

IAMP – A1290 Dualling Works Vegetation Removal

Construction Environmental Management Plan

Compiled by: Steve Marshall

Checked by: Stuart Rand

ESH CONSTRUCTION

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Construction Environmental Management Plan Revision Dates

Revision	Reason	Revised by (name)	Date	Signature
Ø	First Issue for Review	Stuart Rand	22/12/2023	S Rand

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1 Executive Summary

1.1 Project Background

The International Advanced Manufacturing Park Limited Liability Partnership (IAMP LLP) has been formed as a joint venture between Sunderland City Council and South Tyneside Council to promote and deliver the International Advanced Manufacturing Park (IAMP).

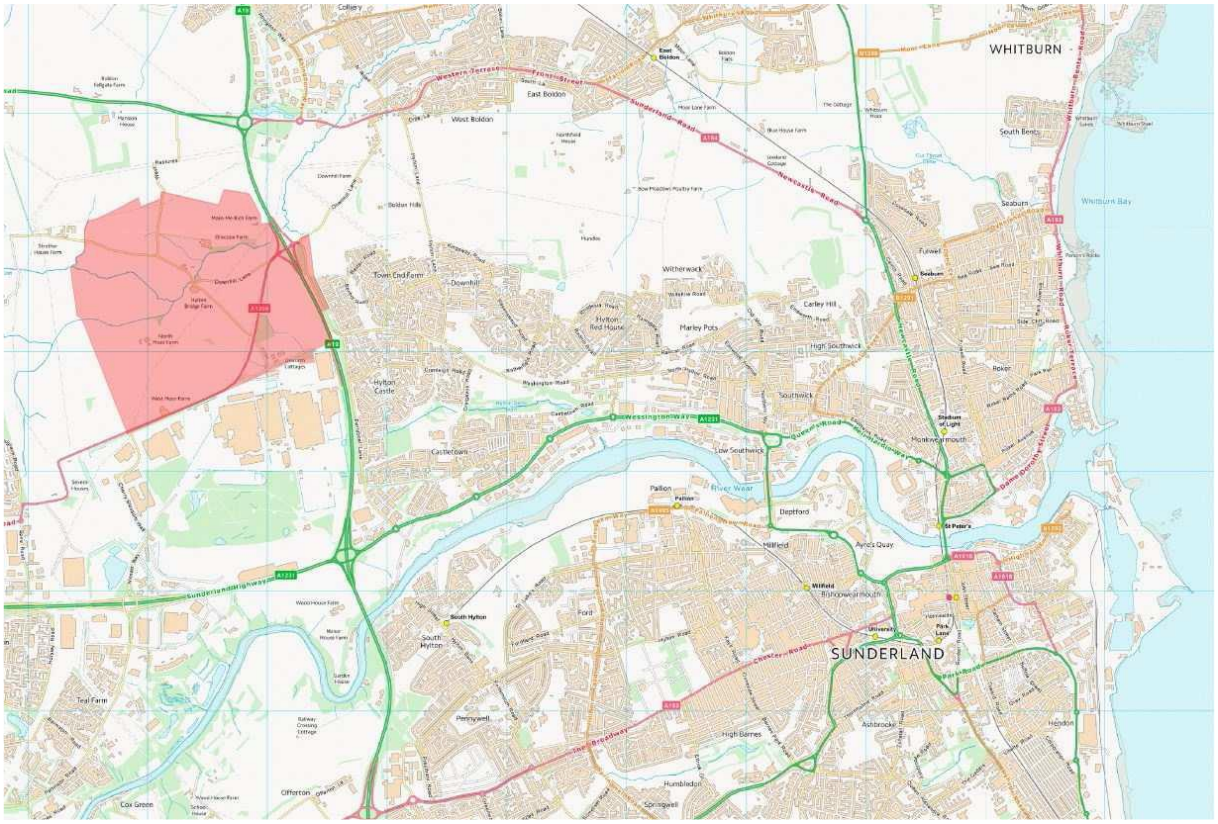
The IAMP Early Infrastructure and Northern Employment Area project consists of upgrades to the existing A1290, the construction of the connecting Road 4 as well as the tie-ins to the existing IAMP One works and surrounding existing infrastructure.
The CEMP has been produced to cover the associated Vegetation clearance of existing trees and hedgerows to allow for future highways and drainage works.

1.2 Outline of the Project

IAMP Early Infrastructure project is located on agricultural land to the north of the existing Nissan car manufacturing plant, to the west of the A19 and to the south of the A184.

Site address:

OS Grid reference: NZ 33382 59425 433382 E, 559425 N



The works consist of the following works in accordance with the Contract Drawings and Specification:

- Vegetation clearance of trees and vegetation

1.3 Framework of this CEMP

The purpose of this CEMP is to outline how effects on the environment and surrounding area during the vegetation clearance phase of the proposed development will be avoided, minimised, or mitigated and the plan sets out the ecological mitigation measures that will be implemented to ensure compliance with legislation and planning policy pertaining to biodiversity.

These include:

- Pre-construction checks for breeding birds, bats, reptiles, hedgehogs, and water vole.
- Implementation of vegetation clearance phase protection measures to minimise potential negative effects to retained habitats, such as pollution or compaction of soils.
- Sensitive clearance of habitats to avoid killing and injury of species such as breeding birds, amphibians, reptiles, hedgehogs, and water voles.

The purpose of this document is to detail how Esh Construction will manage environmental issues through the site clearance period. To achieve this, the document extracts and consolidates the site management and environmental mitigation measures for the site clearance period to support compliance with environmental commitments and regulatory and statutory requirements.

Esh Construction have extensive experience of working in similar environments and are aware of the accepted procedures to avoid unacceptable impacts and risks to such environments. All site personnel will be required to be familiar with the requirements of the CEMP and toolbox talks will be undertaken to inform and implement this by suitably experienced staff.

Esh Construction will ensure that all sub-contractors and visitors to the site will be aware of key environmental issues on site, and that sub-contractors sign up to implementing the requirements of the CEMP. Where necessary, sub-contractors will prepare specific Method Statements, which will be available on Viewpoint section 9.07.2

Viewpoint is our information sharing portal which both Esh and our Contractors alike can access any documentation appropriate to the Project. The client can also be given access to this folder if required.

1.4 CEMP Requirements

The adopted CEMP is required to:

- Identify stakeholder requirements. A1290 is in an area of commercial and business properties West of the A19 with further surrounding area highlighted by IAMP as a major area of development. There are various businesses in the surrounding area; Nissan, Faltec, SNOP, AESC Gigafactory, North East Land, Sea and air museum to name a few. Contact details of surrounding businesses will be recorded in the site communication plan. See Appendix A.
- Set out the Environmental Management System requirements (in line with ISO 14001).
- Ensure compliance with current legislation.
- Effectively minimise any potential adverse environmental effects during vegetation clearance operations including how site-specific method statements will be developed to avoid, minimise, and mitigate effects on the environment.

1.5 CEMP Structure

This document has been completed in line with best practice guidance. This CEMP should be considered as a 'live' document which is reviewed and updated at regular intervals throughout this aspect of works by the contractor. Until the Contractor for each phase is appointed, this CEMP is considered draft outline requiring the review and integration of construction information for each phase of the IAMP A1290 Dualling construction works.

The Contractors appointed by Esh will integrate the CEMP into the overall Construction Management Plan for the construction phases of the IAMP A1290 Dualling.

This CEMP takes the following structure:

1. Executive Summary
2. Roles & Responsibilities
3. Construction Activities
4. Project Environment Management
5. Legal & Other Requirements
6. Control of the Construction Process & Environmental Considerations.
7. Outline Pollution Control & Contingency
8. Handover Environmental Plan

2.0 Roles & Responsibilities

Table 2.1 Key Roles and Responsibilities

Role	Responsibility
Project Manager	Ensuring compliance with legal consents relating to nature conservation Responsible for management of the construction phase of the project. Has overall responsibility for the environmental performance of the project.
Construction Environmental and Biodiversity Manager (Esh Site Agent)	Compliance with legal consents relating to nature conservation, including: • installation of physical protection measures during construction. • implementation of sensitive working practices during construction. • regular inspection and maintenance of physical protection measures and monitoring of working practices during construction • regular review and management of biodiversity protection measures.
Site Staff	To receive general environmental awareness training and undertake work in accordance with Method Statement Briefings and toolbox talks. Trained personnel to manage tasks such as refuelling plant and equipment, managing the stores, water quality monitoring and supervising the segregation and collection of waste.
Client Project Manager	To ensure that the Contractor complies with works information, Contract data and the relevantlegal requirements, commitments and targets agreed for the scheme.
Designer	To provide information relevant to construction that may assist the Client PM to manage environmental aspects of the scheme.
Community Liaison Officer (Role carried out by Marketing and Comms team)	Communications with the public and interested parties, outreach, and education, where appropriate.

3.0 Construction Activities

3.1 Description of the Project

The works delivery will include the following item:

- Vegetation clearance of trees and hedges with disposal off site including removal of roots and tree stumps.

