identified through the OTW training matrix and will be arranged with our JV partner's Learning and Development teams.

## 2.6 Sub Contractor Competency and Vendor Approval

All Contractors engaged by OTW shall be on the OTW Pre-qualified Supplier Register. As part of the pre-qualification process the environmental competency of contractors is evaluated.

Contractors wishing to engage their own subcontractors may do so providing that it is agreed with the OTW Project Manager and that the nominated subcontractor is on their company's pre-qualified supplier list.

## 2.7 Communication

Environmental Alerts are distributed via IMS as required to ensure environmental issues such as learning events from incidents/accidents both internal and external are communicated.

All project personnel are encouraged to make suggestions for environmental improvement and report environmental observations. OTW provides various tools to the workforce for effective reporting which includes On-Site Daily Risk Assessment, Positive Intervention and formal incident reporting.

## 2.8 Monitoring, Inspections and Audits

The project shall undertake weekly environmental inspections. All inspection and resulting actions. Any actions identified during the inspection shall be closed out in a timely manner.

## 2.9 Corporate Environmental Audits

A planned programme of OTW internal audits shall be undertaken by the respective company's SHEQ auditors. The Audit Report shall make recommendations for improvement and identify the appropriate personnel and timescales for completing these actions. The contents of the report shall be discussed at site HSEQ meetings.

*All identified non-conformances during the audit will be recorded on the IMS Action Tracker system. Any actions recorded shall be closed out in a timely manner by the respective actionee.*

## 2.10 Client Reporting

There are the reporting requirements for National Grid, which are submitted on their reporting portal:

***Aggregates and reuse of materials (reported annually)***

*As communicated at the start of the financial year, an annual submission is required to record the aggregate volumes delivered to site and the volume of materials reused on the project. The deadline to submit this data for FY24/25 is 15 working days after 31st March year-end. This replaces the requirement to report aggregates and material reuse monthly.*

*This information will be stored in project files for reporting purposes:* Aggregate Deliveries (CIT) reported annually

***Carbon Values (reported quarterly)***

*An estimated Carbon Interface Tool (CIT) is required to be uploaded quarterly to reflect any changes and updates to the project design. Quarterly carbon values are also required to be submitted to the CSP (taken from the project's most recent CIT). This requirement came into force from April 2023 and any missing carbon data should be uploaded retrospectively to the CSP as soon as possible.*

***Fuel & Energy Consumption (reported monthly)*** *Projects are required to report their fuel & energy consumption data monthly. This should be reported on, or before, the 21st of the month (or the first working day afterwards) for the month prior. This requirement came into force from July 2023 and any missing fuel data should be uploaded retrospectively to the CSP as soon as possible.*

*Project information will be stored here:*

Fuel and Energy (CIT) reported monthly We will fit water and electric meters onsite for mains connection.

***Waste Nil Returns (reported monthly, where applicable)***

*Following feedback from our contractors, the waste nil returns form has been reinstated on the CSP. If you have not had any waste collections on your project in a given month, the 'Nil Returns' form should be used to record this. This shall be reported on, or before, the 21st of the month (or the first working day afterwards) for the month prior.*

**This will commence once we have started waste removals from site.**

*Project information will be stored here:*

Waste Reporting (CSP) Monthly

## 2.11 Existing Documents

The following documents have been reviewed to produce this plan:

| Document reference /title | Key issues/risks/mitigation |
|---|---|
| **Ecology**<br>- WSP – Ecology report - August 2023 Doc Ref. NG_IAMP_EcIA_05042 3 (confidential breeding | The report includes a series of relevant Sunderland Planning Policies for ecology regarding BNG and other issues.<br>**Watching Brief (Ecologist) - all works in areas of habitat that are identified by the Ecologist as having** |

| | |
|---|---|
| | **the potential to be used by or support protected species, taking account of seasonality, will be supervised by an Ecologist.** *These include works:*<br>*All habitats and species defined above; and*<br>*Where the Principal Contractor is in any doubt regarding any ecological constraints on the works or has any ecology-related or nature conservation-related queries relating to the works they will seek advice from the Ecologist. They will also seek advice in the event of any need to deviate from the agreed scope of work.*<br><br>*Pollution Prevention: the ground investigations will employ good practice in pollution prevention, complying with the Environment Agency's Pollution Prevention Guidelines, or similar good practice, to prevent the pollution of controlled water (groundwater and surface water) to prevent pollution incidents and to safeguard legally protected species.*<br><br>*Any potentially polluting materials should be stored in appropriate bunded containers and kept in a secure location. Standard pollution prevention measures, following good practice guidelines, should also be undertaken to prevent sediment mobilisation and ingress to watercourses and waterbodies.*<br><br>*Vehicles and Plant: Vehicle/plant movements on-site will comply with a speed limit of 15mph on Primary routes and 10mph on all other routes to minimise the collision risk with wildlife;*<br><br>*Open excavations: excavations shall be backfilled and reinstated as soon as practicable following completion of the works and excavations that need to be left open overnight shall be inspected daily, and have a means of escape installed (approved by the Ecologist), to ensure no wildlife has become trapped. In the event of wildlife being encountered in any excavation, the advice of an Ecologist shall be sought*<br><br>**Advised there could be some potential loss of habitat to breeding birds – risks of lapwings and skylarks (ground nesting) which may occupy the site before we start works. These are protected by the Wildlife and Countryside Act and we have adapted mitigation /protection measures e.g. falconry and dog visits to reduce the risk of protected nesting birds.** |
| **NG - Doc Ref. NG_IAMP_BNG_050423** | BNG assessment compliance including BNG CEMP and Habitat assessment underway for onsite BNG, offsite BNG managed via NG<br><br>For onsite BNG Atkins are preparing a Habitat Assessment and BNG CEMP (see details below) |

