

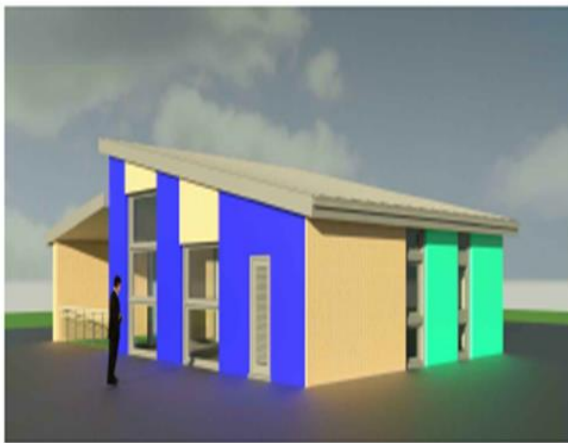


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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR PROVISION OF NEW CHILDCARE CENTRE AT BLAENDULAIS SA10 9DL



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1.1 Introduction

This Construction Environmental Management Plan (CEMP) has been formulated in support of the submission of a full planning application, which is the pre-start condition.

The following plan is a qualified assessment based on current information and is subject to refinement as the project evolves. We have prepared our plan to outline how this project will be constructed including a review of the construction methodology, site logistics and environmental measures to be undertaken. This report also describes the proposed outline programme and key activities for the construction works. Potentially significant environmental impacts associated with these activities are identified and where necessary, proposals for mitigation are outlined.

Planning for the construction is necessarily broad at this stage and may be subject to modifications during detailed construction planning. Consequently, a number of aspects of construction in relation to environmental issues cannot, at this stage, be accurately predicted. For examples, the number of vehicles required during site works will be dependant on the progress of the works against the construction program.

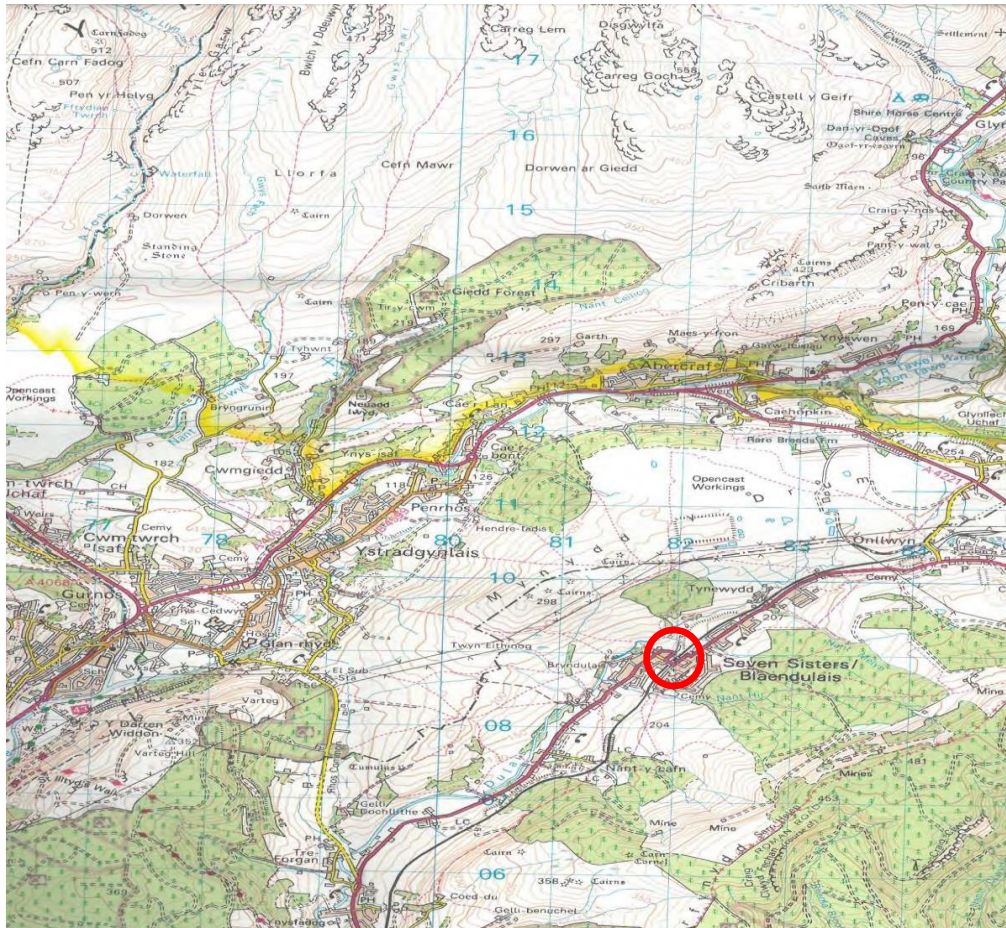
The Principal Contractor has a certified Environmental Management System (EMS) (ISO 14001:2015) and the certification body is UKAS accredited. The EMS includes an aspects and impact register. This register represents an overview of the typical environmental risks associated with the construction of this project. The aspects and impacts register will be used to assist and guide the development of specific project plans as required by legal and other conditions. These will accurately reflect the project specific environmental risk and liabilities.

1.2 Project Summary

The project consists of the new build works to provide of child health Centre. Works will also include Asbestos and Ecology works along with associated external works. All works undertaken within site footprint (as shown in red).



The site (Shown id Red Below) is surrounded by highways, pavements, railway and a public right of way. There are shops and residential housing to the eastern and southern boundaries of the site.



1.3 Purpose of this Document

Each contractor is required to develop and implement a CEMP to help ensure that construction activities are planned and managed in accordance with the environmental requirements of the project.

1.4 Roles and Responsibilities

The Principal Contractor is responsible to ensure that all members of the Project Team, including sub-contractors, comply with the procedures set out in this CEMP. The Principal Contractor will ensure that all persons working on site are provided with sufficient training, supervision, and instruction to fulfil this requirement.

The Principal Contractor will ensure that all persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

The key staff identified as having environmental responsibilities are as follows:

A. Environmental Director

The responsibilities of Environmental Director include but are not limited to:

- Maintaining environmental records.
- Providing guidance for the site team in dealing with environmental matters, including legal and statutory requirements affecting the works.
- Reviewing environmental management content of method statements.
- Reporting environmental performance to the Site Manager.
- Liaison with statutory and non-statutory bodies and third parties with an environmental interest in the scheme.

B. Site Manager

The Site Manager's environmental management responsibilities include but are not limited to:

- Preparation and implementation of the CEMP.
- Close liaison with the Environmental Director to ensure adequate resources are made available for implementation of the CEMP.
- Ensuring that the risk assessments for control of substances hazardous to health regulations (COSHH), noise and environmental risk are prepared and effectively monitored, reviewed and communicated on site; and
- Managing the preparation and implementation of method statements. Ensuring that the Environmental Director reviews all method statements and that relevant environmental protocols are incorporated and appended.

C. Engineering Staff

The engineers' environmental management responsibilities include but are not limited to:

- Reporting any operations and conditions that deviate from the CEMP to the Site Manager.
- Taking an active part in site safety and environmental meetings; and

- Ensuring awareness of the contents of method statements, plans, supervisors' meetings or any other meetings that concern the environmental management of the site.

