

2023

Construction Environmental Management Plan

14 Gelligaer Road.



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CONTENTS

Contents	2
1. Introduction	3
1.1 Aims and Objectives:	3
2 Supporting Documentation:	4
3 The Project:	4
3.1 Project Methodology	4
3.2 Site Details:	5
3.3 Personnel and Equipment to be utilised during the works.	6
3.3.1 Personnel	6
3.4 Access and Traffic Management	6
3.4.1 Excavator access to watercourse	6
3.5 Roles and Responsibilities:	7
4 Consultation / Consents:	8
4.1 Consultation:	8
5 Construction Aspects Mitigation Procedures	8
5.1 Project Specific Environmental Risk Assessment / Mitigation.	8
5.2 Invasive Species:	14
5.3 Nuisance Effects on Neighbours	14
5.3.1 Sensitive Receptors Adjacent to Site	14
5.4 Control of silt contaminated runoff into surface and ground water	16
5.4.1 Potential Receptors	16
5.5 Hydrocarbons, chemicals and COSHH Materials:	17
5.6 Flood Risk	19
5.7 Cleanliness of the Surrounding Highway Network	19
5.8 Control of Emissions to Air:	20
5.8.1 Dust and Particulates:	20
6 Emergency Preparedness and Response	21
6.1 Emergency Contacts:	21
6.2 Environmental Incident:	22
6.2.1 Responsibilities	22
6.2.2 Specific Pollution Incidents	22
7 Training	23



1. INTRODUCTION

The Construction Environmental Management Plan (CEMP) responds to the identified environmental impacts of the construction of a new 3 bedroom residential property on a building plot adjacent to an existing bungalow at 14 Gelligaer Road. The developed will be Mr Patrick Kelleher, who is the current resident of the existing bungalow at 14 Gelligaer Road.

This CEMP includes:

- A description of the scheme;
- An outline of the construction methodology;
- A description of the site setting and existing status;
- A description of the sensitivity of the site, the communities along it and the potential effects of the project on these;
- The legislative, policy and guidance framework associated with the scheme;
- Site access routes and traffic management;
- Key personnel and their roles;
- Consultees and liaison mechanisms;
- Monitoring and reporting procedures;
- Planning requirements for the project;
- Procedures to mitigate impacts;
- Incident response and reporting procedures;
- Environmental monitoring procedures.

1.1 AIMS AND OBJECTIVES:

The main aim of the CEMP for the scheme is to manage the construction phase of the works in an environmentally acceptable and sustainable way, with consideration to the construction and environmental implications associated with the scheme during the preconstruction stage, construction phase and completion of the works.

Below is a breakdown of the objectives:

- Minimise nuisance impacts from the construction process on surrounding residents on Gelligaer Road and the new properties to the south of Gelligaer Road, accessed from the B4255.
- Ensure there is no damage to the line of five pedunculate oaks along the SE site boundary, or to their roots.
- Minimise impacts from the delivery of materials and equipment and the parking of construction vehicles.
- Minimise nuisance for surrounding properties.
- Minimise impacts on the ecology of the site and surrounding habitats.



- Ensure there is no pollution of the small watercourse which flows along the SE boundary during prolonged wet weather.
- Ensure there is no contamination of soils at the site during the construction process. Set out a process for the control of environmental incidents.
- Identify any other environmental risks associated with the project.

2 SUPPORTING DOCUMENTATION:

This document is to be used in conjunction with the following documents which have been produced prior to this management plan:

Document Title	Issued By:	Issue Date	Description
Preliminary Ecological Appraisal	B E Ecology	November 2020	Assessment of ecological status of the site, to inform an impacts assessment.
Ecological Impact Assessment	B E Ecology	November 2020	Assessment of ecological impact as a result of the works and proposals for mitigation for these risks.
Tree Survey, Categorisation & Constraints Report	Steve Ambler and Sons	Nov 2020.	Provides an assessment of all trees and large shrubs on site, their status and works required to maintain them in good / safe condition.