| | |
|---|---|
| AMP Substation proposals: Technical note on the historic environment – WSP October 2022<br><br>**County Archaeologist's comments – 25/07/2023** | This latest document stated:<br>*As no significant archaeological remains were identified in the archaeological evaluations undertaken at this site, I consider that no further archaeological work is required should the proposed works be approved.* |
| **Flood Risk**<br>- IAMP 275 SUBSTATION SURFACE WATER STRATEGY Rev P02 received. - 5th July 2023 - | This report stated - *the modifications to the proposed Gigafactory development have either incorporated suitable changes to the drainage arrangements for the scheme or do not require any change in the development infrastructure to manage flood risk, whether from fluvial, surface-water or other sources* |
| **Nuisance**<br>- Noise Impact Assessment dated 13th October 2022 | Relate to the operation of the substation, there is no need for a ion of a S61 requirement |
| - Section 106<br>- *Sunderland City Council*<br>- *22/02384/FU4 reference:* | The S106 states –<br><br>*The nature of the Development means that offsite Biodiversity Net Gain (BNG) works are required and are intended to be carried out by Durham Wildlife Trust ("DWT") on the Mitigation Land and thereafter maintained by DWT in accordance with the BNG Management Plan in order to mitigate the impact of the Development*<br><br>*The Management Plan setting out the activities on the Mitigation Land to be carried out, and funded by the BNG Contribution, to create the conditions for biodiversity net gain or habitat loss offset requirements to be prepared by the Developer in compliance with the provisions of Schedule Five and approved by the Council in writing prior to the Commencement of Development on the Site*<br><br>*All that land known as land at Rainton Meadows, Houghton-le-Spring and comprised within a lease dated 15th December 2023 made between (1) The Council of the City of Sunderland and (2) Durham Wildlife Trust registration of which is at the date of this Agreement pending with the land registry under title number TY601942.* |

## 2.13 Planning Conditions

Sunderland Council have issued draft planning conditions under application - 22/02384/FU4

1. No development shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The plan must demonstrate the adoption and use of the best practicable

means to reduce the effects of noise, vibration, dust and other air pollutants and site lighting. The plan should include,

- *Identification and location of sensitive receptors*
- *Working times including deliveries and waste collections*
- *Identification of all sensitive receptors including any water courses or drainage ditches*
- *Measures to prevent pollution of any surface waters*
- *Measures to prevent or minimise impacts to air, arising from disposal of surface vegetation, excavation and construction. Control of emissions from vehicles, plant and equipment particularly in the form of smoke or dust.*
- *Measures to control noise and vibration, with consideration of the code of practice set out in BS5228:2009+A1:2014*
- *Site access and minimisation of track out of mud and debris onto the highway - Highway cleansing*
- *Vehicle routing and prevention of off-site queuing and idling of HGVs*
- *Any site floodlighting*
- *Working times*
- *Complaints management system*
- *Protection of watercourse and ecological receptors*
- *Clarification of methodology and controls where any piling is required*

Reason: To safeguard the amenities of nearby residents and to reduce the impact on the on the nearby residential properties in accordance with the NPPF, Policies EN4 and T1 of the IAMP AAP, Policy HS1 of the Core Strategy and Development Plan and in the interest of maintaining Strategic Road Network Operations and Safety. ***The Full draft Planning Conditions are in Appendix 1.***

### 2.14 Project Risks

Potential environmental risks associated with the project include:

- *Nesting birds (ground nesting) which may affect the timing of the works, and (low) potential for GCNs/reptiles*
- Spillage of hydrocarbons, silt, concrete washout and use of other hazardous substances during construction which could affect surface water drains
- Waste arising from the construction of both the temporary and permanent works and compound areas (opportunity for this to be a resource to be donated to other projects)
- The project strategy is to achieve the Biodiversity Net Gain targets by offsite mitigation so there is a net loss of habitat, however there are potential long term risks to breeding birds and other wildlife.

### 2.15 Incident Reporting

All environmental incidents shall be reported in line with the OTW Accident/Incident procedure. The incident shall be recorded on IMS, and an investigation will be conducted, actions identified, logged, and closed out in a timely manner.

### 2.16 Complaints Recording

In the event of an environmental nuisance complaint being received, these shall be logged on the project complaint register, and  All nuisances shall be reported to the client immediately by the Project Manager, utilising the established procedure. All complaints shall be investigated and where required corrective measures undertaken.

## 3 Project Environmental Controls

### 3.1 Incidents and Complaints

An Environmental Incident is defined as ‘an unplanned, undesired event that results in: harm or damage to the environment or the potential for enforcement action relating to environmental legislation, consents and consent conditions’.

Harm or damage to the environment includes (but is not limited to): ‘pollution of, or damage to, surface water, groundwater, or land; spills or leaks of oil and chemicals; damage to archaeology or heritage (listed and non-listed); damage to wildlife; including protected species and habitats; excessive noise, dust and/or other air pollutants, vibration or light pollution; or failure to control waste or excavated material in accordance with the regulations. Incidents are classified as Level 1, 2, 3 or 4 (4 = close call)’.