1.5 Site Induction

All personnel involved in the project will receive environmental awareness induction. The environmental awareness procedure will ensure that the workforce is familiar with the principles of the CEMP, the environmental aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

1.6 Consultation and Communication

Statutory and Non-Statutory Bodies

During the construction works, communication will be required with external parties such as statutory authorities, interest groups and the public. Communication may take the form of scheduled meetings, site visits and written correspondence.

Public

The Site Manager shall ensure that the public is kept informed of operations that may affect them. This may involve letter drops and meetings to keep residents up to date with progress with the scheme and any new operations that are to be carried out. The Site Manager will provide details of contacts within the project team for the public to contact should any issues arise.

Statutory Consents, Licences and Permits

The Principal Contractor will ensure that any licences required are in place prior to works commencing.

Environmental Alerts

Legislative changes or proposed improvements to manage processes on site or other consultations will be communicated by the Site Manager to the Client.

Meetings and Records

Environmental issues relevant to the project will be discussed during Site Progress Meetings which will be attended by the Site Manager and Environment Director (if required). Environmental performance will also be discussed at regular health, safety and environmental meetings. This will include dissemination and discussion of the findings of audits, environmental reports and other inspections where appropriate.

1.7 Environmental Impacts and Mitigation

An environmental review of the scheme has been completed to identify the measures required to be implemented by the Principal Contractor to prevent pollution or damage to the environment during the construction phase. This also includes works associated with archaeological, ecological, landscape and other relevant aspects.

2.1 Scope and Objectives

The objective of this CEMP is to ensure prevention of pollution to land, air or water and compliance with current environmental legislation, and to provide a benchmark for best practice such that all possible preventative measures will be taken to avoid pollution of land or the water environment during construction works.

The Principal Contractor will engage frequently with the Client during the works.

2.2 Reference Documentation

This CEMP will be read and implemented on-site in conjunction with the requirements of Prevention of Pollution from Civil Engineering Contracts: Special Requirements publication industry best practice, published guidance documents and other documents as contained/specified within the CEMP and its associated Technical Schedules (TS). In particular:

Pollution Prevention Guidelines (PPG):

- PPG01 General guide to the prevention of water pollution.
- PPG02 Above ground oil storage tanks.
- PPG03 Use and design of oil separators in surface water drainage systems.
- PPG04 Treatment and disposal of sewage where no foul sewer is available.
- PPG05 Works and maintenance in or near water.
- PPG06 Working at construction and demolition sites.
- PPG07 Refuelling facilities.
- PPG08 Safe storage and disposal of used oils.
- PPG13 Vehicle washing and cleaning.
- PPG18 Managing fire water and major spillages.
- PPG21 Pollution incident response planning.
- PPG26 Storage and handling of drums and intermediate bulk containers.

British Standards Institute (BSI):

- Code of Practice for Earth Works, BS6031: 2009.
- Code of practice for noise and vibration control on construction and open sites – Part 1: Noise / Part 2: Vibration, BS5228-1: 2009.

Forestry Commission:

- The Forests and Water Guidelines, 4th Edition, 2003.

CIRIA Publications:

- Control of Water Pollution from Construction Sites – Guide to Good Practice (SP156).
- Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors (C532).
- Control of Water Pollution from Linear Construction Projects – Technical Guidance (C648).

- Control of Water Pollution from Linear Construction Projects – Site Guide (C649).
- Environmental Good Practice – Site Guide (C650).
- The SUDS Manual (C697).
- Site Handbook for the Construction of SUDS (C698).

2.3 CEMP Technical Schedules

Contractors Requirements

The Principal Contractor is required to submit a detailed CEMP prior to the commencement of works within any area of the site. This plan should be viewed as an evolving document(s), tailored to suit specific activities or work areas and be continually reviewed at weekly meetings for the duration of the works.

The detailed Pollution Prevention Plan will include, as a minimum, specific procedures relating to:

- Fuel handling and storage, including the locations of both periodic and regular fuelling points and emergency spill response.
- Responsibilities and details for monitoring and training in relation to pollution prevention and mitigation measures.
- Design, management and mitigation measures for noise, including monitoring of noise at the nearest sensitive receptors.

3.1 Definitions & Potential Pollution Sources

Pollution may be defined as the introduction of a contaminant into air, land or water, resulting in an impact (generally negative) to the ecosystem into which the substance is released.

Pollution may arise as a result of poor planning and implementation of management procedures associated with traffic, plant and materials handling, waste management, surface water and drainage management, and concrete management.

An environmental incident which pollutes the local environment will typically be, but not be limited to, the following examples:

- Minor oil spills away from watercourses.
- Not working in accordance with specific environmental procedures designed to prevent pollution during the works.
- An event (one-off) or series of events which contribute towards causing the environmental harm i.e. silting up of the adjacent beach and sea, oil spillage leading to the adjacent watercourse etc.
- A breach of consent conditions.
- The issue of a statutory enforcement notice by the Local Authority or Natural Resources Wales.

There are a number of potential sources of pollution from construction works which may adversely impact upon both terrestrial and aquatic ecosystems:

- Run-off from exposed ground, excavations and material stockpiles.
- Cement and cement wash from concrete batching plants, storage areas and other areas where cement grout or concrete is being applied.
- Plant washing and vehicle wheel wash areas.
- Fuel and chemical storage/refuelling areas.
- Leaking / vandalised plant and equipment; and
- Sewage and wastewater from construction compound and permanent control building amenities.

Pollution from fuels, cement run-off, other chemicals and silt or other particulate matter can pose a significant risk to both terrestrial and aquatic habitats, potentially resulting in direct mortality of fish, invertebrates and vegetation as well as longer-term effects on freshwater ecology.

3.2 Site Specific Pollution Prevention Measures

The Principal Contractor will ensure that sufficient numbers of spill kits will be strategically placed around the site, especially in areas identified as potential spillage locations. The location and contents of these spill kits will be checked daily by the Site Manager or delegated responsible individual (nominated person) and recorded on the Environment Checklist form (EMS06-EC) in **Appendix 1**. Under no circumstances will any litter be allowed to be placed within the spill kits. The spill kits will be clearly labelled, and the materials (contents) enclosed listed and kept up to date.

Also, a copy of the spill procedure (**Appendix 2**) will be included within the spill kit container and the Site Manager will also utilise a spill kit toolbox talk (**Appendix 3**) as a form of on-the-job training. Used materials from spill kits will be disposed of appropriately and replaced as a matter of urgency. Appropriate waste facilities will be available for contaminated materials. These waste facilities will be kept separated from any other non-contaminated wastes.

The emergency preparedness and response procedure (**Appendix 4**) will be followed in the event of an emergency on site. The emergency preparedness plan (**Appendix 5**) will ensure that relevant staff is aware of their responsibilities and the process to be followed in the event of a possible, probable or actual incident involving pollution into the adjacent watercourse.

A map (**Appendix 6**) clearly displays the location of all spill kits. In the event that the location changes, the map will be updated to reflect this.