All personnel involved in the project, will be given a Toolbox Talk on the contents of this document.

3 THE PROJECT:

Mr Kelleher is the resident of No14 Gelligaer Road, which is a bungalow set in a plot of land. Mr Kelleher has gained planning permission for the construction of a three bedroom dormer property within this plot of land. This will be constructed adjacent to the existing bungalow on the land.

3.1 PROJECT METHODOLOGY

The works will include:

- Excavation for foundations, drainage and utilities;
- Casting of foundations and floor slabs;
- Utilities connections;
- Construction of the property, including roofing and glazing;
- Internal fit out;



- Hard and soft landscaping to the exterior of the building, including fencing.

3.2 SITE DETAILS:



Figure 1-Site Location (Google Maps)



Figure 2-Approximate Site Extents (Google Maps)

Grid Reference: ST 11016 96557



3.3 PERSONNEL AND EQUIPMENT TO BE UTILISED DURING THE WORKS.

3.3.1 Personnel

- Patrick Kelleher – Project Manager;
- Builder – Works Manager
- Ground workers x 2
- Bricklayer x 1
- Carpenter x 1
- Roofers x 2
- Electrician x 1
- Plumber x 1
- Plasterer x 1
- Landscape operatives x 2

These personnel will work on the scheme at various times over the duration of the project.

Plant & Equipment

- Transit tipper & small tools x 1
- 5t excavator
- Digging spades/shovels/rakes
- Whacker plate;
- Power tools;
- Electric cement mixer;
- Hand tools.

All equipment will be kept in good working order through regular checks and maintenance.

All on site plant will be stored within the property.

3.4 ACCESS AND TRAFFIC MANAGEMENT

3.4.1 Excavator access to watercourse

Access will be via the existing access on Gelligaer Road, which will be widened to accommodate the additional access. The width of this access is restricted by the presence of a lighting column.

All plant, personnel and materials will be brought to site via this access.

Vans will be parked on the existing driveway, which has been extended in preparation for the project.



3.5 ROLES AND RESPONSIBILITIES:

Role / Personnel / Organisation	Contact	Responsibilities
Project Manager: Patrick Kelleher	Mob: 0753266680 Email: patkelz@hotmail.com	• Oversight of the project with a wealth of knowledge on the scheme from early involvement. • Overall responsibility for the development and implementation of the CEMP. • Responsible for the control of environmental impacts during construction and ensuring that the construction process follows sustainability best practice.
Ecological Advisor – Beth Evans	Mob: 07527049134 info@beecological.co.uk	• Advise on ecological mitigation, required during the project.
Arboricultural Advisor – Steve Ambler	Mob: 07961322908 vaughan@steveamblertrees.com	• Advise on tree protection zones and tree works.
Construction Environmental Coordinator – Julian Gregory – (EcoVigour)	Tel: 08448 400 401 Mob: 07974386841 jgregory@ecovigour.com	• Provide advice on Environmental Mitigation during the construction process.



4 CONSULTATION / CONSENTS:

4.1 CONSULTATION:

Consultation shall be undertaken with the following:

Consultation will be required with the residents adjoining the property to discuss working times and the duration of the works.

Consultation will be undertaken with Merthyr Tydfil County Borough Council Planning for the discharge of Planning Conditions.

5 CONSTRUCTION ASPECTS MITIGATION PROCEDURES

5.1 PROJECT SPECIFIC ENVIRONMENTAL RISK ASSESSMENT / MITIGATION.

The following aspect register formulates the assessed risk by multiplying the likelihood of an event or encountering a species (L), by the severity implicated by that event/encounter (S). This quantified the assessed risk of the impact (R).

(L) & (S) are measured between Negligible (1), moderate (2) & high (3) to create the final value.