***Level 1 – ‘An incident which results in catastrophic harm or damage to the environment, with a high likelihood of enforcement action and/or significant media attention’.***

***Level 2 – ‘An incident resulting in significant harm or damage to the environment with a moderate likelihood of enforcement action and/or media attention. The incident may involve the receipt of a statutory notice from a regulatory body’.***

***Level 3 – ‘An incident resulting in limited or no damage to the environment with a low potential of enforcement action’.***

***Level 4 (Close Call) – ‘An environmental near miss with low potential of harm or damage to the environment that could result in enforcement action’.***

In the event of an incident, this shall be reported using the OTW Footprint on-line system.

#### 3.1.1 Investigating and Reporting Environmental Incidents

All Environmental incidents and Close Calls, including close out actions are submitted electronically and reported online.

In the case of a Level 1 environmental incident a written investigation report will be produced. This will include details of corrective and preventative actions that are to be implemented before work can resume.

The Project Manager will be the main point of contact with regulatory authorities and will maintain records of telephone conversations and all written communication relating to environmental issues.

Incidents will also be reported to National Grid

### 3.2 Waste Management

*See Site Waste Management Plan (SWMP) reference VB0022-VEJV-XXXX-XX-PL-EEN-080008*

### 3.3 Pollution Prevention /Handling and Storage of Materials

Any hazardous substances used during the project operation shall be handled in line with the relevant COSHH assessment and the relevant safety data sheet (SDS).

Fuel storage areas shall be located at least 10m away from drains and sensitive areas. Bunded areas shall be located on an impervious surface. Hoses, valves and triggers shall be stored within the bund at all times. Bunded areas shall be positioned in areas to minimise accidental damage or acts of vandalism.

Materials shall be stored in accordance with the manufacturer's instructions and protected from accidental damage. A high level of housekeeping shall be maintained at all times. Storage containers shall be clearly labelled with their contents and a register produced. Perishable materials shall be ordered when required and stored in suitable locations so as to minimise the need to reorder and dispose of expired substances.

Substances and chemicals handled/stored by subcontractors shall be monitored to ensure compliance with OTW procedures, i.e. appropriate method statements, COSHH assessments, preventative measures against spillage's.

***Used plant nappies and spill response material shall be disposed as hazardous waste in line with procedures and legislation.***

### 3.4 Spill Response and Emergency Preparedness

An Emergency Plan has been produced for the project. Routine testing in response to potential on-site environmental emergencies, such as spillages of fuel, oil and chemicals shall be undertaken through toolbox talks and event scenarios. In the event of an environmental emergency or incidents this shall be actioned in accordance with the Taylor Woodrow reporting requirements.

When installing the drainage for the stormwater (carpark), we will include an interceptor to prevent oil or other fuels entering the stormwater/surface water.

### 3.5. Emergency

**In the event of a serious spillage, which cannot be contained and/or cleaned-up by the project team, contact should be made with Adler & Allan on 0800 592 827 – quote 'VIN001'**

A specialist response unit will be dispatched within a maximum of 4 hours to contain and clean-up the fuel/oil spillage. Relevant project personnel and site operatives will be provided with instruction in the general use of spill kits during the site induction and via toolbox talks.

Measures to prevent or minimise impacts to air, arising from disposal of surface vegetation, excavation and construction. Control of emissions from vehicles, plant and equipment particularly in the form of smoke or dust.

Any generation of dust during project work shall be mitigated by appropriate control measures, implemented by the project team.

Dust monitoring shall be undertaken as part of environmental inspections or for construction activities which is deemed to pose a risk of dust emission. The inspection shall document visible signs of dust emission and depositions originating from site activity.

### 3.6 Refueling

Refueling operations shall only be undertaken in designated areas with a plant nappy, fire extinguisher (dry powder), a spill kit in the immediate vicinity and away from drains or watercourses (Plant nappies shall be used under suitable equipment or kit). Hoses and valves will be checked regularly for signs of wear and turned off and securely locked when not in use

Wherever possible new equipment (e.g. transformers) should be delivered already filled with oil. Only trained personnel shall remove/replace oil from equipment. A task specific environmental risk assessment shall identify suitable controls for the operations.

The following mitigation measures shall be implemented to ensure the effective control of dust emissions from construction works.