3.2 Construction Phasing

The works commencement is subject to planning approval. It is anticipated that works to Areas 1 & 2 will run concurrently and start January 2024, running until the end of March 2024.

Works will be phased as follows:

Pre-commencement Works Week - 6 to 2	Vegetation clearance including removal of trees, hedges, and fences before the bird nesting season.

3.3 Working Hours

The working hours for the site will be as follows

Monday to Friday	07:00 – 18:00
Saturday	08:00 – 17:00
Sunday	No works permitted (unless agreed with client)
Bank Holidays	No works permitted (unless agreed with client)

The compound welfare arrangement will have low level shrouded lighting to allow safe pedestrian movements during darkness. Checks will be carried out to ensure light leakage is minimised, in particular viewing from adjacent properties. Positions of the lighting will be agreed with the client.

3.4 Construction Process

Pre-commencement Works up to mid-March 2024, will be carried out initially and will cover the following activities in order:

- Installing Initial Welfare Cabins for early site clearance
- Temporary Site Access
- Ecology Measures and Visit
- Site Clearance of trees and vegetation

4.0 Project Environmental Management

4.1 Environmental Policy

The project will be carried out in accordance with the policies / objectives listed below:

- Biodiversity Action Plans
- South Tyneside and Sunderland City Council's Environmental Policy and procedures.
- The designer's environmental policy and procedures.
- During the pre-construction and construction phases, management of the project will also need comply with the Contractor's Environmental Policy and procedures.

4.2 Objects and Targets

Environmental objectives for the Vegetation Removal will be developed and should refer to legal compliance and environmental good practice, these may include:

- Zero pollution incidents.
- Minimise waste sent to landfill.
- Minimise disruption to nearby businesses and residents (and therefore complaints).
- Protect and where possible enhance biodiversity.

4.3 Structure and Responsibilities

A management structure that includes an organisational chart encompassing all staff responsible for environmental work will be included within the CEMP after roles are clarified with the client at the pre-start meeting.

Illustrative key roles and responsibilities are set out in Table 2.1 in Section 2.0, Roles & Responsibilities

4.4 Training Awareness & Competence

Site staff shall be competent to perform tasks that have the potential to cause a significant environmental impact. Competence is defined in terms of appropriate education, training and experience. Project specific training is required.

Environmental awareness and training shall be achieved by:

- Site induction, including relevant environmental issues.
- Environmental posters and site notices.
- Method statement and risk assessment briefings.
- Toolbox talks, including instruction on incident response procedures.
- Key project specific environmental issues briefings. All managers and supervisors will be briefed on the CEMP.
- Ecologist Toolbox Talks

Method Statements will be prepared for specific activities prior to the works commencing and will include environmental protection and mitigation measures and emergency preparedness appropriate to the activity covered. The Construction Environmental Manager will review key Method Statements prior to their issue.

Method Statement briefings will be given before personnel carry out key activities for the first time.

4.5 Communication

The CEMP will be distributed to the project team, including sub-contractors, to ensure that the environmental requirements are communicated effectively. Key activities and environmentally sensitive operations will also be briefed to staff and Contractors. Project, Client and company environmental policies, where available, should be displayed on site.

The Contractor will define procedures for internal and external communication. The client may require that any communication with external parties such as environmental regulators or the public is undertaken through a nominated client representative.

During the construction phase, internal communication will include regular progress meetings, which should cover:

- Training undertaken
- Progress reports
- Inspections, audits and non-conformance
- Complaints received
- Visits by external bodies and the outcome or feedback from such visits
- Objective / target achievement, including reporting on environmental performance.

External communication, including letter drops or meetings and liaison with statutory authorities will be overseen by the Client Project Manager. See Section 5.3 Stakeholders.

4.6 Complaints, Compliments & Inquiries

A Community Liaison Officer will be available as well as the site team, and a telephone number will be published for use by members of the public wishing to complain, provide other feedback, or make enquiries.

All complaints or information requests will be communicated to the Client Project Manager and will be logged promptly.

Careful monitoring of complaints received, including recording details of the location of the affected party, time of the disturbance and nature of the noise can assist with managing the works to reduce the likelihood of further complaints.

4.7 Evaluation of Compliance

The Contractor will define procedures for regular site surveillance to evaluate performance against legal requirements and the requirements of the CEMP.

4.8 Non-Conformance & Corrective/Preventative Action

Procedures for addressing non-conformance and corrective actions are to be provided. These may include, for example:

- A Non-Conformance Report (NCR) that will be raised to record any environmental incident and work that has not been carried out in accordance with the CEMP or Method Statement.
- A Corrective Action Report (CAR) that will be raised where a deficiency is identified as a result of monitoring, inspection, surveillance and valid complaints.
- Any actions identified shall nominate an owner to follow through the action to be taken, along with a specified timescale for it to be closed out.

4.9 Control of Records

Environmental records, including waste management records, will be maintained in accordance with the respective company procedure and legal requirements. The records are to be maintained, in either hard copy or electronic format as required by the individual procedure that the records relate to, in such a way that they are readily identifiable, retrievable, and protected against damage, deterioration or loss. The procedure that the records relate to also specifies the retention time for the records and who has the authority todispose of them.

4.10 Management Review

The outputs required for delivering the environment management for the IAMP scheme will be routinely discussed and reviewed on an on-going basis at progress meetings to ensure framework delivery and continual improvement in accordance with theBS EN ISO 14001 model, given that the CEMP is a live document.

Review of the CEMP will be carried out at each project phase and where changes are made affecting the scope of works to ensure its continuing relevance and accuracy.

5.0 Legal and Other Requirements

5.1 Legislation

The environmental legislation relevant to the Highway scheme is detailed in Table 5.1. below

Legislation	Description
International Legislation	
The Water Framework Directive (2000)	The Water Framework Directive (WFD) (Commission of the European Communities, 2000) establishes a framework for a Europe-wide approach to water policy. The ultimate aim is to ensure all inland and transitional water bodies are of 'Good' status or better in terms of ecology, chemical, biological and physical parameters by 2015. Therefore, any activities or developments that could either deteriorate a nearby waterbody or prevent the ability of a waterbody reaching its potential status must be mitigated to reduce potential for deterioration.
The European Floods Directive (2007)	The European Floods Directive (EFD) (Commission of the European Communities 2007) requires Member States to assess the flood risk for all watercourses and coastlines. Member States were required to map flood extents and to adopt measures to reduce flood risk.

Legislation	Description
Conservation of Habitats and Species Regulations 2017 (as amended)	The habitats and species protection provided within the Habitats Directive (Council Directive 92/43/EEC) is transcribed into UK legislation through the Conservation of Habitats and Species Regulations 2017. The Habitats Regulations 2017 consolidates the Conservation (Natural Habitats, & c.) Regulations 1994 and its several amendments, which provide the original transcription of Habitats Directive into UK legislation. Special Protection Areas and SACs are designated under the Habitats Regulations 2017. These sites, including those throughout the European Union, for a network termed Natura 2000. The Regulations make provisions for the management of Natura 2000 sites for the benefit of nature conservation, particularly in respect of features for which the sites have been designated and prevent actions that would otherwise damage the nature conservation value of these sites. The Regulations also require the effect of relevant planning permissions on the integrity Natura 2000 sites to be considered and, subject to certain exceptions, restrict those permissions where the integrity of a Natura 2000 site would be adversely affected. The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions may be permitted through licences, which may be granted for a number of purposes, such as science and education, conservation, preserving public health and safety, but only if it can be demonstrated that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned. Schedules 2 and 4 contain lists of species that are protected under the EC Habitats Directive and occur within the UK. Where these species formerly appeared within Schedules 5 and 8 of the Wildlife and Countryside Act1981 (as amended) they have been removed. These species are termed European Protected Species.
National Legislation: Water Quality Standards and Objectives	
The Water Environment (WFD) (England and Wales) Regulations (2003)	The quality of England's water bodies is classified by the EA following the requirements of the WFD within river basin management plans (RBMP). The EA must monitor water quality *via* established programmes for surface water and groundwater. These cover ecological and chemical status and ecological potential, in addition to water levels and flow rate for surface water and chemical and quantitative status for groundwater. The WFD sets out classification targets for all water bodies by 2015, 2021 and 2027.