Potential Impact	Risk Assessment			Mitigation / Enhancement Measure	Risk Assessment with Mitigation			Management / Monitoring	Responsibility
	L	S	R		L	S	R		
Ecology and Biodiversity									
Statutory Designated Sites – Nelson Bog SSSI is 665m from the site.	0	0	0	Due to the nature and scale of the development, impacts on this SSSI have been assessed as negligible.	0	0	0		
Non Statutory Designated Sites – There are 9 SINC's within 1km of the site: Wern Woodland (589m) Brooklands Marsh (242m) Llancaiach-Fawr Meadows (228m) Coed Gelliau’r-Gwelt (753m) Nant Caeach (894m) Afon Bargoed Taf (855m) Trelewis Caeach (203m) Nant Caeach (203m) Berthlwyd (880m)	0	0	0	Due to the nature and scale of the development, impacts on this SSSI have been assessed as negligible.	0	0	0		
Birds – The row of broadleaved trees and scrub along the SW boundary provides suitable habitat for nesting, commuting and foraging birds. Buildings within the site were surveyed with no presence of nesting birds found.	2	2	4	It is not proposed to undertake any vegetation clearance as part of the development, which could impact nesting birds. Any vegetation clearance required, will be undertaken outside of the bird breeding season (Late Feb to September) If nesting birds are identified within the site, Beth Evans, the project Ecologist will be contacted for advice.	2	1	2	Environmental site inspections will include a walkover check for nesting birds.	PK / BE
Hedgehogs – Habitat within the site offers potential for use by hedgehogs.	2	2	4	Care will be taken during the disturbance of leaf piles and piles stacked vegetation to ensure hedgehogs sheltering within these are identified. Any hedgehogs identified will be moved to suitable habitat outside of the construction footprint.	2	1	2		PK / BE
Bats – Buildings within the site have been assessed as offering negligible potential for use by roosting bats. The line of mature oaks along the SE boundary offer some potential for use by roosting, foraging and commuting bats.	1	2	2	No works are to be undertaken to the trees along the SE boundary. Within the exterior lighting design for the property, this line of trees will be maintained as a dark corridor.	1	1	1		PK



Potential Impact	Risk Assessment			Mitigation / Enhancement Measure	Risk Assessment with Mitigation			Management / Monitoring	Responsibility
	L	S	R		L	S	R		
Reptiles – The SE section of the site, provides favourable habitat for common reptiles including slowworm and common lizard.	2	2	4	If reptiles are encountered during site clearance, works will cease and Beth Evans will be contacted for advice.	2	1	2	Site clearance personnel to be made aware of the potential for the presence of reptiles during clearance of the site.	PK
Amphibians – The site has low potential for common amphibian species.	1	2	2	If common amphibians (frogs, toads) are encountered during site clearance works, they will be moved to suitable habitat along the SE boundary.	1	1	1		PK
Invasive Species- No invasive non-native species have been identified at the site.	0	0	0	If invasive non-native plant species are identified, Julian Gregory the project Environmental Specialist will be contacted for advice.	0	0	0		
Landscape and Arboriculture									
There are five pedunculate oaks along the SE site boundary.	3	3	9	These trees are to be retained as part of the project. No construction works or storage of materials will be undertaken within the root protection zone of these trees. Reference should be made to the Tree Survey, Categorisation & Constraints Report – Steve Ambler & Sons, for further information regarding the establishment of root protection zone and maintenance requirements for the trees.	1	2	2		PK / SA
Hedgrow along the boundary with Gelligaer Road				A section of the hedge along the boundary with Gelligaer Road is to be removed, comprising Leyland cypress with holly, barberry sp, cotoneaster sp, wilson's honeysuckle. The conifers have been cut back to wood and are unsightly. The section of this hedgerow up to the lighting column will be removed, to widen the access into the property for the shared drive.				This section of hedgerow should be removed outside of the bird nesting season, or should be inspected for nesting birds by the project ecologist.	PK / BE
Pollution Control and The Water Environment									
Silt pollution impacts on the dry ditch running along the SE boundary – There is potential during heavy rain that construction runoff contaminated with suspended solids, could flow into the dry ditch.	2	2	4	A 5m wide vegetated strip will be maintained between the work site and the dry ditch. A line of silt fence will be erected between the work site and the 5m buffer zone. This will be installed with the base of the fence buried 250mm into the ground and the wooden support stakes placed on the downstream side of the fence so that as the fence is loaded with water it sits against the posts. A 1m return will be installed at the end of the fencing run. No water from excavations on site will be pumped directly into the ditch.	1	3	3	Visual assessments of water quality will be included as part of the daily Site Inspections. Silt fence will be inspected for undercutting and build up of silt against the fence and will be maintained accordingly.	PK