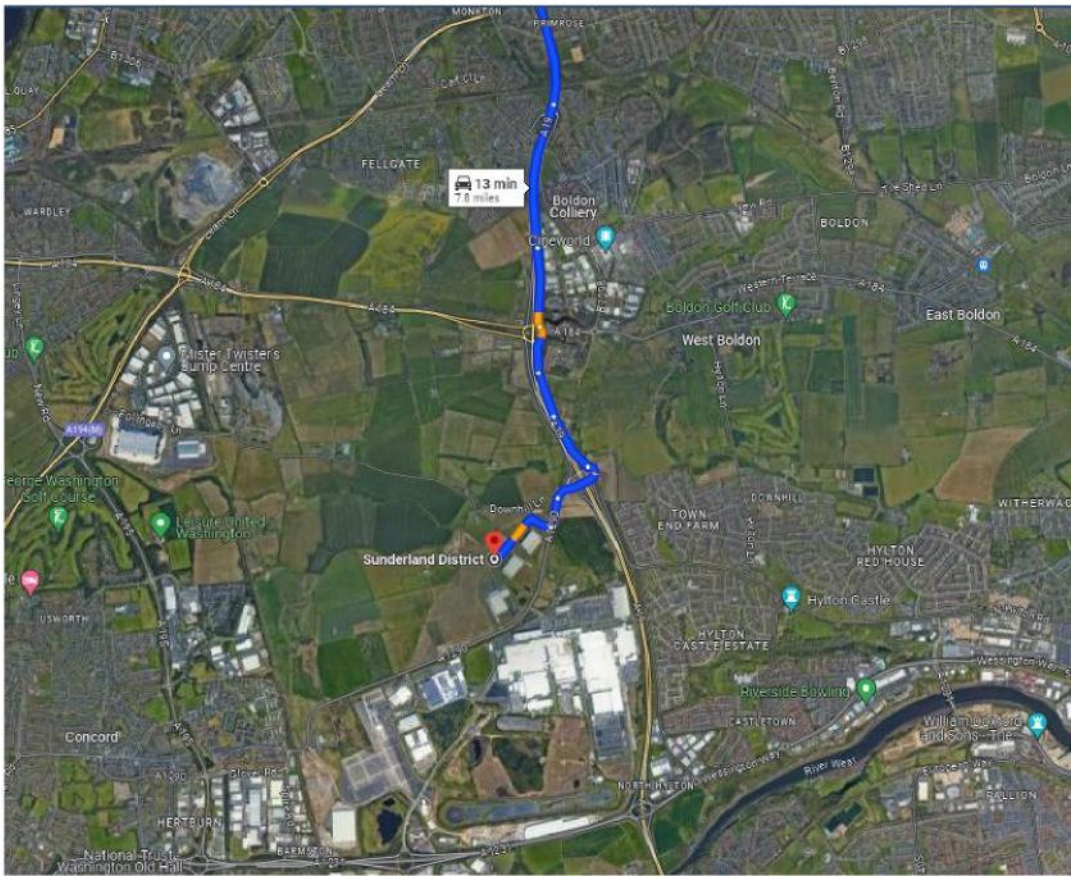
| Activity | Mitigation Measures |
|---|---|
| Construction traffic | ▪ All construction traffic shall follow specifically designated routes<br>▪ Speed limits shall be put into place on site for all vehicular movements<br>▪ All vehicles carrying loose material shall be covered<br>▪ Vehicles will be cleaned as necessary |
| Highways | ▪ Where necessary, use of road sweepers shall be incorporated to ensure highways remain clear of dust and mud<br>▪ Road edges and pathways shall be swept by hand and damped down as necessary |
| Stockpiles | ▪ To be damped down enclosed or covered as appropriate<br>▪ Location of stockpiles away from any sensitive receptors wherever possible |
| Dust Suppression | ▪ Mobile bowsers to be deployed on site at regular intervals as necessary<br>▪ Monitoring and mitigation activity to be increased during significantly dry and windy periods<br>▪ Where necessary, use of enclosures to be considered to ensure reduction in dust mitigation<br>▪ Deliveries of significantly dusty materials to be sprayed to reduce dust potential<br>▪ All cutting and grinding operations to be conducted in ways to reduce risk of dust, e.g. wet cutting techniques etc. |

If there are any issues with dust during the execution of the works, OTW shall ensure that the contractor implement suitable control measures such as damping down in order to prevent the spread of airborne particulates.

### 4 Site access and highway cleanliness free of mud & debris

Consistent Highway cleansing. We will adopt a wheel wash and a Road Sweeper. OTW Site Management shall ensure that public roads and drainage systems are kept free of mud and loose material resulting from construction works. A road brush shall be employed at construction access points as and when required. Wheel wash facilities will be installed if deemed necessary, and there will be constant monitoring of the public highway to ensure that this provision is met.

## 5 Vehicle routing and prevention of off-site queuing and idling of HGVs.




The location of the construction site is within a business park where interface with other user's of the location is inevitable. Site construction HGV's will announce their arrival in advance before approaching site, minimum 1 hour. Specific site instructions will be provided upon procurement order with HGV companies. Deliveries to and from the site and loading and unloading of raw material during the construction phase of the development shall be restricted to the hours of 07:30 to 17:30 Monday to Friday, with no deliveries on Saturdays, Sundays or Bank Holidays. Site construction HGV's must not whilst entering or exiting site. Upon announcing their arrival, by phone, they must seek permission that it is ok to do so. If site access is busy at that time they must wait in an designated parking area until permission is given to approach site.

## 6 Any Site Floodlighting

All temporary lighting required during construction shall be placed within the site and face downwards / inwards to prevent light leakage onto the road and neighbouring land. All site lighting will be directional, with photocell timer, to prevent any light pollution. Temporary lighting will be deployed in line with the BCT Guidance Note 8 Bats and artificial lighting (2018) where possible. Lights will be placed as low as practicable, to prevent moth confusion, on walkways etc.