Legislation	Description
Pollution Prevention Guidelines (PPGs)	The PPGs provide direction on how to minimise the environmental impact of new developments and related activities, within England and Wales. Whilst the PPGs are widely adopted across many industries, they are not updated with new legislation and are intended for guidance purposes only. The PPGs considered relevant to this development include the following. PPG1 – General Guide to the Prevention of Pollution (EA, 2013) PPG5 – Works and Maintenance in or Near Water (EA, 2007) PPG6 – Working at Construction and Demolition Sites (EA, 2012) PPG21 – Pollution Incident Response Planning (EA, 2009)
National Legislation	
The Water Resources Act (1991)	The Water Resources Act makes provisions for the protection and enhancement of controlled waters throughout England and Wales. Water quality is the main concern of this legislative act therefore any form of water pollution is deemed a criminal offence under these provisions.
The Water Industry Act (1991)	The Water Industry Act makes provisions for the discharge of effluent to sewers from the water sector, in which the composition, volume, flow rate and outlet sewer is controlled by the sewage undertaker.
Flood and Water Management Act (2010)	The Flood and Water Management Act makes provisions for protection against flood risk through sustainable flood management, encouraging the use of SuDS wherever possible. Planning approval must be gained before any development can commence and a considerable part of this approval is conditional of a sufficient drainage system site.
The Land Drainage Act (1994)	The Land Drainage Act states that responsibility for a watercourse lies with the landowner. Should the watercourse require maintenance works to prevent the impact of flooding downstream, the landowner must carry the cost of works. The act requires that all surface water bodies are allowed to flow freely without unauthorised impediment by landowners.

The Water Act (2014)	The Water Act allows for the implementation of proposals set out in the 'Water White Paper', which aims to improve water management in the water industry, with particular reference to consumer involvement. The Water Act amends earlier legislation, such as The Water Industry Act (1991) and the Water Resources Act (1991)

Wildlife and Countryside Act 1981 (as amended)	The 1981 Act allows for the designation of National Nature Reserves (NNRs) and SSSIs to protect areas that support habitats and species of national or international importance. The network of SSSIs forms the basis for selection of the SPAs and SACs within the UK. All bird species, including eggs, young and nests while in use are protected under the Wildlife and Countryside 1981 Act as amended. These include a number of specially protected birds (listed in Schedule 1). Other animals that areafforded protection are listed in Schedule 5 and a number ofprotected plant species are included in Schedule 8. The nests of certain bird species that re-use their nests are also protected while no longer in use.

Table 5.1 Relevant environmental legislation

5.2 Consents & Licences

A register of permissions and consents that may be required, with responsibilities allocated and a programme for obtaining them is to be developed by the Contractor. Environmental consents and licences that may be required to enable the construction works are given in Table 5.2.

Legislation	Licence / Permission Required
General	
Planning Act 2008	Any requirements attached to the consent will need to be adhered to.
Control of Pollution Act 1974	Section 60 (Construction site noise) Prior consent will be required to carry out construction works from the Local Authority under Section 61.
Environmental Protection Act 1990	Section 79 & 80 Statutory Nuisance Environment Act 1995
Air Quality Standards Regulations 2010	
BS5228-1:2009+A1:2014	Code of Practice for Noise & Vibration Control on Construction and Open Sites

Ecology and Trees	
Conservation of Habitats and Species Regulations 2010	A number of species, including bat and Great Crested Newt, are protected under Regulation 41. A licence is required before any works can commence in an area inhabited by such species. Check latest biodiversity surveys
Wildlife and Countryside Act 1981 (as amended)	A licence is required for works in an area inhabited by protected species under the Wildlife and Countryside Act 1981 (see Table 5.1).
	A licence would be required to carry out measures to prevent the establishment of non-native species listed in Schedule 9 of the Wildlife and Countryside Act 1981.
Protection of Badgers Act 1992	A licence will be required from the statutory authority if works cause disturbance to badgers.
Forestry Act 1967	A licence from the Forestry Commission may be required for tree felling.
Hedgerow Regulations 1997	A permit from the Local Planning Authority will be required for the removal of hedgerows.
Waste	
Environmental Permitting (England and Wales) Regulations 2016	It is not anticipated that a waste management permit will be required as part of the works. However, certain activities are exempt from waste management licensing and must be notified to the Environment Agency in advance.
Hazardous Waste Regulations 2005	Requires hazardous waste to be collected by businesses that are registered as waste carriers.
The Waste (England and Wales) Regulations 2011	Requires waste removal businesses to have a valid waste carrier and waste receiver licence.

Table 5.2 – Relevant Environmental Legislation.

5.3 Stakeholders

See Appendix A

6.0 Control of the Construction Process & Environmental Considerations

This section of the CEMP outlines the key controls required for the construction process for the construction of IAMP 2. It includes information on:

- Site Housekeeping
- Ecology and Nature Conservation
- Arboriculture
- Noise Management
- Vibration Monitoring and Control
- Dust Management
- Waste Management

6.1 Site Housekeeping

A 'good housekeeping' policy will be adopted across the site. This will include the following requirements:

- No fires on site
- Considerate behaviour of all site staff, including on the highways
- Maintenance of staff welfare facilities
- Removal of food waste and other rubbish at frequent intervals
- Maintenance of road cleanliness surrounding the site
- Safe Storage of Materials

6.2 Ecology and Nature Conservation

6.3.1 HABITATS

The site is within a semi-rural area consisting mainly of open farmland. With Downhill Lane intersecting the site. There are industrial units present within the IAMP scheme, some of which are in close proximity of the site. There may also be further developments under construction in adjacent land during our works.

Durham Wildlife Services were commissioned by IAMP LLP and Esh Construction in November 2023 to carry out an ecological walkover of land at IAMP in Sunderland where works are proposed to widen the A1290 road, which will include vegetation clearance. The survey was completed by Principal Ecologist Karen Devenney MSc MCIEEM and Assistant Ecologist Gemma Jones MSc on the 5th December 2023.

A range of surveys have been carried out across the site from 2014 to date and this walkover was to establish whether there are any ecological changes on site that might be impacted by the proposals.

A site walkover was completed with the aim of establishing whether there are any field signs of European protected species or species protected under the Wildlife and Countryside Act

(1981) as amended. Other potential issues or constraints were also identified.

Habitats on site are the same as previously recorded, with some trees, hedgerow, scrub, bramble scrub, neutral grassland and modified grassland all due to be impacted by the proposals. A small amount of Lowland Meadow habitat will also be impacted.

Protected and Notable Species:
No signs of protected or notable species were identified during the site walkover. The site provides suitable habitat for nesting birds and for hedgehogs, *Erinaceus europaeus*, therefore further recommendations have been made with regard to these species.

Invasive species:

Japanese knotweed *Reynoutria japonica* was recorded in one location by the side of the footpath, along the edge of the woodland at NZ332585 (Figure 1, Appendix A & Photograph 3, Appendix B). This species is listed under Schedule 9 part ii of the Wildlife and Countryside Act 1981 (as amended). Under section 14 of the Act it is an offence to cause the spread or relocation of this species. This species had not been previously recorded at this location and its proximity to the proposals means that specialist advice should be sought for its removal from site or works must ensure this species is securely fenced off to prevent potential spread.

Recommendations:

Hedgehogs

The West European hedgehog is a species of principal importance under section 41 of the NERC Act (2006), and a Local Biodiversity Action Plan (LBAP) priority species due to a rapid decline in numbers. In rural areas, preferred habitats include woodland edges, hedgerows in meadowland and rough pasture, where sufficient cover is provided for nesting. Hedgehogs are rarely found in marshy or upland habitats and in coniferous woodland. Hedgehogs hibernate to conserve energy between November and March, when food is scarce, remaining largely inactive. During the rest of the year, they are predominantly nocturnal, and may travel 1-2km in a night within home ranges of 10-50ha.
The proposed vegetation clearance works are due to be undertaken in winter when hedgehogs are hibernating. Contractors should be made aware that hedgehogs may be present in the denser areas of vegetation and scrub/bramble (examples shown in Photograph 1 & 2, Appendix B). Clearance of these area should be done carefully by hand. With a first cut at about 30 cm and the site checked for hedgehogs prior to being cleared to ground level. If any hedgehogs are found, they should be moved to a nearby area of similar habitat that is being retained.

Birds

The Wildlife and Countryside Act 1981 (WCA 1981) (as amended) under Section 1, makes it an offence to intentionally kill, injure or take any wild bird, nest or egg. The possession of any of these is an offence of strict liability. The act also covers special protection for Schedule 1 species. Part 1 of Schedule 1 lists 79 rare, endangered, declining or vulnerable bird species which are protected by special penalties at all times, including the offence of disturbance.

Vegetation clearance is proposed for the winter prior to the bird nesting season (March-August inclusive). Should this not be possible, the area should be checked for nests by an experienced ecologist prior to the works taking place.