The construction site will where possible use double bunded plant or equipment, where double bunded plant or equipment is not available, there will be an additional method of containment to ensure no pollution or spillages occur. This may be in the form of plant nappies and/or drip trays. Where drip trays are used, suitable methods for emptying will be employed, such as with hand-held pump and the contaminated water disposed of correctly. The trays will be checked daily (more during wet weather) to ensure no build-up of contaminated water overspill from the tray.

Initial plant set-up will be checked. The amount of fuel in the tanks on arrival will be recorded. Only authorised personnel may have access to generator enclosures, and they must be kept locked at all times.

In the event that a wheel-wash facility is required to be provided to prevent the spreading of any contamination onto local roads, this will be installed accordingly. However, the Principal Contractor does not envisage the use of a wheel-wash as part of this project as a hard standing surface will be formed at the commencement of the project (**Appendix 6**).

All vehicles carrying waste away from the construction site must use covers to prevent any loss of load and additional dust.

The Site Manager will undertake weekly Health, Safety and Environmental Inspections to ensure the procedures listed above are being followed.

3.3 General Pollution Prevention Measures

The following points (not exhaustive) indicate general pollution prevention measures in accordance with those highlighted within the guidelines referenced above and the Environmental Statement:

- i) Any material or substance which could cause pollution, including silty water, will be prevented from entering surface water drains or watercourses by the propitious use of and appropriate placement of straw bales, silt fences, cut-off drains, silt traps and drainage vegetated areas where appropriate.
- ii) Any silty water generated on site will ideally be settled out as much as possible through drainage mitigation measures (silt traps etc) and channelled into vegetated areas 20-50cm from watercourses to allow the settlement of solids.
- iii) All refuelling will be carried out in the designated compound which will be located as far away from the watercourse as is possible. Irrespective of the buffer distance and location of refuelling, drip trays and spill kits will be available in accordance with standard best practice across the construction industry.
- iv) Areas of waste, oil/fuel / chemical storage and permanent refuelling will be located as far away from the watercourse or drainage paths as is possible. Such storage areas will be appropriately sited to prevent the downward percolation of contaminants to natural soils and groundwater.
- v) Fuel, oils and chemicals will be stored on an impervious base within a bund able to contain at least 110% of the volume stored. Rainwater will not be allowed to accumulate within the bund and in any way compromise the required 110% volume capacity.
- vi) Site compounds, parking areas and turning areas and vehicle and equipment washing areas are to be sited at least 10 metres from watercourses.
- vii) All waste and stockpiled materials will be stored in designated areas and isolated from any surface drains.

- viii) The use of cut-off ditches, silt fences, silt traps and drainage to vegetated areas will be employed as required / appropriate in areas of excavation, exposed soils, stockpiling, dewatering and plant and wheel washing.
- ix) A Personnel Site Induction will make specific reference to required pollution prevention measures as detailed in the guidance discussed above.
- x) All works will be carried out in accordance with best practice and will aim to prevent deterioration in the ecological status of surface waters and to avoid compromising the restoration potential of such waters.
- xi) In the event of a pollutant spillage on site, the material will be contained (using an absorbent material such as sand or soil or commercially available booms).

3.4 Water Environment

The removal of established vegetative cover can lead to the loss of large quantities of soil particles and suspended silt to watercourses which can then cause significant pollution of water. Therefore, any earth moving works or other similar operations giving rise to contaminated drainage must be carried out in accordance with BSI Code of Practice for Earth Works, BS6031: 2009.

Site drainage and surface run-off contaminated with silt will not be allowed to directly enter any watercourse; as such, appropriate sedimentation and silt mitigation measures will be implemented on site in order to treat contaminated waters. This will include the use of Terrastop Premium Silt Fence or similar being installed at agreed locations on the construction site. This barrier is a special, high quality, permeable, technical filter fabric for stormwater surface runoff pollution management. The barrier can be installed as an entrenched vertical entrapment fence, and is designed to intercept and detain stormwater run-off, trapping harmful silt through settlement and filtration before it leaves the site.

3.5 Dust Suppression

Water needed for dust suppression during the construction and on the haul road during periods of dry weather will be clean water. Clean water may be obtained from re-circulated clean or treated (silt removed) drainage waters. Dust suppression methods will be considered especially during dry periods. The methods must ensure dust cannot contaminate surrounding areas, cause pollution of watercourses or damage to any wildlife and ecology. Task-specific risk assessments will define areas as at risk of dust contamination. Suitable methods available would include the use of bowzers and/or micro spray systems. For control of dust on roads, all lorries will be covered, and use of road sweepers will be implemented where appropriate. Dust suppression techniques will be deployed at the Principal Contractors discretion throughout the works.

3.6 Concrete Pollution Prevention Measures

Foundation excavations are generally below the level of the surrounding ground and therefore risk the concrete spills existing the base area is considered to be low. However, where the topography allows, foundation excavations are generally designed to be gravity draining in order to control ingress/egress of surface water from the excavation.

3.7 Concrete Wash Out

Wash out of concrete trucks will only be undertaken in designated areas. Designated wash out areas will be located away from any open watercourse, field drain or sensitive habitat area. No surface run-off from within the washout area will be permitted to leave the area and directly enter any drain or watercourse. Each wash out area should be located away from the main construction traffic area or access areas to prevent disturbance or tracking. A sign will be installed adjacent to each wash out the facility to inform concrete equipment operators to utilise only the designated washout areas.

The number of wash out areas will be kept to a minimum.

At the designated washout areas, wash water will be contained within a specially constructed lined containment lagoon. Lagoons should be constructed and maintained in sufficient quantity and size to contain all liquid and concrete wastes generated by washout operations. The supernatant from the wash pit may be reused for truck washing.

When temporary concrete washout facilities are no longer required for the work, any hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbances caused by the removal of the temporary concrete wash out facilities will be backfilled and repaired.

3.8 Noise and Vibration Pollution

Working hours are as follows:

- Monday to Friday 09:00 hrs – 16:30 hrs (Autumn and Winter).
Monday to Friday 09:30 hrs – 16:00 hrs (Spring and Summer).
- Saturday – Subject to an agreement.
- Sunday – Subject to an agreement.

Works are not permitted outside of the permitted times without prior consent from Client. Suitable methods will be undertaken to ensure the reduction of disturbance. Where it is deemed the impact of the noise is a significant risk, alternative methods will be utilised where possible to mitigate this risk. Use of low noise plant and good plant maintenance will be incorporated on site.

The application of best practice in accordance with BS 5228:2009 will assist in minimising impact from construction noise and vibration. This will consist of erecting local screening within the confines of the construction site. In addition, the construction site will also have a mixture of hoarding present to secure the site from unauthorised access, which will also reduce noise levels.

It is not possible to complete a construction noise assessment at this stage.

3.9 Hazardous Substances

A full inventory of all hazardous substances to be utilised on the project which can contribute towards pollution will be populated at the start of the project and kept in the site file. This list will be updated as the construction project progresses. All hazardous substances will be appropriately stored as per manufactures guidance. All hazardous substances also have the appropriate task-specific COSHH assessments which include the risk assessment and the material safety data sheet/manufacturer instructions, to ensure minimal risk to any watercourses, wildlife and ecology.