Construction phase lighting will be limited to permitted working hours in low light conditions, with lower-level security lighting outside of these times if necessary. We will ensure dark corridors remain (e.g. the hedgerows) to protect bats/moths etc. The first obvious way to

achieve these & additional objectives was to minimise our dark working requirements. Environmental Noise and Working Times

### 6.1 Any site floodlighting

All temporary lighting required during construction shall be placed within the site and face downwards / inwards to prevent light leakage onto the road and neighbouring land. ***All site lighting will be directional, with photocell timer, to prevent any light pollution***

### 6.2 Environmental Noise and Working Times

The Planning Conditions state:

*Any site operations and activities associated with the periods for construction (excluding deliveries) shall only be carried out between 0700 hours and 18:00 hours on Mondays to Fridays and only between 0800 hours and 1700 hours on Saturdays, with no construction related operations and activities taking place on Sundays, Bank Holidays or Public Holidays. Except in emergencies and where agreed in advance with the LPA Reason: To safeguard the amenities of nearby residents in accordance with the NPPF, Policy EN4 of the IAMP AAP, Policy HS1 of the Core Strategy and Development Plans*

#### 6.2.1 Sensitive Receptors

There is one farm located to the north east of the site which will be demolished as part of the overall IAMP works.

There are no other sensitive receptors.

#### 6.2.2 Best Practicable Means

*We will adopt the* Best Practicable Means *(as defined by the Control of Pollution Act 1974 and Environmental Protection Act 1990)* and BS5228:2009+A1:2014 principles to minimise noise/vibration impact of construction works, where applicable including:

- Switching off all plant when not in use
- Powering all plant/equipment by mains electricity over diesel
- Using ‘sound-reduced’ compressors/generators
- Briefing all site personnel before works start on noise reduction

Vehicles, plant and machinery used on site shall be regularly maintained and serviced to ensure they are in efficient working order emitting a minimum of noise. Project management shall take into account the following noise hierarchy:

- Eliminate the source of the noise
- Substitute for quieter methods of working
- Isolate source of the noise
- Engineering controls, i.e. barriers, silencers, insulation
- Restriction of working hours

Construction work that gives rise to noise that is audible outside the site boundary shall not be carried out except between agreed hours.

The construction site working hours are *(including site deliveries ):*

- Monday to Friday *0700 hours and 18:00 hours*
- Saturday *0800 and 1700 hours*

No working on Sundays or Bank Holidays shall be permitted unless written permission from the client/councils. Should this be granted, local residents shall be informed by the client prior to any works commencing.

### 6.3 Emission

A No-Idling policy shall be adapted on the project. This encompasses that any engines or equipment not in immediate use are to be switch off.

No petrol or diesel engines used to power equipment or plant on site shall be permitted to emit dark smoke.

## 7 Water Management

There is a separate water management plan where we outline our commitments to manage the water risks of the project.

## 8 Biodiversity Net Gain/Ecology Mitigation

The planning conditions state:

*No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The measures contained within the CEMP (Biodiversity) shall be in general conformity with those measures set out in Table 5.1 of the Ecological Impact Assessment by WSP dated August 2023 (Doc Ref. NG_IAMP_EcIA_050423).*

*The CEMP shall include the following.*

*a. Risk assessment of potentially damaging construction activities.*

*b. Identification of "biodiversity protection zones".*

*c. Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).*

*d. The location and timing of sensitive works to avoid harm to biodiversity features.*

*e. The times during construction when specialist ecologists need to be present on site to oversee works.*

*f. Responsible persons and lines of communication.*

*g. The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.*

*h. Use of protective fences, exclusion barriers and warning signs.*

### 8.1 BNG strategy

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

We are working with our consultants (Atkins Realis) to create a BNG CEMP to ensure we mitigate the risks.

*The 15% BNG target will be achieved by offsite habitat creation through Durham Wildlife Trust (DWT) in an agreement through the section 106 managed by Sunderland Council.*

### 8.2 Nesting Birds

To minimise the disturbance of nesting birds, site lighting shall be installed at the lowest possible level and shielded to create directional light pointed downward and into the site working areas only.

Should an active nest be discovered, an exclusion zone shall be set up around the breeding site, and all activity will stop within the exclusion zone area. Expert advice will be sought as how to manage the situation.

All British birds, their nests and eggs are protected by law, which makes it an offence to:

- Kill, injure, or take a wild bird.
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built
- Take or destroy the egg of any wild bird.
- Possess or control any live or dead wild bird or any part of, or anything derived from a wild bird, or an egg or part of the same.

### 8.3 Nesting Birds

The EIA report (WSP) stated there could be some potential loss of habitat to breeding birds – risks of lapwings and skylarks (ground nesting) which may occupy the site before we start works. ***These are protected by the Wildlife and Countryside Act and we will need to consider mitigation /protection measures e.g. bird scarers.*** Skylarks and lapwings were observed nesting close to the site in Spring 2023. The surface of the site is suitable for ground nesting birds/

The 'Bird Nesting Season' is officially from February until August (Natural England) and it is recommended that vegetation works (tree or hedge cutting) or site clearance should be done outside of the nesting season.

Vegetation clearance within the nesting season shall be preceded by a thorough check for nests by a competent person. Any active nests must be left undisturbed with a suitable barrier of vegetation (approximately 5m) around them to avoid harm to the nest or eggs. The barrier should remain in place until the young have flown.