Potential Impact	Risk Assessment			Mitigation / Enhancement Measure	Risk Assessment with Mitigation			Management / Monitoring	Responsibility
	L	S	R		L	S	R		
Hydrocarbon Spillage during re-fuelling, use and storage of plant.	2	3	6	Use of plant on site will be limited. Funnels will be used when fuelling plant and equipment with restricted access to the fuel filler. Plant nappies will be placed beneath fuel filling apertures during re-fuelling. Fuelling will be undertaken away from the water course and surface water drainage. All items of static plant will be placed on a plant nappy. If plant or equipment is found to be leaking hydrocarbons or other fluids it will be suitably environmentally isolated or removed from site until repaired. If hydrocarbons are spilled, they will be cleaned up in line with the Emergency Preparedness and Response Procedure as described in Section 8.	1	2	2	If spills or leaks are identified, action will be taken in line with the Emergency Preparedness and Responses Plan	PK
COSHH Substances – Release to atmosphere of environmentally damaging COSHH Substances.	3	3	9	COSHH Assessment will be undertaken for all materials to be bought to site. COSHH Assessments will need to cover how potential COSHH materials could impact on the environment and the mitigation required for this. COSHH Materials will be stored in a dedicated COSHH store which will be a secure, contained facility.	1	3	3		PK
Flooding – NRW flood risk maps show that the site is not at risk from flooding. There is a low risk of flooding along the small watercourse along the SE boundary.	0	0	0	No action is required in respect of flooding, during the construction phase. Drainage will be installed and maintained as set out within the approved planning permission.	0	0	0		
The Historic Environment									
Archaeology – No features of archaeological importance have been identified within the site.	1	2	2	A precautionary approach will be adopted to the discovery of features of cultural heritage importance. Operatives will be instructed to cease activity in any area where items which may be of significance are found.	1	1	1	No further monitoring is deemed necessary for these works.	PK
Nuisance									
Noise –	2	2	4	Site hours will be as described in section 5.3 – Noise and Vibration. Refer to Section 5.3 – Noise and Vibration	2	1	2		PK



Potential Impact	Risk Assessment			Mitigation / Enhancement Measure	Risk Assessment with Mitigation			Management / Monitoring	Responsibility
	L	S	R		L	S	R		
Deliveries – Traffic disruption on Gelligaer Road and obstruction of residents drives.									
Construction Parking – Additional pressure on road parking along Gelligaer Road and obstruction of residents drives.				The driveway within the property has been extended to accommodate additional vehicles. All construction traffic will be parked on the driveway. If on road parking is required, this will be on the highway in front of the property taking care not to obstruct neighbours drives. Gelligaer Road is a 30mph zone with good line of sight either side of the property. Refer to section 5.7				Project Manager to monitor construction parking and ensure all vehicles are parked in a safe manner, not obstructing residents drives.	
Dust – it is likely that dust will be generated during cutting operations.	3	2	6	All disc cutters will be fitted with proprietary dust suppression equipment i.e. pumped water bottle to provide water spray onto the blade during cutting operations. Refer to Section 5.8 – Control of Emissions to Air.	1	2	2	Observations will be made throughout the working day by Works Managers with mitigation instructed as appropriate.	PK
Vibration – It is considered unlikely that the adjacent properties will be impacted by vibration from the works, as it is not proposed to utilise any heavy plant or dynamic compaction equipment.	1	1	1	No mitigation is proposed in respect of groundborne vibration.	1	1	1		
Artificial Lighting – Intrusion for residents and wildlife from artificial lighting. Bats are particularly sensitive to artificial lighting.	2	2	4	Works will be undertaken during daylight hours, with no floodlighting proposed. Within the exterior lighting design for the property, this line of trees will be maintained as a dark corridor.	1	2	2		PK
Smoke – Nuisance from windblown smoke.	1	1	1	Burning on site will not be permitted.	1	1	1	No burning to be enforced by Works Managers.	PK
Contaminated Land									
Discovery of Contaminated Land No ground contamination is anticipated.	1	1	1	Should indicators of contamination be identified i.e. odours, discolouration, anthropogenic materials, works will cease and Julian Gregory will be contacted for advice.	1	1	1		PK
Waste									