3.10 Emergency Response

An Environmental Incident and Emergency Response Plan (**Appendix 5**) has been developed for the site. This will include details on incidents and emergencies relating to pollution.

Pollution control related environmental incidents may include spillages (oils and chemicals); contaminated or silty run-off entering a watercourse or water supply; flooding; riverbed or other aquatic habitat/species disturbance; damage to underground services; damage to habitats; poor waste disposal and storage.

3.11 Contaminated Ground

TABLE 6 POTENTIAL SOURCES OF CONTAMINATION

SITE USE / ACTIVITY AND AREA	SOURCES	CONTAMINANTS
Current on-site:		
Electrical Substation	Leaks of coolant from plant as they age.	Polychlorinated biphenyls (PCBs)
Coal seam outcropping beneath site	Ground gas generation	Harmful ground gasses H ₂ S, CH ₄ and CO ₂
Previous building remains	Degradation of macadam material leaching into the soils. Possible old services leaks, demolition rubble.	Unknown; possible hydrocarbons, metals, inorganic and organic contamination and asbestos
Historic on-site:		
Past building on site	Unknown.	Unknown possible hydrocarbons, heavy metals, inorganic and organic contamination.
Railway sidings	Spills and tipped material associated with the rails use and transport.	Unknown possible hydrocarbons, heavy metals, inorganic and organic contamination and asbestos
Mill pond(s)	Material that settled in mill pond and source of infill not known.	Unknown; possible hydrocarbons, metals, inorganic and organic contamination and asbestos
Coal Mining (Surface)	Unknown though machinery and infrastructure may have been present.	Unknown possible hydrocarbons, heavy metals, inorganic and organic contamination, potential asbestos.
Coal Mining (underground)	Ground gas generation	Harmful ground gasses H ₂ S, CH ₄ and CO ₂
Possible toilet block	Unknown	Unknown possible inorganic and organic contamination.
Current offsite:		
Gas pipe line	Leaks from pipe as it aged	Possible hydrocarbons
Historical offsite:		
Railway, tramway and station	Spills and tipped material associated with the rails use and transport.	Unknown possible hydrocarbons, heavy metals, inorganic and organic contamination and asbestos

11.5 Summary

The relevant pollutant linkages based on the potential sources, pathways and receptors outlined above are tabulated below:

TABLE 7 INITIAL CONCEPTUAL SITE MODEL

SOURCE	PATHWAY	RECEPTOR
Current onsite: - Electrical Substation - Previous Building remains and demolition rubble - Coal Seam Beneath Site Contaminants: - PCBs - Hydrocarbons	Ingestion, direct contact, Inhalation of dust and vapours. Migration via permeable strata into groundwater. Direct contact with contaminated soils and waters. Lateral Groundwater Migration. Ground gas generation.	Workers at time of site development. Future maintenance workers for upkeep of site. Future site users. Aquifers underlying the site.

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- Possible metals - Inorganic and organic contaminants - Asbestos - Ground gases		
Historic onsite: - Past building on site - Railway sidings - Mill Pond(s) - Coal mining (surface) - Coal mining (underground) - Possible toilet block Contaminants: - Hydrocarbons, - Metals, - Inorganic and organic contamination - Ground gases - Asbestos - Unknown in places	Ingestion, direct contact, Inhalation of dust and vapours. Migration via permeable strata into groundwater. Direct contact with contaminated soils and waters. Lateral Groundwater Migration. Ground gas generation.	Workers at time of site development. Future maintenance workers for upkeep of site. Future site users. Aquifers underlying the site.
Current offsite: - Gas pipe line Contaminants: - Possible Hydrocarbons,	Lateral Groundwater Migration. Ground gas generation.	Workers at time of site development. Future maintenance workers for upkeep of site. Future site users. Aquifers underlying the site.
Historical offsite: - Mining processes, - Railway, tramway and station Contaminants: - Hydrocarbons - Metals - Inorganic and organic contamination - Asbestos	Dust migration to site. Lateral Groundwater Migration. Given the proximity to the site of these sources there is also potential for contaminated material to have been moved during the previous site developments.	Workers at time of site development. Future maintenance workers for upkeep of site. Future site users. Aquifers underlying the site.

There are currently a series of uncertainties and assumptions in the CSM presented above as this is based on desk study information only:

TABLE 11 PRELIMINARY RISK ASSESSMENT

SOURCE	PATHWAY	RECEPTOR	SEVERITY	PROBABILITY	RISK RATING	COMMENTS
Onsite: Soils and Waters beneath the development and hardstanding, electrical substation, coal seam beneath site and previous building remains	Ingestion, direct contact, inhalation of dust	Construction site workers Future users Maintenance workers	Severe	Likely	High risk	The mill pond(s) and railway sidings are possible sources of unknown contamination formerly present on site. PCBs may also be present if the electrical substation has leaked.
	Consumption of home grown vegetables	Future users	Medium	Likely (depending on the end use may be unlikely)	Moderate risk	If home grown vegetables are to be consumed there is a moderate risk.
Hydrocarbons, PCBs, Metals, Inorganic and organic contamination, Asbestos	Leaching and downward migration	Groundwater in the River Terrace Deposits	Medium	Low likelihood	Moderate/low risk	The soils beneath the site have been in place for a prolonged period so leaching is likely to have occurred though may increase if the new development affects the local groundwater regime.
	Lateral Groundwater Migration	River Dulais	Medium	Likely	Moderate risk	The soils beneath the site have been in place for a prolonged period so leaching is likely to have occurred though may increase if the new development affects the local groundwater regime.
Ground gases CO ₂ , H ₂ S, CO ₄	Build-up of dangerous gases within buildings or excavations	Construction site workers Future users	Severe	Likely	High risk	The presence of potential gas generating seams and workings beneath the site and the potential for thicknesses of Made Ground mean ground gases are likely to be generated beneath the site.
Offsite: Soils and waters	Leaching and downward migration	Construction site workers	Medium	Low Likelihood	Moderate/ low risk	The nearby railway sidings and gas main may pose a potential

Hydrocarbons, PCBs, Metals, Inorganic and organic contamination,		Future users Maintenance workers				risk given the close proximity to the site they may pose a potential moderate to low risk.
	Lateral Groundwater Migration	Construction site workers Future users Maintenance workers	Medium	Low Likelihood	Moderate/ low risk	The nearby railway sidings and gas main may pose a potential risk given the close proximity to the site they may pose a potential moderate to low risk.
	Dust transportation of soil particles	Construction site workers Future users Maintenance workers	Medium	Low Likelihood	Moderate/ low risk	The nearby railway sidings and gas main may pose a potential risk given the close proximity to the site they may pose a potential moderate to low risk.

Notes:

- LQM/CIEH - Generic Assessment Criteria for a residential development with plant uptake
- C4SL - Category four screening level for a residential development with plant uptake
- BRE - British Research Establishment

Mitigation and Remedial Measures

During the works the Contractor should adhere to all relevant legislation, good practise, construction workers should adhere to good site management, COSHH, good standards of hygiene and appropriate health & safety on site, with personal protection equipment (PPE) and dust suppression where appropriate.