### 8.4 Ecology - Flora

The existing greenway and all trees, hedges, and shrubs within or adjacent to the site, except those that have been approved for removal shall be protected from damage during construction work. This will be using best practice (for example BS5387), with a 2m exclusion zone put in place where feasible to avoid damaging the root protection zone, or other impacts such as

- *Abrasion*
- *Crushing by vehicles/plant equipment and/or storage of building materials or soil*

- *Compaction of the surrounding soil leading to root death by asphyxiation (lack of oxygen) or drought (inability to obtain water)*
- *Severing and removal of roots by excavation*
- *Poisoning from spillage or storage of fuel, oil, chemicals etc.*

### 8.4.1 Invasive species

No invasive non-native species have been recorded within the site from previous ecological surveys. If invasive species are identified, they will be managed in accordance with the OTW best practices.

### 8.4.2 Reptiles

The ecology reports reported low risks of reptiles in the short grassed areas (66kV /compound area), however there was habitat which was deemed more likely to support reptiles along the site boundary.

For clearance works in the main 275kV compound area we will employ an ecological watching brief to ensure there are no risks from reptiles.

*In the unlikely event that reptiles are encountered they will be allowed to move to a place of safety either of their own accord or by use of a gloved hand, before works continue.*

## 9. Archaeology and Historic Sites

The County Archaeologist report stated*: As no significant archaeological remains were identified in the archaeological evaluations undertaken at this site, I consider that no further archaeological work is required should the proposed works be approved.*

## APPENDIX 1 – DRAFT PLANNING CONDITIONS

Draft condition set out below :-

1 The development to which this permission relates must be begun not later than three years beginning with the date on which permission is granted, as required by section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004 to ensure that the development is carried out within a reasonable period of time

2 The development hereby granted permission shall be carried out in full accordance with the following approved plans:

- PDD_101152_LAY003_1_ - PROPOSED BUILDING ELEVATIONS
- PDD_101152_LAY003_1_A - 275kV Control Building received 22nd October 2022
- PDD_101152_LAY005_1_B 66KV PROPOSED 66KV CONTROL BUILDING ELEVATION.
- PDD101152-LAY001-P4 275KV - 275KV LAYOUT received 22nd October 2022
- PDD101152-LAY002-S1-P3 -275KV ELEVATIONS A-A received 22nd October 2022
- PDD101152-LAY002-S2-P4 - 275KV ELEVATIONS B-B received 22nd October 2022
- PDD101152-LAY002-S3-P4 - 275KV ELEVATIONS C-C AND D-D received
- PDD101152-LAY002-S4-P3 - 275KV ELEVATIONS E-E AND F-F
- PDD101152-LAY004-P7 - 66KV PROPOSED LAYOUT received 22nd October 2022
- PDD101152-LAY006-P4 - 66KV ELEVATIONS 66KV ELEVATIONS
- PDD101152-PLA002-P3 - SITE LAYOUT received 22nd October 2022
- PDD101152-PLA001-P7 - SITE LOCATION PLAN received 22nd October 2022
- Landscape and Visual Assessment - received 22nd October 2022
- Design and Access Statement - received 22nd October 2022
- ECIA Version 2 received 4th September 2023
- IAMP 275 SUBSTATION SURFACE WATER STRATEGY Rev P02 received 5th July 2023
- FLOOD RISK ASSESSMENT IAMP 66 SUBSTATION Rev 02 -received 5th July 2023

In order to ensure that the completed development accords with the scheme approved and to comply with policy BH1 of the Core Strategy and Development Plan.

3 The development shall be carried out in accordance with the submitted flood risk

assessments

- IAMP 275 SUBSTATION SURFACE WATER STRATEGY Rev P02 received.

5th July 2023

- FLOOD RISK ASSESSMENT IAMP 66 SUBSTATION Rev 02 -received

5th July 2023

These mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the scheme's timing/phasing arrangements. The measures detailed above shall be retained and maintained thereafter throughout the lifetime of the development.

Reason: To reduce risk of flooding to the proposed development and future occupants

4 Any site operations and activities associated with the periods for construction (excluding

deliveries) shall only be carried out between 0700 hours and 18:00 hours on Mondays to

Fridays and only between 0800 hours and 1700 hours on Saturdays, with no construction

related operations and activities taking place on Sundays, Bank Holidays or Public Holidays. Except in emergencies and where agreed in advance with the LPA Reason: To safeguard the amenities of nearby residents in accordance with the NPPF, Policy

EN4 of the IAMP AAP, Policy HS1 of the Core Strategy and Development Plans

5 No development shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The plan must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and other air pollutants and site lighting. The plan should include,

- Identification and location of sensitive receptors
- Working times including deliveries and waste collections
- Identification of all sensitive receptors including any water courses or drainage ditches
- Measures to prevent pollution of any surface waters
- Measures to prevent or minimise impacts to air, arising from disposal of surface vegetation,
- excavation and construction. Control of emissions from vehicles, plant and equipment
- particularly in the form of smoke or dust.
- Measures to control noise and vibration, with consideration of the code of practice set out in BS5228:2009+A1:2014
- Site access and minimisation of track out of mud and debris onto the highway - o Highway cleansing
- Vehicle routing and prevention of off-site queuing and idling of HGVs

- Any site floodlighting
- Working times
- Complaints management system
- Protection of watercourse and ecological receptors
- Clarification of methodology and controls where any piling is required

Reason: To safeguard the amenities of nearby residents and to reduce the impact on the on the nearby residential properties in accordance with the NPPF, Policies EN4 and T1 of the IAMP AAP, Policy HS1 of the Core Strategy and Development Plan and in the interest of maintaining Strategic Road Network Operations and Safety.