Potential Impact	Risk Assessment			Mitigation / Enhancement Measure	Risk Assessment with Mitigation			Management / Monitoring	Responsibility
	L	S	R		L	S	R		
Unnecessary waste.	3	3	3	Waste segregation areas will be created to allow Source Segregation of wastes. Duty of Care checks will be undertaken for all Waste Hauliers and Waste Management Companies. No waste shall leave site without a Waste Transfer Note	1	1	1		PK

5.2 INVASIVE SPECIES:

No invasive species non-native plant species have been identified at the site. Personnel will be cautious to the discovery of INNS. Key INNS are Japanese knotweed and Himalayan balsam:

- Japanese knotweed – *falopia japonica* – is a perennial plant which grows from a below ground rhizome system. The plant starts its growth cycle in May and grows rapidly achieving its full height of between 1.5m – 2.5m by July. Plants send out lateral leaders, up to 5m from the outermost plant within the stand. These then form new plants and this is how the plant spreads. New plants can also grow from rhizome fragments carried by water, human activity and earth movements. New plants do not readily develop from stem material but can do if left in water. The rhizomes can extend to a depth of 3m but generally no more than 1m.
- Himalayan balsam – *impatiens glandulifera* – is an annual plant which regenerates from seeds. The growth cycle starts in May with the plants achieving full growth in early July. The plant then flowers, before setting seed in late July, early August. The seeds are contained in a seed pod, which once ripe, uncoils to eject the seeds up to 5m. The plant is shallow rooting with a fleshy stem. It can be easily pulled out of the ground.



Figure 3- Himalayan Balsam



Figure 4- Japanese Knotweed

In INNS are discovered on site, works will cease and the Environmental Advisor Julian Gregory will be contacted for advice.

5.3 NUISANCE EFFECTS ON NEIGHBOURS

5.3.1 Sensitive Receptors Adjacent to Site

The development site lies within a row of 13 detached properties along the southern end of Gelligaer Road. There are other residential properties opposite this on the other side of Gelligaer Road and three new build properties to the rear of No14.

The area to the south, east and west is predominantly agricultural plots with woodland belts.

Key receptors for nuisance impacts from the works will be the directly adjacent properties and surrounding properties along Gelligaer Road due to construction traffic and parking.

The development is small and hence these impacts will in turn be small and will sufficient mitigation can be avoided.

5.3.1.1 Risks:

- Disturbance to residents surrounding the site from construction noise and vibration.
- Disturbance to residents surrounding the site from dust and odours.
- Disturbance to the ecology of the surrounding area due to excessive noise, vibration and dust.
- Disruption due to deliveries to the site and the parking of construction traffic.

The following construction activities have potential to generate excessive levels of noise:

- Excavation;
- Use of breakers;
- Use of disc cutters.

5.3.1.2 Controls for Noise Impacts:

The following controls will be implemented on site to reduce the impact of noise on the local population.

5.3.1.2.1 Working Hours

A key method of limiting nuisance is the restriction of working hours. The working hours are shown below.