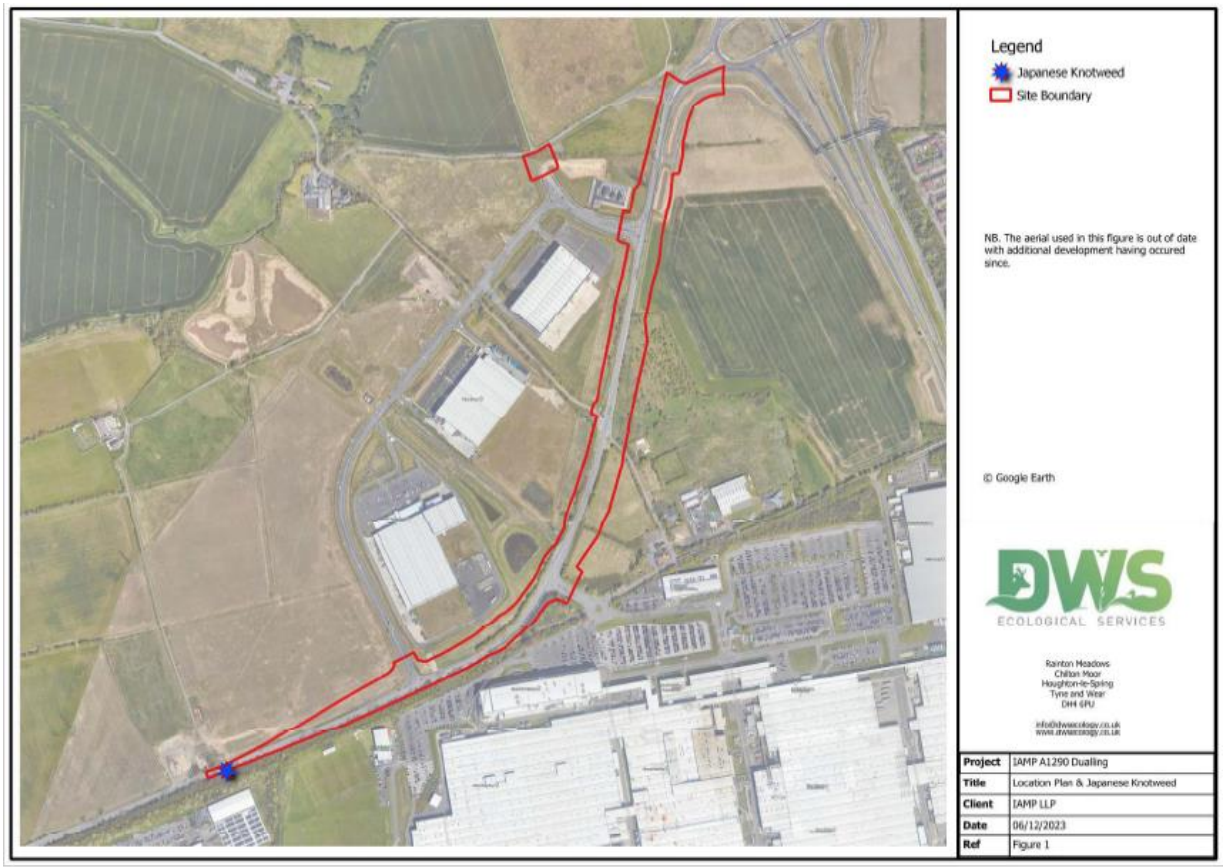
Japanese Knotweed

This species is listed under Schedule 9 part ii of the Wildlife and Countryside Act 1981 (as

amended). Under section 14 of the Act it is an offence to cause the spread or relocation of this species. This species had not been previously recorded at this location and its proximity to the proposals means that specialist advice should be sought for its removal from site, or works must ensure this species is securely fenced off to prevent potential spread. It is envisaged that works will not encroach into the area where the Japanese knotweed is located on the A1290, and that this area will be protected from construction work using fencing. The landowners will also be contacted to notify them about the presence of this species and a plan agreed for its removal.

Karen Devenney MSc MCIEEM
Principal Ecologist
Durham Wildlife Services

Appendix A - Figures



Appendix B – Photographs

Areas of scrub that should be removed carefully in case of hedgehogs.





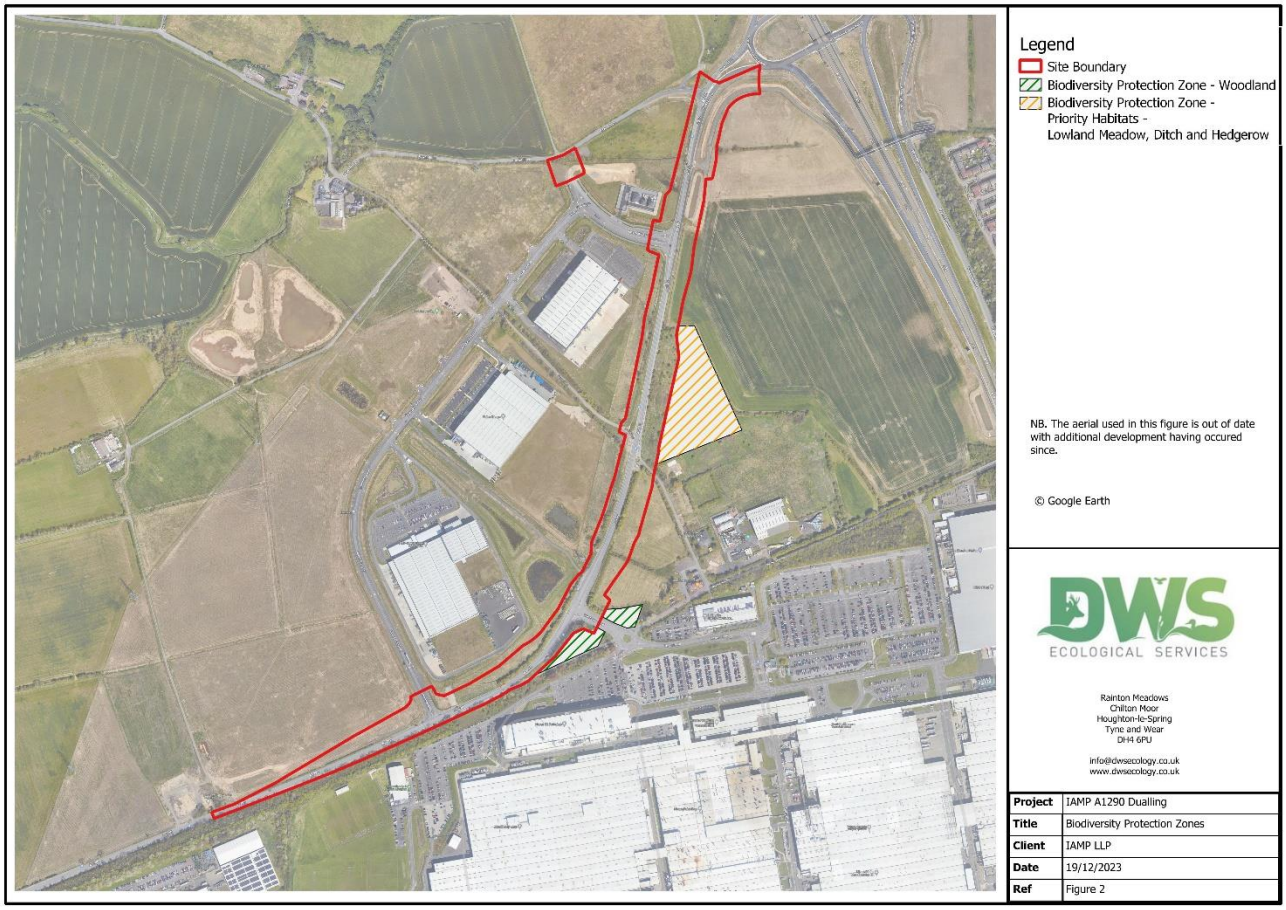
Japanese Knotweed



Works will not encroach into the area where the Japanese knotweed is located on the A1290, and that this area will be protected from construction work using fencing. The landowners will be contacted to notify them about the presence of this species

Measures to safeguard priority habitat, such as Lowland Meadow, and woodland, protected species and other wildlife during the site clearance and construction phases will include adhering to the method statements above and fencing to protect the biodiversity protection zones provided in Figure 2 below. These measures will be communicated to site staff through toolbox talks at the start of works. In areas of particular sensitivity or concern, an Ecological Clerk of Works will attend site during works in a supervisory role.

Should a suspected protected species or place of shelter be encountered at any time all work must cease in that area and the appointed Ecological Clerk of Works (ECoW) will be notified and advice sought.



6.3 Arboriculture

Arboriculture

Various trees and hedgerows have been identified for removal as part of the scheme proposals.

Removal will be carried out in line with the recommendations contained within the above 'Preliminary Ecological Appraisal' which was carried out on behalf of the client by Durham Wildlife Services.

A Tree Protection Plan will be dealt with under a separate document, should it be required.

See Appendix B

6.5 Noise

Baseline noise surveys will be established prior to main works commencing and we will carry out the following procedures to minimise the levels of noise and vibration on this scheme:

6.5.1 Carry out a risk assessment for all site operations

6.5.2 Should it be evident that noise levels seem high, noise monitoring stations will be set up around the works perimeter to record noise levels. Records against baseline are to be compared and kept on site for reference and establish an agreed intervention level.

6.5.3 Carry out a toolbox talk with operatives and subcontractors regarding noise levels and protective equipment and working in close proximity to third parties.

6.5.4 Adhere to the working hours limits referenced above

6.5.5 Provide information regarding the level of noise that plant is likely to produce to enable planning and protection measures to be introduced.