Any soils imported on to site as part of the development should be suitably validated as suitable prior to use in accordance with 'Requirements for the Chemical Testing of Imported Materials for Various End Uses and Validation Cover Systems' published by the Welsh Land Contamination Working Group.

If during development works any other unexpected ground conditions or evidence of contamination is found inspection by a geo-environmental engineer should be made, and any required testing or investigation carried out prior to continuation of works.

Pathways

Potential Pathways

A pathway is a route by which a receptor may be affected by contamination. The exposure pathways associated with the site are:

- Inhalation of ground gas and dust
- Ingestion of soil and dust
- Dermal contact with soil and dust
- Consumption of home grown produce
- Leaching of contamination from soils into underlying aquifer **Receptors**

Receptors

Potential Receptors

Construction workers/maintenance personnel will be excavating in soils and are considered to be a potential receptor to contamination.

A residential/commercial/office end use is currently in place. Future site users are a potential receptor to contamination.

Controlled water receptors are considered to be the Afon Teifi.

All groundworkers on site will be issued with protective clothing, hard hats, footwear and gloves and will be instructed as to how they are to be used.

All personnel will wear hard hats, high visibility clothing and protective footwear at all times. In addition, the following will be implemented:

- Hand washing and boot cleaning facilities will be available.
- Smoking will be designated to a location outside of the construction site.
- Good practices relating to personal hygiene will be promoted.
- Before site operations are commenced, the necessary COSHH Assessments will be completed and disseminated to relevant persons.

- All visitors to the site will report to the site office and receive a visitors induction.
- All site personnel will undergo a site-specific health and safety induction prior to the commencement of works on-site. This will include the specific control measures to be implemented for the contaminated ground.

4.1 Monitoring

On-site meetings/inspections will be carried out as necessary to confirm the appropriate use of mitigation measures identified within the Principal Contractor environmental plans relating to pollution control. These meetings/inspections will highlight any further issues/measures which may be relevant either prior to commencement or during the works.

To ensure all mitigation measures put in place are maintained and continue to be effective, monitoring will be carried out.

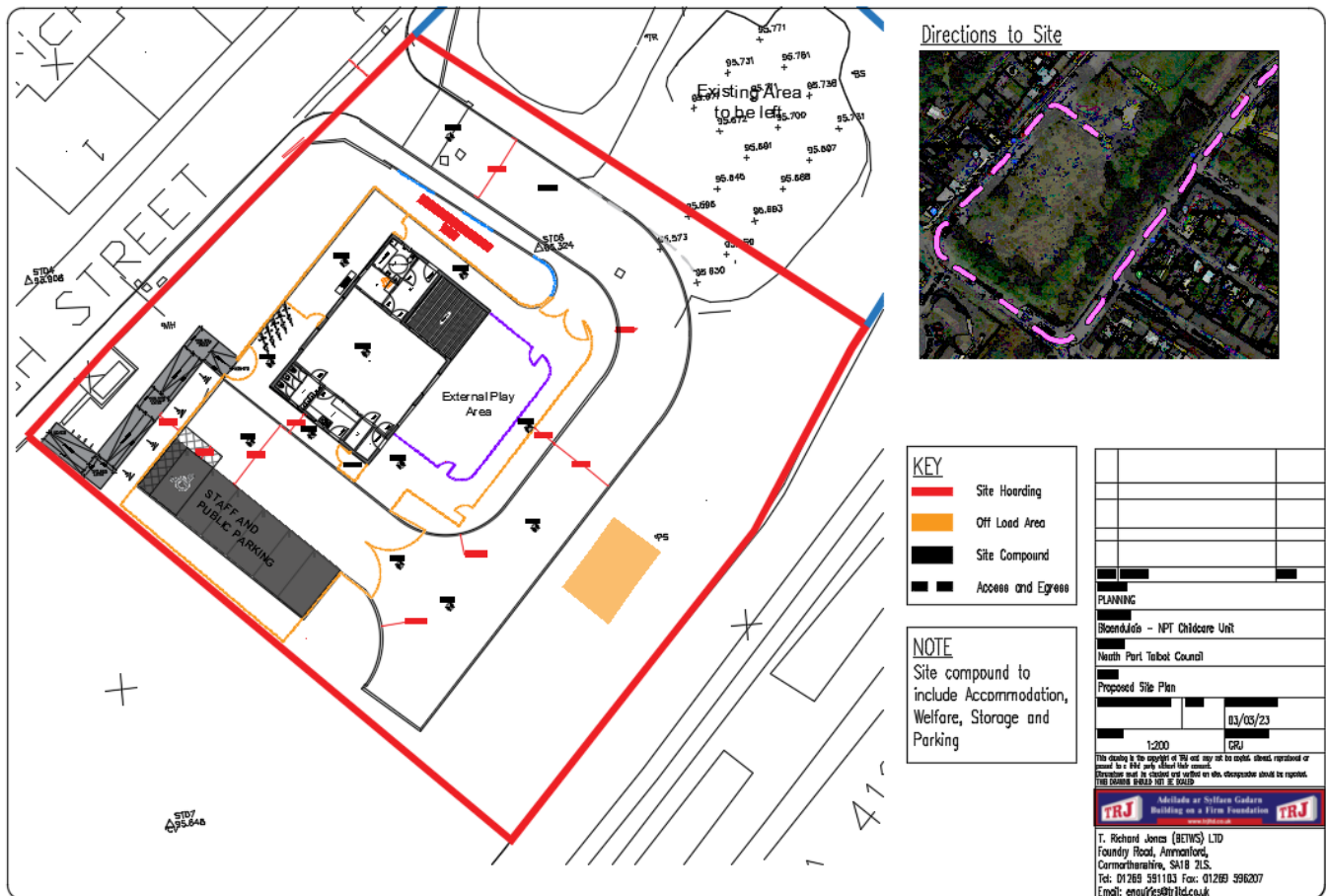
Regular checks of plant and equipment will be undertaken by the Principal Contractor to identify any oil or fuel leaks and will be carried out to confirm the condition of the plant. Regular checks for visual evidence of contamination/sediment will also be made alongside water courses, nearby working areas and in areas of surface water discharge.

4.2 Training

All employees, subcontractors, suppliers and visitors to the site will be notified via a site induction of the requirements on site for pollution prevention.

Through toolbox talks, site personnel and subcontractors will be educated on those aspects of environmental management as appropriate to the task assigned to them.

5.1 Boundaries & Site Fencing



5.3 Controlling Personnel Access onto Construction Site

The site entrance will be manned by an appointed gateman at all times when the security gate is required to be opened and closed. This will control the movement of all construction traffic and personnel entering and leaving the site.