Day	Working Hours
Monday - Friday	08:00 – 18:00
Saturday	08:00 – 18:00
Sundays and Public Holidays	No work permitted

Table 1: Working Hours for the Site

There will be no night time working.

5.3.1.2.2 Additional Mitigation Measures

The following shall be put in place to further mitigate the impact of noise and vibration:

- The works will adhere to BS 5228: parts 1 and 2, as well as BS 7385: parts 1 and 2.

- Residents in the vicinity of site will be advised of noisy or vibration producing works in advance, including their likely duration.
- All residents adjoining the site will be provided with the name and contact details for the project manager, who will be the first point of contact for any issues raised.
- Acoustic covers to engines shall be kept closed at all times during operation.
- It is anticipated that the use of a breaker will be required to break out the existing garage slab. This operation will be short duration and consultation will take place with neighbours during the planning of this operation. Breakers will not be used before 09:00.
- Materials to be cut will be moved to the centre of the site to maximise the distance from potential receptors. Cutting operations will not be undertake before 09:00. Materials will be ordered pre-cut to minimise cutting operations.
- Personnel will be instructed to be respectful of neighbours.
- Site radios will not be used.

5.4 CONTROL OF SILT CONTAMINATED RUNOFF INTO SURFACE AND GROUND WATER

5.4.1 Potential Receptors

Runoff from the site area flows into the unnamed watercourse running along the SE boundary. This is dry for much of the year and only flows during periods of heavy rainfall when the ground is saturated.

Site materials dragged onto Gelligaer Road are likely to be washed into surface water gullies, which will flow to controlled waters.

Risks:

- Silt contaminated runoff from the site flowing into the ditch along the SE boundary during periods of heavy rain.
- Silt contaminated water flowing into highway drainage on Gelligaer Road and subsequently into controlled waters.

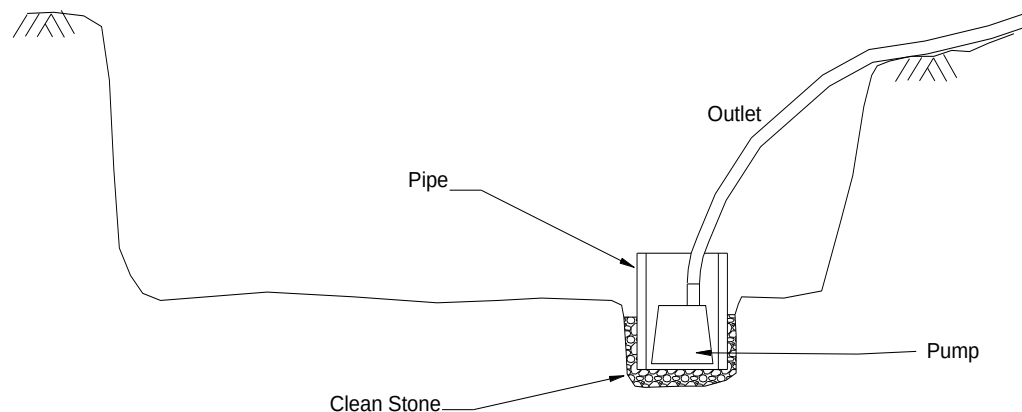
Controls:

The works footprint is relatively small and the amount of time it will be open to the elements will be short. Consequently the risk of silt contaminated runoff entering controlled waters is low.

To minimise this risk, the following measures will be put in place:

- Plant will not track across the property footprint following the completion of excavation.
- A 5m vegetated strip will be maintained along the SE boundary of the site, between the property footprint and the ditch.

- A line of Siltfence will be erected between the worksite and the vegetated buffer. This will have a 1m return into the site, at either end of the siltfence. Runoff from the site will be allowed to percolate through this, prior to entering the ditch. Siltfence will be installed with the base buried 250mm into the ground and the soil compacted around the base of the fence to prevent under cutting. Stakes will be placed on the downstream side, so that the fence sits against the stake, when loaded with water.
- Materials shall not be stockpiled near the ditch.
- All water pumped from excavations shall be pumped via a pipe and gravel sump. In order to prevent silt being agitated from the base of the excavation and to provide rudimentary filtration to the water prior to abstraction.