6.5.6 Operate plant with engine covers down.

6.5.7 Our project team will request quieter plant (fitted with silencers where possible) when hiring or buying and ask for noise information to be sent with the item.

6.5.8 Stop vibration of plant covers and guards.

6.5.9 Reduce the number of employees at risk from exposure by pre-planning. Put other employees to work away from the noisy task area until it is complete.

6.5.10 Place static plant as far away as possible from the majority of the workforce. If it is 20 metres away it will be less noisy to the ear than if it was only 10 metres away. More importantly the noise levels will have been reduced in intensity by a considerable amount.

6.5.11 Ensure that all plant where practicable is baffled for reduced noise.

6.5.12 Maintenance records of all plant and equipment to be monitored and kept up to date.

6.5.13 Damaged equipment or equipment requiring planned maintenance is not to be used.

6.5.14 Consider rotation of operatives carrying out operations at or above the lower exposure level of 80dB(A)

6.5.15 Do not leave plant running when not in use.

6.5.16 Ensure that regular maintenance and inspections are carried out on plant.

6.5.17 Orientate plant so noise is directed away from nearby residential receptors.

6.6 Vibration

Several operations require the use of plant and equipment which may produce vibration. As well as consideration regarding the operators of plant and equipment we will have due consideration to any structures in the proximity of the works. This may include commercial properties or buried services.

An assessment of the hazards created by the use of specific types of plant will be undertaken to prevent, or where this is not reasonably practicable, reduce and control the risks from the vibration.

Manufacturers or supplier's information will be used as guidance and low vibration plant and equipment will be specified and used wherever practicable.

6.7 DUST ACTION PLAN	
Client	**IAMP LLP**
Project title / reference	**IAMP A1290 Dualling**
Principal Contractor	**Esh Construction**
Author of Dust Action Plan	**Steve Marshall**
Project location	**IAMP Early Infrastructure project is located on agricultural land to the north of the existing Nissan car manufacturing plant, to the west of the A19, to the south of the A184.**
Project cost (estimated)	**£9m**

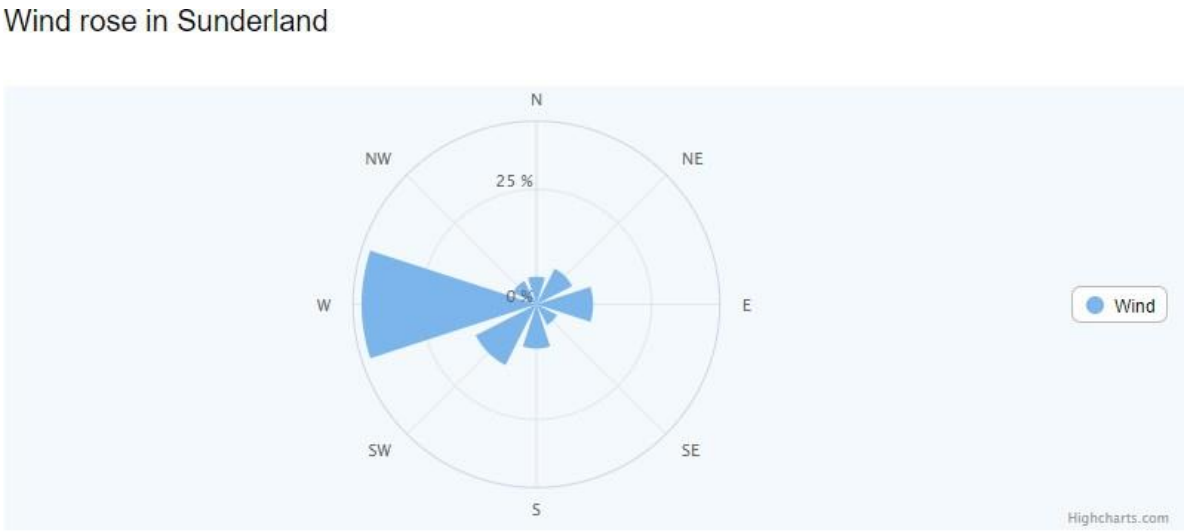
1.0 INTRODUCTION

This document describes the measures we will undertake to control and manage the dust produced as part of the works to be undertaken on this contract.

Esh Construction recognise that uncontrolled construction activities have the potential to generate levels of airborne dust that may affect the public and environment in the nearby area.

We aim to maintain the highest environmental standards on our schemes and as such we will keep dust emissions to the lowest level possible. Experience has shown that 5 days without rain can cause the ground to dry out sufficiently for dust to be a concern. During a hot and windy period this may be as little as 2 days.

Distribution of any dust normally due to the prevailing wind affecting the site and generally this will be a Westerly as shown on the Wind Rose for Sunderland



Wind direction graph in Sunderland using average values according to our data.

N ▼ Northern	NE ▲ Northeastern	E ◄ Eeastern	SE ➤ Southeastern	S ▲ Southern	SW ➤ Southwestern	W ► Western	NW ▲ Northwestern
6%	8.7%	12.3%	5%	9.6%	14.8%	37.9%	5.7%

Figure 6.1 Wind Rose Sunderland

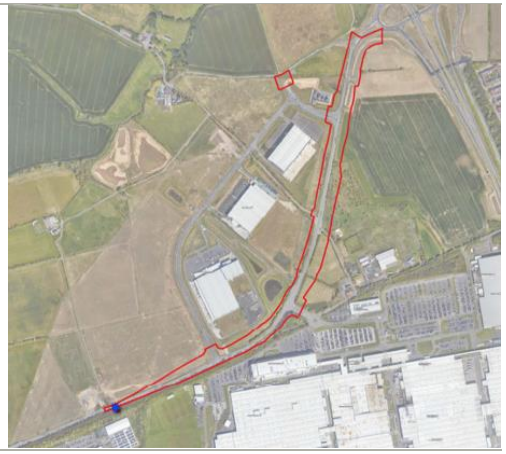
2.0 POTENTIAL DUST SOURCES

The potential for significant dust production could arise from:

1. Soil and overburden removal
2. Material handling and loading operations
3. Movement of vehicles on site and public roads
4. Delivery of materials coming onto site



3.0 THIRD PARTIES AFFECTED

AREAS	DETAILS	PHOTO
Residential	It is not envisaged that any residential properties will be affected due to the proximity of the A1290 Dualling works	
Commercial	Nissan, Rustica Tratorria & Inn, and other commercial properties already on the overall IAMP footprint.	

4.0 DUST MITIGATION MEASURES

The following measures will be undertaken on the scheme to minimise dust production and dispersion:

4.1 Road Cleaning

The main tarmac access roads to the North and South approaches to the site entrances will be swept with a mechanical road sweeper to prevent build-up of dust at a level which constitutes a nuisance potential. A mechanical road sweeper will also be used on public highways in the immediate vicinity of the site, if necessary, to ensure the road surface remains clean. The frequency of use of a sweeper is determined by the Site Agent, based on weather and road conditions. Haul roads will be constructed from clean stone to prevent the build-up of dust from site movements.

Road cleaning plant will be hired for use during periods of soil excavation and movement or as required by the site operations. We have standard agreements with local hire companies to enable call outs generally within 1hr of request.

4.2 Adverse Weather

Works will be planned with due consideration to weather conditions and weather forecasts to minimise the nuisance effects of airborne dust.

4.3 Plant

- Equipment will be appropriate for the task for which it is being used, maintained in good working order, and operated according to the manufacturer's instructions.
- Speed restrictions of 10mph will be imposed for all vehicles driving on the site, in order to minimise emissions of dust from internal road surfaces

5.0 MONITORING

It is the responsibility of all site personnel to maintain a visual awareness of dust emissions during the working day. Any significant dust emission occurring with the potential to travel beyond the site boundary will be reported to the Site Agent, who will be responsible for investigating the cause and taking immediate action to minimise further emissions. If necessary, site operations will be halted until appropriate remedial action is completed.

The Site Agent or nominated employee will inspect the site boundary and/or location of sensitive receptors and commercial properties, relative to wind direction on a weekly basis to check for abnormal levels of on- site dust creation and off- site deposition. If this is found, the cause will be investigated, and remedial action will be taken immediately.

The site will also be audited at least once per month by Esh Health, Safety and Environmental inspectors to ensure compliance and to provide advice regarding any improvement measures.

A logbook relating to the management of dust will be maintained by Esh. The information

kept will include:

- details of the source,
- date and time of any significant dust emission during site operations, along with an assessment of its likely impact,
- details of complaints received
- details of remedial action taken, and changes made to operational procedures, in order to eliminate or minimize dust emissions

6.0 MANAGEMENT RESPONSIBILITY

The Project Manager/Site Agent will:

- Nominate competent personnel to assist in the management of the site.
- Ensure personnel and operatives are advised of their roles to minimise the generation of dust (e.g. Site Induction)
- Review the performance of the operatives and efficiency of dust reduction measures.
- Promote toolbox talks to remind operatives of their responsibilities.
- Ensure that records are maintained.
- Ensure that equipment is maintained.
- Ensure there is effective communication with the Authorities.
- Investigate complaints received regarding any dust migration and take corrective action.
- Approve method statements prior to commencement ensuring adherence to dust mitigation procedures.