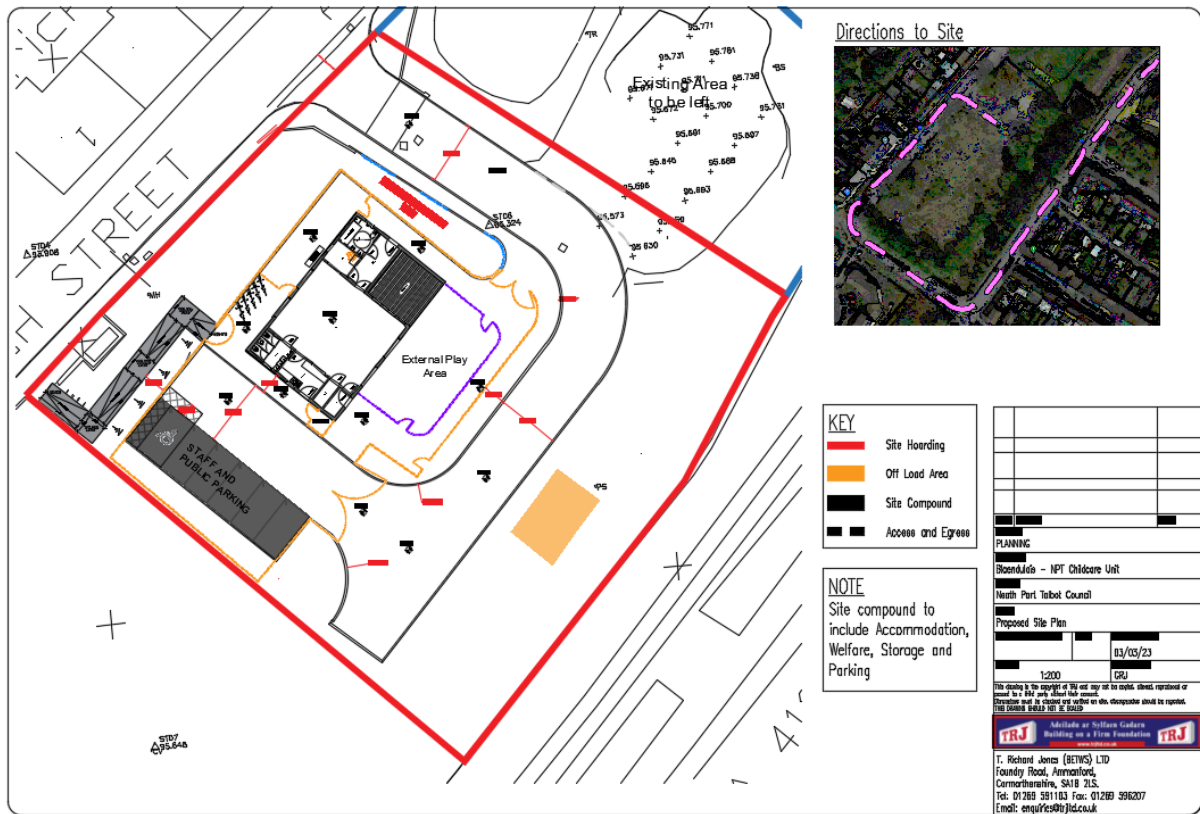
Other visitors will be greeted by the gateman or Site Manager who is able to arrange entry to the site office. Unauthorised visitors will not be permitted access. The site entrance will be monitored at all times to manage deliveries during the course of our work, and will also be the only point of access for personnel onto our construction site.

5.4 Off-Site Activities & Traffic Management

The Principal Contractor will ensure that all delivery vehicles are kept off the B4286 highway. This will reduce disturbance to the general public and local road networks and ensure that there is no on-street loading or unloading.

Construction traffic will be routed using High Street (as shown below). It is considered that the impact associated with a temporary increase in construction traffic from the construction project can be mitigated by means of vehicles arriving and departing at staggered intervals during the day in order to reduce congestion and delays on the local road network (avoiding peak times). These

conditions can be firmed up later after consultation with the relevant parties and will form part of the subcontractor agreements.



5.5 Contractor Car Parking Proposals

It is proposed that initially, the designated storage areas will be used for the parking of vehicles on site. However, the intention is to create the internal road at the earliest opportunity within the construction site and once this has been formed, this will then be used for parking (as shown on Site Logistics Plan).

6.1 Environmental Impacts

Potential Impacts during the construction works.

A review has been undertaken of the potential sources of adverse impacts associated with the construction stages. The results of this are presented below.

Issue Potential Impacts

- **Dust/air quality:** Wind blowing dust from ground surfaces, stockpiles, vehicles, work faces and cutting and grinding materials. Exhaust emissions from lorries and plant delivering and removing materials including dust and particulates.
- **Ecology:** Disturbance to nesting birds, bats etc. Water/ mud run-off into drains/river.
- **Energy usage:** Indirect impacts associated with energy consumption such as CO2 emissions, depletion of natural resources, air pollution etc (material selection and embodied energy issues are covered during the sustainable design section).

- Fuel & construction materials storage: Accidental spills, discharges to drains/ storm-water systems, river and contamination to ground (refer to contaminated ground comments below).
- Hazardous materials & contaminated land: Exposure of the workforce to hazardous materials and contaminated land, mobilisation of any source contaminants and creation of a pathway from source to groundwater receptor.
- Noise: Increased road noise levels from vehicles. Increased noise levels from the plant during the refurbishment and construction work on-site.
- Site & Surroundings pedestrian access: Restrictions on pedestrian access to the surrounding pavement.
- Traffic: Traffic congestion caused by site traffic. Increased vehicle movements mainly consisting of construction vehicles. Disruption from abnormal or hazardous loads, exhaust emissions.
- Waste: Waste generation and its disposal.
- Road cleanliness: Mud on highway creating slippery/hazardous driving conditions. Contamination of storm sewers.
- Water and water usage: Increased sediment loadings to the storm-water system. Potentially contaminated storm-water run-off. Natural resources depletion.
- Vibration: Increased vibration levels from vehicles. Increased vibration levels from the plant during the demolition and construction stages.

Appendix 1 - Environmental Checklist (EMS06-EC)

Site:			
Inspected By:		Date:	
Item	Acceptable		
	Yes ✓	No ✗	N/A ✓
Dust and Air Quality	If N/A ✓ box go to next section		
Are dust/air quality conditions adequate at site?			
Noise & Vibration	If N/A ✓ box go to next section		
Are noise/vibration levels within acceptable limits?			
Waste Storage	If N/A ✓ box go to next section		
Waste storage identified?			
Proper disposal containers present?			
Containers labelled to identify contents?			
Material properly segregated?			
>10 m from natural areas / watercourses and >2 m away from buildings?			
Good housekeeping observed on site (no litter)?			
Waste removed daily from work zone storage areas?			
Hazardous Waste	If N/A ✓ box go to next section		
Hazardous waste present?			
>10 m from natural areas / watercourses and >2 m away from buildings?			
Stored on level ground?			
Containers labelled (type, waste class, accumulation date, date full)?			
Secondary containment provided and adequate?			
Protected from vehicular impact?			
Segregated based on compatibility?			
Signage is present to identify potential hazards in area?			
Drums stored no more than 2 high?			
Access between rows of stored material?			
Segregated waste based on compatibility?			
Flammables stored in designated areas?			
Public access restricted?			
Protected from weather / outdoor elements?			
Containers in good repair?			