WATER PERCOLATES INTO CLEAN STONE WHICH REDUCES SILT
LOAD AND PREVENTS SCOUR OF THE SUMP

Figure 5- Pipe and Gravel Sump

Monitoring:

Visual assessments will be undertaken daily of the watercourse and drainage ditches on site during wet conditions as this is a good instant indicator for silt contamination.

5.5 HYDROCARBONS, CHEMICALS AND COSHH MATERIALS:

Risks:

- Leakage of fuels and oils from plant and machinery.
- Leakage/spillage of fuels, oils and chemicals from containers.
- Spillage of fuel during refuelling.

- Wind blowing of COSHH materials.

Controls:

- COSHH assessments will be undertaken for all materials bought to site. These assessments will include environmental exposure information and instructions for dealing with accidental release of the materials including environmental impact from the materials.
- All COSHH Materials and static plant will be kept within a secure compound area.
- Maintenance and re-fuelling of plant and machinery shall not take place near the watercourse. A plant nappy will be placed beneath the fuelling aperture of the equipment during fuelling.
- The re-fuelling of static and small items of plant shall be carried out using fuel cans with spouts which can be inserted into re-fuelling apertures of the plant being re-fuelled. If such fuel cans are not available a funnel will be used.
- All fuels, oils and chemicals to be stored in suitable containers within controlled secondary bunded enclosures such as plant nappies.

Control of Cementitious Material

The following methodology will be carried out to ensure cementitious material is handled in an environmentally considerate and responsible fashion:

- A washout pit will be provided for concrete delivery vehicles to wash their slides and drums following the delivery of concrete. This will be a shallow pit lined with plastic sheet. Once cured, this can be broken out and disposed of as hard core.
- Washouts will be provided for cement mixers, in the form of a plastic tub or a pit lined with plastic, as described above. Under no circumstances will cement mixers be washed out on the highway, footway or near the ditch.
- All cement bags will be sealed following use in order to prevent leaks and dust;
- Storage of any concrete, cement and mortar materials will be away from the ditch and any surface water drainage.
- Cementitious materials will be handled according to the procedure for the handling of COSHH materials outlined in section 5.5 of this document.

5.6 FLOOD RISK

Flood risk at the site has been assessed as being negligible. No actions are required in respect of flood risk.



Figure 6- NRW Flood Risk Map

5.7 CLEANLINESS OF THE SURROUNDING HIGHWAY NETWORK

Hard surfaced routes will be used by delivery vehicles to prevent them having to traverse areas of site material. This will prevent site materials being picked up on wheels and deposited onto the highway network.

The following measures will be employed to maintain the cleanliness of the surround highway network:

- The existing driveway will be maintained as a hard surfaced areas and will be regularly cleared of site material.

- The tracks of the excavator will be cleaned down prior to it, tracking from the excavation area. This will be done by raising one track at a time and cleaning is with a brush and the addition of a hose if required. This will prevent site material being dragged onto the hard standing.
- The footway and highway adjacent to the site will be regularly swept to removal all site material dragged from the site by vehicles.
- Runoff from the site will not be allowed to flow down the road.

Monitoring:

Visual inspections of highways surrounding the site will be undertaken by the Works Manager daily, with the results used to direct further mitigation in the form of wheel washing, highway cleansing, as required. The frequency of this will be increased during periods of wet weather but inspections will continue during dry weather.

5.8 CONTROL OF EMISSIONS TO AIR:

5.8.1 Dust and Particulates:

Dust emitted from site can cause severe nuisance to surrounding residents, businesses and facilities. In its simplest form it can cause additional cleaning work and reduce resident's quality of life but in its most severe form it can have acute effects on people's health especially those suffering with respiratory conditions such as asthma.

Dust can have an impact on the ecology of the area, blanketing vegetation, preventing it from transpiring and reducing food sources for animals and invertebrates.