6.8 Energy management

In line with the UK Energy Efficiency Action Plan, energy efficiency measures and greener energy sources should be considered and implemented where possible. Using energy more efficiently assists with cutting carbon dioxide emissions:

Energy consumption is to be minimised and energy use during construction monitored.

Construction plant and equipment is to be maintained to maximise fuel efficiency.

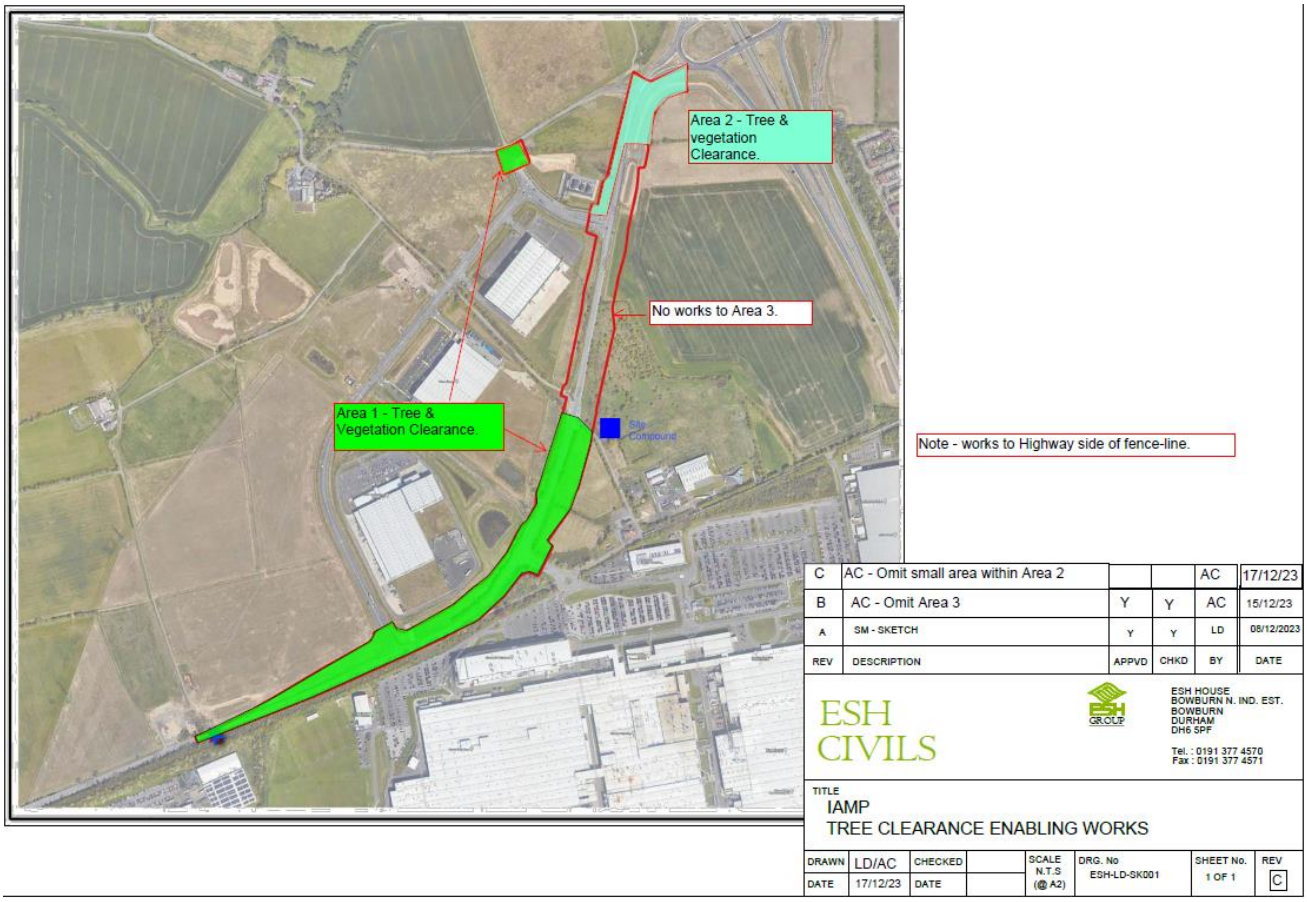
Utilise energy from renewable sources where practicable.

Ensure efficient materials handling / husbandry.

Minimise workforce travel.

6.9 Security on Site

For this aspect of works, it is proposed to establish a Heras Fenced compound at the location indicated on the plan below. Security cameras will also be installed to cover the are of the compound.



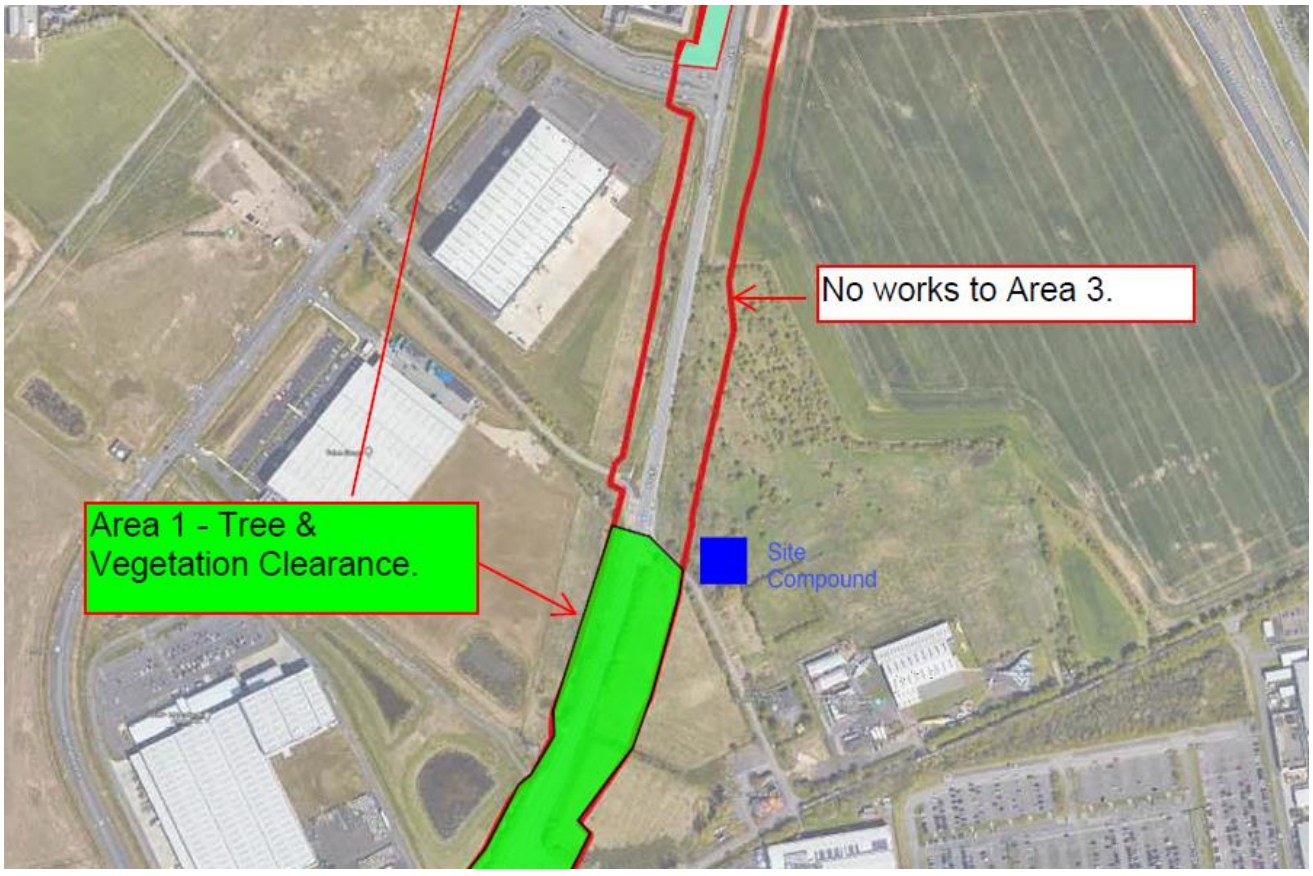


Figure 6.2 Site Compound Location

The General public using the carriageway and footways around the proposed works will be protected and segregated from the working areas as set out in the 'Traffic Management Plan'.

7.0 Outline Pollution Control and Contingency

General

A pollution control and contingency plan will be developed and included within the CEMP to provide details of the measures to be implemented to prevent pollution of the site in the event of an environmental incident or emergency.

An 'environmental incident' is defined as any event, activity or condition that causes, or has the potential to cause harm to people, or damage to property or the environment. 'Pollution' is defined as any harmful impact on the local atmospheric, aquatic or land environment caused by release of hazardous or nuisance-causing substances or excessive noise and vibration.