If No, what corrective action is being implemented to achieve compliance? (please write below)

Item	Acceptable		
	Yes ✓	No ✗	N/A ✓
Hazardous Materials If N/A ✓ box go to next section			
1. Hazardous materials identified?			
2. Stored in approved containers?			
3. Material Safety Data Sheets (MSDS) available and current (< 3 years)?			
4. Proper labelling of containers (CLP) labels present?			
5. Bulk materials stored in tanks?			
6. Flammable (CLP) labels present)?			
7. Flammables in designated areas?			
8. Materials protected from tampering / vehicular impact?			
9. Compressed gas cylinders upright / secured?			
10. Containers in good repair?			
11. Protected from weather / outdoor elements?			
12. Stored in centralized storage area?			
13. >10 m from natural areas / watercourses and >2 m away from buildings?			
14. Stored on level ground?			
15. Secondary containment provided and adequate?			
16. Signage is present to identify potential hazards?			
17. Drums stored no more than 2 high?			
18. Access between rows of stored material?			
19. Protected from vehicular impact?			
20. Public access restricted?			
General Waste/Hazardous Waste Materials If N/A ✓ box go to next section			
1. Surfaces clean of stains / spills?			
2. Spill kit readily available?			
3. Spill kit adequately stocked based on type of material spills?			
4. Fire extinguisher readily available?			
5. Fire extinguisher inspections current?			
Fuelling If N/A ✓ box go to next section			
1. Fuelling observed?			
2. Fuelling rules adhered to?			
3. Secondary containment provided and adequate?			
4. Supervised while fuelling?			
5. Surfaces clean of stains / spills?			
6. 10m away from natural areas / watercourses and >2 m away from buildings?			

7. Spill kit readily available?			
8. Spill kit adequately stocked based on type of material spills?			
9. Fire extinguisher readily available?			
10. Fire extinguisher inspections current?			
If No, what corrective action is being implemented to achieve compliance? (please write below)			

Item	Acceptable		
	Yes ✓	No ✗	N/A ✓
Erosion and Sediment Control	If N/A ✓ box go to next section		
1. Catch basins protected?			
2. Other measures present or required?			
3. Erosion prevention measures in place?			
4. Erosion prevention measures in good repair?			
5. Sediment fence in good condition and free of sediment?			
6. Hydroseeding effective?			
7. Water diverted from work area?			
8. Water diverted to drainage swales?			
9. Water free of sediment?			
10. Ditch spoils cast >2m from ditch?			
11. Ditch spoils contoured/stabilized?			
12. Bank or slope clear of sloughing?			
13. Culverts free and flowing?			
Contaminated Site	If N/A ✓ box go to next section		
1. Is this a known contaminated site or has contamination been identified?			
2. Exclusion Zone established?			
3. Photos ionization detector (PID) calibrated daily?			
4. Groundwater sampled before dewatering?			
5. Contaminated groundwater disposed appropriately?			
6. Contaminated soil disposed appropriately?			
7. Air monitoring performed during excavation?			
8. Qualified persons performing work as it relates to contaminated materials?			
9. Contaminated soil stockpiled?			
10. Proper containment pad built to prevent contaminated runoff?			
Excess Soil	If N/A ✓ box go to next section		
1. Excess soil being managed on site?			
2. Materials segregated?			
3. Non-contaminated materials reused?			
4. Excess material final destination identified?			
5. Silt fence present/in good repair?			
6. 10m away from natural areas / watercourses and >2 m away from buildings?			
7. Stockpile in good condition with no signs of erosion issues?			

Pumping/Dewatering					If N/A ✓ box go to next section			
1. Pumping or dewatering occurring?								
2. Permit to work required?								
3. Sediment control in good condition and free of sediment?								
4. Pumps adequate?								
5. Fish screens used and appropriate?								
6. Pumping activity: (please indicate)				Steady	Intermittent	As Needed		
7. Water volumes being tracked?								
8. All dewatering is going through a water treatment unit?								
9. Diesel pumps have secondary containment?								
10. Water free from: (please indicate)				Sheen	Turbidity	Foam		
If No, what corrective action is being implemented to achieve compliance? (please write below)								
Item							Acceptable	
							Yes ✓	No ✗
Pumping/Dewatering					If N/A ✓ box go to next section			
11. Pumping or dewatering occurring?								
12. Permit to work required?								
13. Sediment control in good condition and free of sediment?								
14. Pumps adequate?								
15. Fish screens used and appropriate?								
16. Pumping activity: (please indicate)				Steady	Intermittent	As Needed		
17. Water volumes being tracked?								
18. All dewatering is going through a water treatment unit?								
19. Diesel pumps have secondary containment?								
20. Water free from: (please indicate)				Sheen	Turbidity	Foam		
Concrete Washout Areas					If N/A ✓ box go to next section			
1. Concrete washout present or required?								
2. Adequate distance (>10 m) from Natural area / watercourse?								
3. No evidence of discharge to ground?								
4. Waste concrete/washwater disposed of in dedicated/approved concrete sump or removed off Site?								
5. Sump liners in good condition?								
Natural Area Protection					If N/A ✓ box go to next section			
1. Natural area present?								
Aquatics					If N/A ✓ box go to next section			
1. In water work occurring?								
2. Natural Resources Wales (NRW)/Environment Agency (EA) notified?								
3. Fish Removal required?								
4. Fish Collection Permit obtained?								
5. In-water work restricted to period b/w July and February?								
6. In-water work executed as per Permit?								
7. Water free from: (please indicate)				Sheen	Turbidity	Foam		
Wildlife					If N/A ✓ box go to next section			
1. Construction activities restricted to daytime?								
2. Activities performed outside of breeding period (February - August)?								
3. If no, bird nesting nest surveys conducted from (February - August)?								
4. Wildlife identified? (please describe activity and potential hazard below)								
5. Species at Risk Identified?								

6. Ecologist / biologist notified?			
7. Silt fencing present at frog breeding ponds?			
8. Protection of wetland / upland vegetation at frog breeding ponds?			
Heritage	If N/A ✓ box go to next section		
1. Heritage landscape identified? (Please describe below)			
2. Heritage resource identified? (Please describe below)			
Archaeology	If N/A ✓ box go to next section		
1. Archaeological material encountered?			
2. Human remains encountered?			
<i>If No, what corrective action is being implemented to achieve compliance? (please write below)</i>			

Appendix 2 – Spill Procedure

Environmental Incident Response Procedure for Construction Sites

Spillage or discharge of a potential pollutant, such as oil, silt, cement or water used to extinguish a fire.

Can it, using on site equipment, be prevented from entering a drain or watercourse or, if airborne, from leaving the site or premises?

Yes = Minor Incident

No= Major Incident

Minor Incident

PREVENT without putting yourself at risk any further spillage or discharge

ELIMINATE any source of ignition

CONTAIN spillage or discharge and prevent it from entering a drain or watercourse

CHECK spillage or discharge has not reached any nearby pond, river, stream etc.

NOTIFY the Site Manager immediately, giving the following information:

- ✓ Location of incident;
- ✓ Cause;
- ✓ Extent of pollution;
- ✓ Substance involved and quantity.

The Site Manager will then notify the company Health and Safety officer and the Director responsible for Environmental compliance.

Major Incident

NOTIFY the Site Manager immediately giving the following information:

- ✓ Location of incident;
- ✓ Cause;
- ✓ Extent of pollution;
- ✓ Substance involved and quantity.