Risks:

- Dust emitted from earthworks
- Dust emitted from vehicle movements
- Dust emitted from cutting operations
- Dust emitted from materials handling.
- Particulates emitted from vehicles and plant exhaust systems.

Controls:**Material Handling**

- Fine, dry materials such as cement will be stored under cover with adequate protection from the wind.

- Stockpiles shall be maintained with shallow slopes to prevent slippages and shall be seeded if they are to be left for any period of time.

Vehicles & Plant Movement

- Vehicle movements around the site will be restricted due to the size of the site.
- All vehicles and plant on site shall be fully serviced and maintained, so that they do not emit smoke and particulates. If vehicles produce black smoke they will be removed from operation and sent for service.
- No machinery shall be left running when not in use.

Control of Site Operations

- Sheeting of vehicles: all HGVs carrying loose material capable of spillage or which has the potential to give rise to dusty emissions from the vehicles during transit shall be sheeted.
- Prevention of wind-blown dust arising from storage mounds: storage mounds shall be profiled to reduce erosion where the nature of the material could lead to it being rain washed or windblown.
- Equipment which produces excessive dust (concrete cutting, grinding and breaking) will be fitted with water spray dust suppression systems, which will be used on all occasions. If the equipment does not have suppression equipment fitted, a water mist shall be used to damp down dust (hand held plant sprayers can be used for this purpose).
- Spraying of paints and chemicals shall only be carried out in wind free conditions.

Monitoring:

Visual inspections shall be undertaken for airborne dust during dry periods.

6 EMERGENCY PREPAREDNESS AND RESPONSE

6.1 EMERGENCY CONTACTS:

Incident Manager: Patrick Kelleher - 07532066680

NRW: 0300 065 3000 (to be informed in the event of oil/chemical spill or fire).

Emergency Services: 999 (Request service required)

6.2 ENVIRONMENTAL INCIDENT:

6.2.1 Responsibilities

In all cases responsibility for immediate action lies with the person discovering the incident. They should take whatever actions they can, to immediately stop the source and contain the pollution.

In all cases the incident shall be immediately reported to the Works Manager / Project Manager who will act as the incident controller. The Incident Controller shall coordinate resources to put the containment and mitigation plan in place.

6.2.2 Specific Pollution Incidents

Fuel or Oil spillage on land:

- Stop release of fuel by removing the source or placing a container beneath the leak.
- Excavate oil contaminated soil and place in a quarantine area. This must be disposed of by a specialist waste handler as hazardous waste.
- If spillage is onto a hard surface, all drains and gullies must be sealed immediately. Oil absorbent granules will be used to soak up the spill. If these are not available absorbent materials such as sand, sawdust are to be placed over the contaminated area to soak up the spill. These should then be removed and stored and disposed of as hazardous waste. Impermeable gloves are to be worn.
- Spill kits will be kept on site in the site stores.
- If more than 10l of fuel or oil is released NRW to be contacted (0300 065 3000)

Spillage of chemicals:

- Where possible remove source of pollution.
- Obtain as much information on the chemical spilt as possible to evaluate the potential harm it could cause to staff and the environment.
- If it can be ascertained that there is no significant health and safety risk the chemicals should be dealt with as oil, above.
- If a potential health and safety risk is identified the area should be evacuated and the emergency services contacted.
- NRW to be contacted (0300 065 3000)

6.2.3 Environmental Response Equipment

Spill kits are available from the site stores.

7 TRAINING

All staff involved with the project shall be trained to a level to ensure that they are capable of carrying out their duties with minimal environmental impact.

ALL personnel on the project shall undergo a site induction. This induction will include information on the environmental aspects of the works. The contents of this CEMP will be used for this, in particular:

- Parking arrangements;
- The avoidance of nuisance and working times;
- The presence of ecologically sensitive features;
- Tree protection required;
- Waste management;
- The control of silt and concrete contaminated runoff.