6 No development shall commence until a Construction Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority.

Thereafter development shall take place in accordance with the approved details.

o Routing of movements including details of any abnormal loads;

o Contractor parking and site compound arrangements;

o Measures to prevent debris being displaced onto the highway;

o Details of any temporary highway / rights of way closures and alternative

routes;

o Temporary traffic management and site access control measures; and

o Site security and contract details.

Reason: In the interest of maintaining the Strategic Road Network operation and safety and to avoid nuisance to the occupiers of adjacent properties during the construction phases and in the interests of highway safety, in accordance with the NPPF, Policies T1 and EN1 of the IAMP AAP, Policy HS1 of the Core Strategy and Development Plan.

7 The development shall be carried out in accordance with the submitted Noise Impact Assessment dated 13th October 2022

The measures detailed in the report shall be retained and maintained thereafter throughout the lifetime of the development.

Reason: To ensure a satisfactory form of development and comply with policy HS1.

8 The development shall be carried out in accordance with the submitted in The Air Quality Assessment dated 13th October 2022

The measures detailed in the report shall be retained and maintained thereafter throughout the lifetime of the development.

Reason: To ensure a satisfactory form of development and comply with policy HS1.

9 No excavation or movement of soil should take place within the site until a Soil Handling Strategy has been submitted to and approved in writing by the Local Planning Authority details of the volume of soil to be moved and whether the soil will be stored on-site or transported off-site. Thereafter, development should take place in accordance with the approved details.

Reason: To ensure an appropriate form of development, in accordance with the NPPF.

10Development, other than demolition, shall not commence until a suitable and sufficient ground investigation and Risk Assessment to assess the nature and extent of any contamination on the site (whether or not it originates on the site) has been submitted to and approved in writing by the Local Planning Authority.

The investigation and risk assessment shall be undertaken by competent persons and a written report of the findings must be produced and submitted for the approval of the LPA. The report of the findings must include:

i a survey of the extent, scale and nature of contamination;

ii an assessment of the potential risks to:

o human health;

o property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes;

o adjoining land;

o ground waters and surface waters;

o ecological systems;

o archaeological sites and ancient monuments; and

iii where unacceptable risks are identified, an appraisal of remedial options, and proposal of the preferred option(s).

The Investigation and Risk Assessment shall be implemented as approved and must be conducted in accordance with the Environment Agency's "Land contamination: risk management".

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, in accordance with the National Planning Policy Framework Paragraphs 174f and 183.

The details are required to be submitted and approved in advance of works commencing on site to ensure the development is undertaken in a manner to protect future users of the site and the environment.

11Development, other than demolition, shall not commence until a detailed Remediation Scheme to bring the site to a condition suitable for the intended use (by removing unacceptable risks to human health, buildings and other property and the natural and historical environment) has been submitted to and approved in writing by the Local Planning Authority.

The Remediation Scheme should be prepared in accordance with the Environment Agency's "Land Contamination: Risk Management" and must include a suitable options appraisal, all works to be undertaken, proposed remediation objectives, remediation criteria, a timetable of works, site management procedures and a plan for validating the remediation works. The Remediation Scheme must ensure that as a minimum, the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation. Once the Remediation Scheme has been approved in writing by the Local Planning Authority it shall be known as the Approved Remediation Scheme.

Reason: To ensure that risks from land contamination to the future users of the land and

neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, in accordance with the National Planning Policy Framework Paragraphs 174f and 183.

The details are required to be submitted and approved in advance of works commencing on site to ensure the development is undertaken in a manner to protect future users of the site.

12The Approved Remediation Scheme for any given phase shall be implemented in accordance with the approved timetable of works for that phase.

Within six months of the completion of measures identified in the Approved Remediation Scheme and prior to the occupation of any building in that phase, a Verification Report (that demonstrates the effectiveness of the remediation carried out) must be produced and is subject to the approval in writing of the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, in accordance with the National Planning Policy Framework Paragraphs 174f and 183.

13In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. A Risk Assessment must be undertaken in accordance with the requirements of the Environment Agency's "Land Contamination: Risk Management" and where remediation is necessary a Remediation Scheme must be prepared and submitted to the Local Planning Authority in accordance with the requirements that the Remediation Scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation. Once the Remediation Scheme has been approved in writing by the Local Planning Authority it shall be known as the Approved Remediation Scheme. Following completion of measures identified in the Approved Remediation Scheme a verification report must be prepared and submitted in accordance with the approved timetable of works. Within six months of the completion of measures identified in the Approved Remediation Scheme and prior to the occupation of any building, a validation report (that demonstrates the effectiveness of the remediation carried out) must be submitted to the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and

neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, in accordance with the National Planning Policy Framework Paragraphs 174f and 183.