7.1 Pollution Prevention

Works will be taking place within former farmland. Potential pollutants from the works include:

- Oils and fuels
- Waste materials
- Effluent/wastewater from site accommodation

To minimise the risk of pollution from oils on site, measures are required in relation to their storage, use and disposal. Environmentally considerate lubricants, such as synthetic, non-toxic biodegradable hydraulic fluids are available and may be used at sensitive locations.

7.2 Fuel and Oil Handling

All fuel and oil will be stored in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Careful consideration will be given to the siting of re-fuelling areas to reduce the risk of ground contamination. Fuel handling will be carried out in such a way that risk of pollution is minimised, this will include:

- Fuel and oil storage tanks will comply with the Control of Pollution (Oil Storage) (England) Regulations 2001 and will be locked when not in use.
- The risk of vandalism or theft of fuel and the associated disregard for fuel leakage should be minimised by site security measures.
- Storage areas will not be located within 10m of any watercourse or highway gully.
- Mobile bowsers will be bunded and will comply with the Control of Pollution (Oil Storage) (England) Regulations 2001 and will be locked when not in use.
- Drums will be stored in bunded areas with a minimum capacity of 25% of the total volume contained within the bund, or 110% of the largest container, whichever is greater. Drums will be maintained in good condition, fitted with lids and labelled to indicate the contents.
- Trained operatives only will carry out refuelling of plant and equipment.
- Static combustion engine plant (e.g., compressors, lighting sets) will be integrally bundedor placed on drip trays.
- Plant will be regularly checked for leaks and will be regularly maintained.

- Spill kits will be provided within close proximity to fuel and oil storage areas and operatives will be trained in their use.

7.3 Maintenance of Plant

Any maintenance of plant and equipment will be carried out at least 10m away from any watercourse or drain.

Spill kits will be available during all plant maintenance operations and drip trays used to contain any leakage of oil.

Storage of plant on site should be secured to prevent vandalism or theft of fuel. The plant parking area should be provided with an impermeable barrier (e.g., temporary clay liner) to prevent contamination of the ground in the event of leakage or spillage.

Any plant or equipment considered to be a pollution risk will either be repaired or removed from site.

7.4 Notification Procedure

Procedures for reporting any spillages or pollution incidents are to be set out.

The procedure will include recording all incidents in the project progress report and providing details to the Client Project Manager.

Contact details for key site and emergency response personnel with responsibilities relating to the protection of the environment will be kept and publicised in key locations on site. Key contacts will include:

- Contractor's Project Manager
- Construction Manager
- Construction Environmental Manager
- Client Project Manager
- Community Liaison Officer
- Fire, Police, Ambulance
- Environment Agency
- Northumbrian Water
- Oils and fuels
- Waste materials
- Effluent/wastewater from site accommodation
- Trained operatives only will carry out refuelling of plant and equipment.
- Static combustion engine plant (e.g. compressors, lighting sets) will be integrally bunded or placed on drip trays.
- Plant will be regularly checked for leaks and will be regularly maintained.
- Spill kits will be provided within close proximity to fuel and oil storage areas and operatives will be trained in their use.

8.0 Handover Environmental Management Plan

8.1 Requirements

As this CEMP is for the Vegetation Removal only and a CEMP for the main works for the dualling of the A1290 will be produced and that document will be live to consider maintenance implications of the design and construction phase of the project. Maintenance requirements will be recorded in the relevant section of the main works CEMP and will be updated to provide a Handover Environmental ManagementPlan (HEMP) at the end of the construction phase. The HEMP will set out the proposed strategy for the future maintenance and management of all environmental areas and will include the following:

- Strategies for the regular maintenance of all Environmental Areas.
- A timetable for the implementation of each regular maintenance operation.
- A timetable showing the anticipated date at which the 'Environmental Function' attributed to each Environmental Area will be achieved.
- A timetable showing the regular monitoring requirements for each Environmental Area, including those in relation to protected species and/or water quality, as agreed with the relevant Statutory and Non-Statutory bodies.
- Any supporting information e.g., agreements made with third parties.

Appendix A – Stakeholders

Stakeholder	Address	Post Code
Nissan	Washington Rd, Sunderland	SR5 3NS
Envision (AESC UK)	International Drive, Washington	SR5 3NS
Snop	International Drive, Washington	SR5 3FH
Faltec	International Drive, Washington	SR5 3FH
Rustica Trattoria & Inn	Washington Rd, Sunderland	SR5 3HZ
North East Land, Sea and air Museum	Washington Rd, Sunderland	SR5 3HZ

Appendix B – Tree and Hedge Protection



A 2 metre high temporary fence is to be installed to the perimeter of the site, as indicated in red, to provide protection to any trees and hedgerows outside of the site boundary. All trees and hedgerows within the Site Boundary are to be removed and therefore no further protection is required.

Appendix C – Archaeology

Archaeology Mitigation Plan

The early tree and hedgerow removal will not require an Archaeological Watching Brief.

Archaeological investigations are required as part of the Main Construction works within the areas described below.

Fields just to the north of the Nissan junction, as marked in red in Fig 1, has been identified with Archaeological interest. A specification is to be produced by the county archaeologist to stipulate the requirements when working in this area. It is anticipated that a Watching Brief will be required as a minimum whilst works in this area are being carried out.

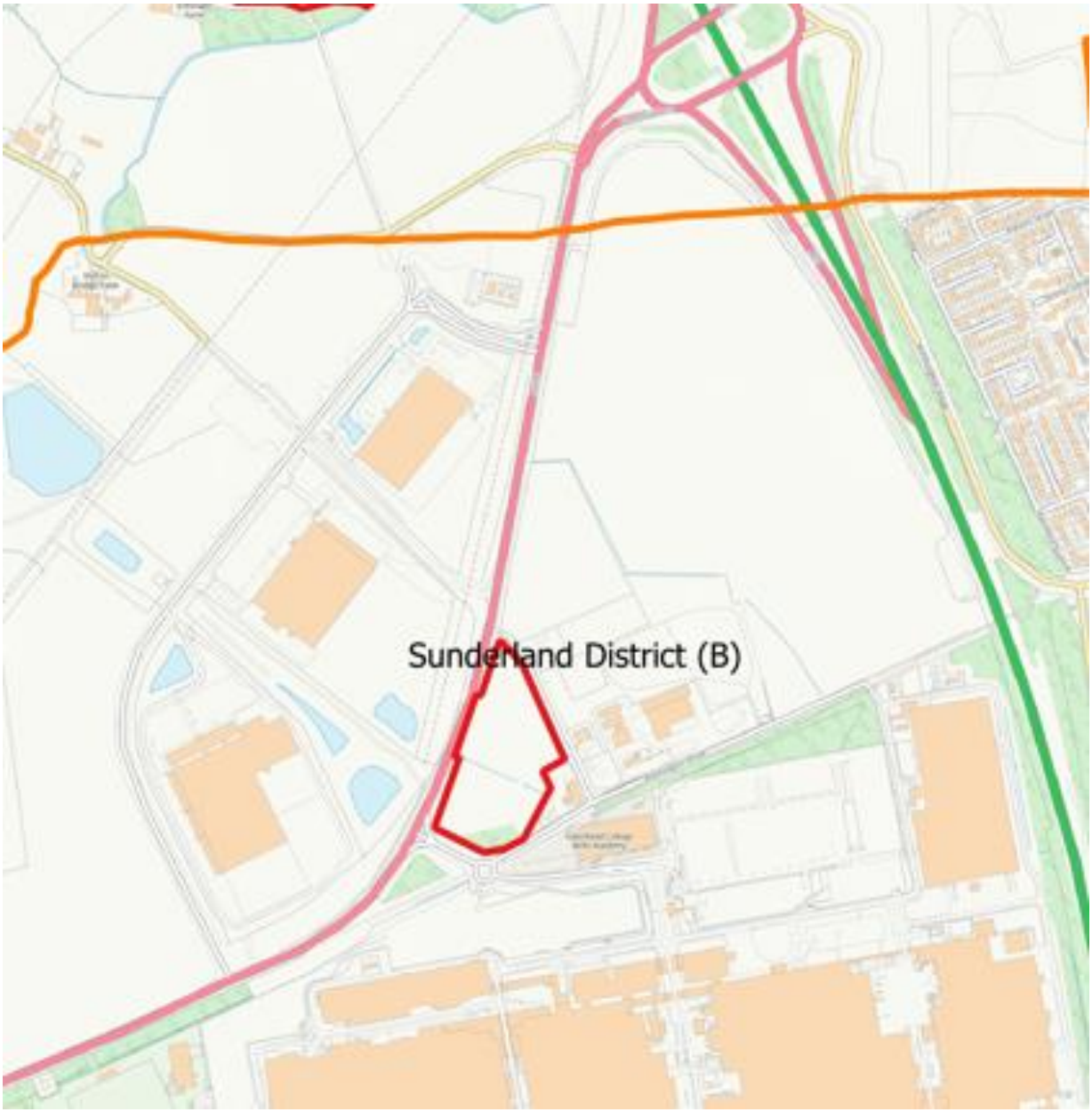


Fig 1: Area of Archaeological interest

Should the Archaeological Watching Brief find anything of interest during the Main works and require further investigation, then the proposed archaeology works will be reviewed by the Project Manager and Contractor and planned accordingly.