14No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The measures contained within the CEMP (Biodiversity) shall be in general conformity with those measures set out inTable 5.1 of the Ecological Impact Assessment by WSP dated August 2023 (Doc Ref. NG_IAMP_EcIA_050423). The CEMP shall include the following.

a. Risk assessment of potentially damaging construction activities.

b. Identification of "biodiversity protection zones".

c. Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).

d. The location and timing of sensitive works to avoid harm to biodiversity features.

e. The times during construction when specialist ecologists need to be present on site to oversee works.

f. Responsible persons and lines of communication.

g. The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.

h. Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

REASON: In order to protect and enhance the biodiversity of the site and its surroundings and to comply with Adopted Area Action plan policies EN2 and EN3 and EN1, EN2 and EN3 of the IAMP AAP 15An Onsite Habitat Management and Monitoring Plan (HMMP) shall be submitted to, and be approved in writing by, the local planning authority within 6 months of this permission. The content of the HMMP shall include the following.

a. Description and evaluation of the habitats to be created and managed.

b. Ecological trends and constraints on site that might influence management.

c. Aims and objectives of management, including reference to target conditions and timescales for these.

d. Appropriate management options for achieving aims and objectives.

e. Prescriptions for management actions.

f. Preparation of a work schedule (including an annual work plan capable of being rolled

forward over a thirty-year period).

g. Details of the body or organisation responsible for implementation of the plan.

h. Ongoing monitoring and remedial measures.

The HMMP shall also include details of the legal and funding mechanism(s) by which the long term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the HMMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved plan will be implemented in accordance with the approved details and habitats shall be actively maintained for a period of not less than 30 years.

REASON: In order to protect and enhance the biodiversity of the site and its surroundings and to comply with Adopted Area Action plan policies EN2 and EN3 and EN1, EN2 and EN3 of the IAMP AAP

16An Offsite Habitat Management and Monitoring Plan (HMMP) shall be submitted to, and be approved in writing by, the local planning authority prior to the commencement of the

development. The content of the HMMP shall include the following.

a. Description and evaluation of the habitats to be created and managed.

b. Ecological trends and constraints on site that might influence management.

c. Aims and objectives of management, including reference to target conditions and timescales for these.

d. Appropriate management options for achieving aims and objectives.

e. Prescriptions for management actions.

f. Preparation of a work schedule (including an annual work plan capable of being rolled

forward over a thirty-year period).

g. Details of the body or organisation responsible for implementation of the plan.

h. Ongoing monitoring and remedial measures.

The HMMP shall also include details of the legal and funding mechanism(s) by which the longterm implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the HMMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved plan will be implemented in accordance with the approved details and habitats shall be actively maintained for a period of not less than 30 years.

REASON: In order to protect and enhance the biodiversity of the site and its surroundings and to comply with Adopted Area Action plan policies EN2 and EN3 and EN1, EN2 and EN3 of the IAMP AAP

17Prior to occupation no soft landscaping works shall commence in the plot until full details of the soft landscaping , which includes links to the most recent BNG assessment have been submitted to and approved in writing by the Local Planning Authority for this area. This will consist of a detailed planting plan and specification of works indicating soil depths, plant species, numbers, densities, locations inter relationship of plants, stock size and type, grass, and planting methods including construction techniques for pits in hard surfacing and root barriers. All works shall be in accordance with the approved plans. All existing or proposed utility services that may influence proposed tree planting shall be indicated on the planting plan. The scheme shall be completed to the satisfaction of the Local Planning Authority in accordance with a timetable of works that is submitted to and approved in writing by the Local Planning Authority within 12 months of the commencement of development within the Public Realm Area. Thereafter the approved details shall be implemented in accordance with the approved details. Within the Development Plot any new planting within a period of 5 years from the date of completion of that planting that is dying, damaged, diseased or in the opinion of the LPA is failing to thrive shall be replaced by the same species of a size at least equal to that of the adjacent successful planting in the next planting season unless the Local Planning Authority gives written consent to any variation. Thereafter the planting shall be implemented in accordance with the approved details.

Reason: To ensure satisfactory landscaping to improve the appearance of the site in the interests of visual amenity, in accordance with the NPPF and Policies EN1, EN2 and EN3 of the IAMP AAP.

18No hard landscaping works (excluding base course for access roads and car parking areas) shall commence until full details of proposed hard landscaping , which includes links to the most recent BNG assessment has been submitted to and approved in writing by the Local Planning Authority. This will include all external finishing materials, finished levels, and all construction details confirming materials, colours, finishes and fixings. Thereafter, the scheme shall be implemented in accordance with the approved details and shall be completed to the satisfaction of the Local Planning Authority within a period of 24 months from first occupation / use of the building.

Reason: To enable the LPA to control details of the proposed development, to ensure a high quality hard landscaping scheme is provided in the interests of visual amenity, in accordance with the NPPF and Policy D2 of the IAMP AAP.

19Within the development plots, any new planting within a period of 5 years from the date of completion of that planting that is dying, damaged, diseased or in the opinion of the

LPA is failing to thrive shall be replaced by the same species of a size at least equal to that of the adjacent successful planting in the next planting season unless the Local Planning

Authority gives written consent to any variation. Thereafter the planting shall be implemented in accordance with the approved details.

Reason: To ensure satisfactory landscaping to improve the appearance of the site in the

interests of visual amenity, in accordance with the NPPF and Policies EN1, EN2 and EN3 of the IAMP AAP.

20Notwithstanding any indication of materials which may have been given in the application, no development shall take place until a schedule and/or samples of the materials and finishes to be used for the 2.,4m boundary fence has been submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall not be carried out other than in accordance with the approved details; in the interests of visual amenity and to comply with policy BH1 of the Core Strategy and Development Plan.