Appendix D – Site Compound Location and Access Routes

Traffic Routes to and from site
All staff / workforce will be instructed (via toolbox talk and letters) to access the site from the A1 / A1231 direction to avoid the A19 / Downhill Lane junction when they are starting on-site at 7:00am to avoid the Nissan shift change.

All HGV construction traffic will be instructed to use A19 from the North and South, to minimise traffic movements through urban areas, such as Washington, commencing at 8:00am.
Site direction to be signposted from A1290 Junction with A19 from North and South.
There are no planned abnormal loads on the IAMP Dualling Scheme.

HGV Inbound Movement
- From the North and South via the A19, vehicles will travel South West on the A1290.
- Vehicles will turn right to access the site compound on Downhill Lane.
- We will not use any A19 laybys as holding locations, as we have sufficient space to hold any vehicles on site when they arrive.

HGV Outbound Movement
- From the site compound on Downhill Lane, vehicles will turn left travel North East on the A1290 and access the A19 at the local Interchange.
- Vehicles will then travel North or South on the A19 to their destination.



Fig 1: Access Routes into Site Compound

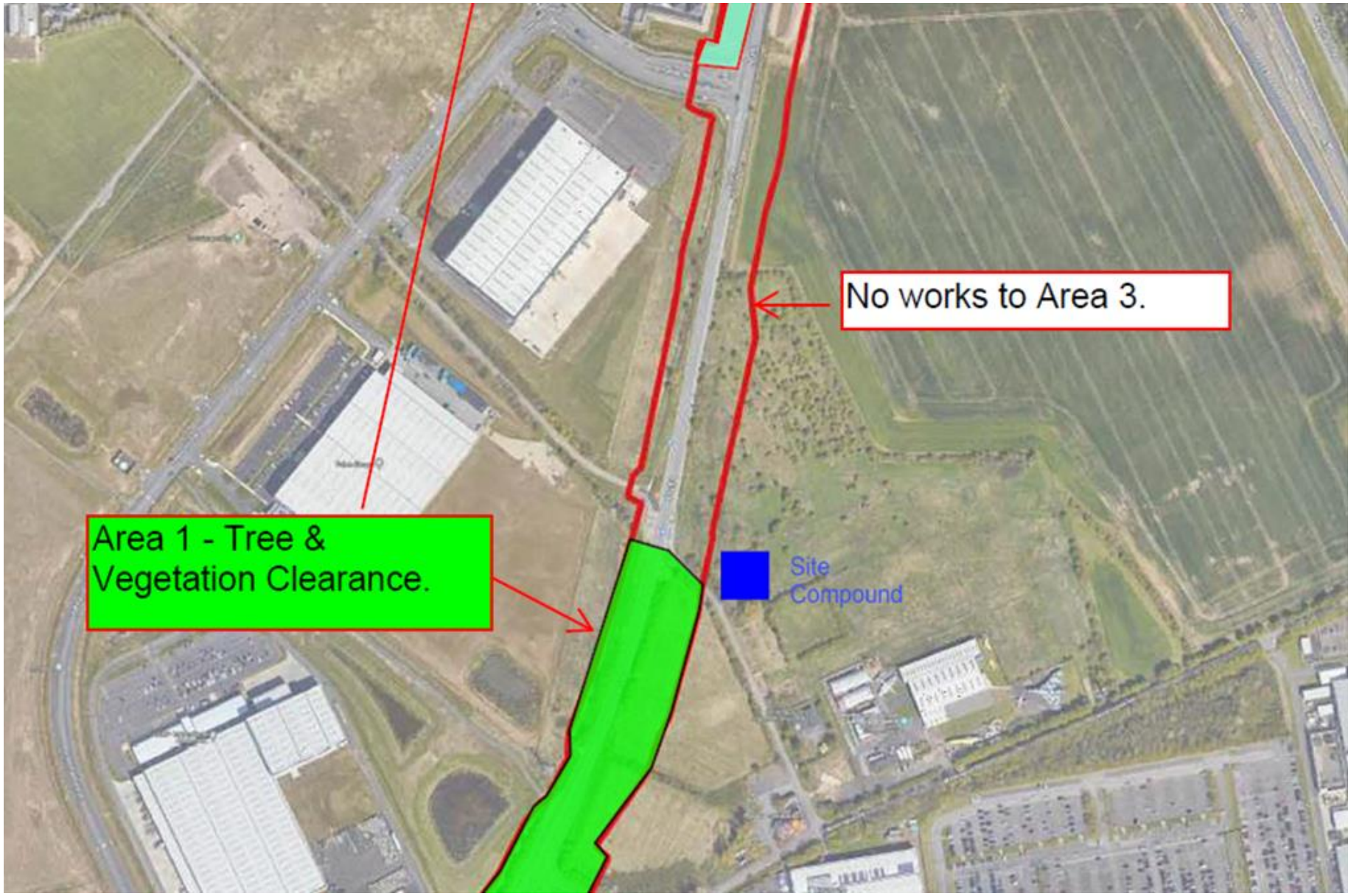


Figure 2: Site Compound Location

Appendix E – Environmental Impact Assessment

Environmental Impact Assessment (EIA)

Environmental Impacts

The following is a summary of control measures identified by the Environmental Aspects register within the Esh Construction Ltd Environmental Management System. The controls identified are to be in place to ensure there is no adverse impact on the environment and to maintain legal compliance. The controls are to be read in conjunction with any COSHH assessment relating to any product that has the potential to cause harm.

Item	Issue	Applicable? Initial if yes	Comments
1	**GENERATION OF AIRBORNE DUST**		
1.1	Vehicle / plant movements, Storage and Handling of Fine materials – including waste	Y	
2	**GASEOUS EMISSIONS**		
2.2	Vehicle / Plant Exhaust, Chemical / bitumen odours etc	Y	
2.3	Burning waste	N	
3	**WATER MANAGEMENT**		
3.1	Mains Water Usage	N	
3.2	Dewatering	N	
3.3	Drainage and Drainage Repairs	N	
3.4	Discharges	N	
3.5	Runoff from vehicle / Plant Operation; Vehicle Plant Maintenance;	N	
4	**FUEL AND CHEMICAL SPILLAGE**		
4.1	Bulk storage of Fuel, Oil and Chemicals in jerry cans / bowsers	Y	
4.2	Vehicle Washing / Power Cleaning	N	
4.3	Vehicle and Plant Maintenance	Y	
4.4	Delivery of fuel and oils	Y	
4.5	Refuelling of Plant / Generators etc	Y	
4.6	Storage of LPG	N	
4.7	Handling of waste oils	Y	
5	**TRAFFIC MOVEMENT**		
5.1	Carriage of Mud and dust off site	Y	
5.2	Dust from inadequate sheeting	N	
5.3	Erosion of verges and road surfaces	N	
5.4	Use of sensitive routes / unplanned	N	
6	**NOISE AND VIBRATION**		
6.1	Mobile plant, handling and loading including reversing alarms	Y	
6.2	Excavation and Soil Moving	N	
6.3	Lorry Movements	Y	
6.4	Operation of Stihl saws, drills, piling etc	Y	
6.5	Compaction equipment – wackers, rollers etc	N	
7	**WASTE GENERATION**		
7.1	Processed stone (coated materials)	N	
7.2	Soils / Demolition materials etc	N	
7.3	Used drums / containers	Y	
7.4	Office / canteen waste	Y	
7.5	Plastics and packaging	Y	
7.6	Wood	Y	
7.7	Scrap Metal	N	
7.8	Waste Oil / Chemicals/ Paints etc	Y	
7.9	Batteries	N	
7.10	Other Hazardous Wastes e.g. Asbestos	N	
7.11	Septic Tanks	N	
7.12	Litter	Y	
7.13	Contaminated water	Y	
7.18	Noxious Weeds	N	
8	**ENERGY USAGE**		
8.1	Lighting	**Y**	
8.2	Heating	**Y**	
8.3	Fuel for Plant / Vehicle operation	**Y**	
9	**VISUAL INTRUSION**		
9.1	Site Offices and Compounds	**Y**	
9.2	Stockpiles	**N**	
9.3	Site Lighting	**N**	

9.4	Entrance / Exit / Access Roads	**Y**	
10	**CONSERVATION MANAGEMENT**		
10.1	Soil Handling / Storage etc	**N**	
10.2	Protection of rights of way, boundaries, fences etc	**Y**	
10.3	Hedge and Tree removal	**Y**	
10.4	Disturbance of wildlife / habitat/ banks. Grassland etc	**Y**	
10.5	Archaeological disturbance	**N**	

Further details to be added to site specific Environmental Management Plan if required