IMPLEMENT

The Site Manager will then implement the emergency response plan (EMS-P04-ER)

In the event of an incident, NRW should be informed e.g. silt entering a watercourse, large chemical spill, hazardous chemical spill. The phone number for NRW is (0300 065 3000) incident hotline.

Appendix 3 – Spill Kit Toolbox Talk

Introduction

The following toolbox talk is meant as a helpful guide in the use of spillage control equipment. The spill products in this kit are designed to be used to contain and absorb spilt liquid. Environment Agency Guidelines and current legislation make it an offence for any polluting matter to enter controlled waters (rivers, streams, lakes etc).

Before attempting to tackle any spillages of dangerous liquids, get help and always wear the appropriate personal protective equipment.

Spillages can be easily tackled by following these simple steps:

Isolation – Contain – Absorption – Clean-up & Disposal – Report and Reorder

Isolation

Wherever possible try to isolate the area of a spillage with a caution tape or suitable warning device to prevent other people becoming part of the incident. Extinguish all cigarettes and naked flames and try to keep upwind of the spillage.

Contain

Spill safety provide you with several means of containing liquids, depending on the type of kit you have purchased you should have one or several of the following items.

Leak block granules are a loose bentonite granule that can be used to contain liquids by damming or by adding water and kneading to form a putty, they can be used to seal or plug holes in tanks or drums. Note: Leak Block Granules need to be sprinkled with water first if being used as a dike on hydrocarbon spillages.

Absorbant socks are filled with absorbent material and can be used to surround a liquid spillage in isolation or in conjunction with the leak block granules.

Absorption

Your kit will contain an appropriate sorbent material in either loose granular form or an appropriate absorbent fabric.

Pads/wipers can be used directly on the spilled liquid to absorb it. White, oil only materials will float on water but will absorb most hydrocarbons. Chemical sorbents (grey or yellow) will absorb water, oil and most chemicals.

Sock/booms, as well as being used to contain liquid spillages, also have absorbent properties.

Clean up & Disposal

If not already supplied with your kit, you will need to provide adequate means of disposal of any saturated absorbent materials. Remember all saturated absorbents take on the properties of the liquid that they have absorbed and may

then be classed as hazardous waste. Contact the appropriate local authority for disposal advice. Never throw hazardous waste onto a general waste skip.

Warning

All components of Spill Kits are safe to handle and do not pose a direct health risk. However, normal precautions should be taken when handling Oxe Oil Emulsifier, Drain Covers and Leak Block Granules as these may cause dermatitis or skin irritations on sensitive individuals. Similar precautions should also be taken when handling even the Melt Blown Absorbent materials, although no adverse effects have been reported with the materials.

When using Spill kits to contain and absorb a spillage, every effort should be taken to avoid contact with the spilt liquid. Where the nature of the hazard is known, reference should be made to the liquid manufacturers or supplier's data sheet and precautions contained therein should be adhered to whilst using the contents of the Spill Kit to absorb and dispose of the relevant material.

In particular, when dealing with Chemical spillage the Spill Kit should only be used where the liquid offers no direct threat to life or health in the handling of the material. Again, reference should be made to the manufacturer's data sheet.

If doubt exists as to the nature of the spilt substance, then reference should be made to Specialist Organisations used to handling such spillage, i.e. Fire Brigade, Chemical Control Experts or the Water Board.

Personal Protective Equipment should be worn whilst dealing with hazardous spill; in all cases a proper risk assessment should be carried out by qualified personnel. The Personal Protective Equipment supplied in the kit offers basic protection. The user should assess the risk to ascertain whether alternative or additional Personal Protective Equipment is required. Please note that respiratory equipment included in kits has a limited shelf life.

Employer details

CITB-ConstructionSkills Levy & Grant Registration Number:	1797999
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Title	Spill Kit
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Date:		Start Time:		End Time:	
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Details of the trainees		Please
-------------------------	--	--------

Candidate Name	Candidate Signature	Please indicate:	
		PAYE	LOSC

[illegible]

Appendix 4 – Emergency Preparedness and Response Procedure

1. PURPOSE

This procedure describes the processes to identify potential emergency situations and potential accidents that can have an impact on the environment, and how T.Richard Jones (Betws) Ltd responds to such events.

This procedure should be read in conjunction with T.Richard Jones (Betws) Ltd Service Provision and Operations procedure (EMS-P06-SP&OP).

2. SCOPE

This procedure contains the following sections:

- Identification of potential emergency situations and accidents.
- Response to emergencies and mitigation of adverse environmental impacts.
- Test and review of emergency preparedness and response procedures.

The procedures for preventing and mitigating the following emergency situations are described:

Offices:

- Fires

Construction Sites:

- Fires, explosions.
- Rainstorms, typhoon or other unexpected weather conditions.
- Major chemical spillage.
- Interference to utility services due to accidents – e.g. accidental damage to power cables, gas supply and water supply pipelines.
- Discovery of site of historical or archaeological heritage, graves, dangerous objects or substances (such as bombs, arsenals, explosives and unknown chemicals); and
- Discovery of rare / protected species.

3. IMPLEMENTATION

The Company Director and Site Manager are responsible for the implementation of this procedure.

The Company Director and Site Manager are responsible for identifying potential emergency situations and potential accidents and determining those potential situations / accidents that may have a significant environmental impact. The Company Director and Site Manager are responsible for the review and periodic testing of elements of the emergency preparedness and response procedures.

The Company Director and Site Manager are responsible for the implementation of corrective and preventative action resulting from an emergency situation / accident.

Identification of Potential Emergency Situations and Accidents

Identification of potential emergency situations and accidents will be carried out through the Risk Assessment process for all new contracts / introduction of new working methods. A Risk Assessment is also documented in the T.Richard Jones (Betws) Ltd Health and Safety management system. Identification of methods, risks, hazards and controls (based on site / job specific risk assessments) may also be documented in new contract proposals as requested by the client. These will include method statement, legislation and PPE required. Proposal documents will also include identification of environmental issues covering potential noise, land, water and air pollution

The purpose of risk assessment is to identify the significant risks in the workplace and then control those risks at an acceptable level and to comply with the Management of Health & Safety at Work Regulations 1999.

All aspects of the work activity are reviewed for Risk Assessment. Where hazardous chemical risks are encountered, C.O.S.H.H. Assessment Procedures are followed and where other risks are to be assessed, the procedures in the T.Richard Jones (Betws) Ltd Health and Safety management system will be implemented. This includes key aspects such as working from height, confined spaces, manual handling, contact with waste, use of equipment and environmental risks.

Where appropriate, detailed method statements are also produced for particular contracts / site operations. These method statements include scope of work, job specific instructions, risk assessment, accident and near miss reporting, toolbox talks, PPE and equipment information and sign-off / acknowledgement sheets.

Emergency Response activities include spillage / contamination control measures. If an emergency situation or accident occurs in relation to the collection, processing and shipment of waste / recycled by T.Richard Jones (Betws) Ltd, emergency response activities will be implemented accordingly.

The identification of potential emergency situations and accidents that could have an adverse environmental impact is supported by the Environmental Aspect and Impact Registration activity which has identified any significant impacts using form EMS01-EAIRF, this includes those that may occur under emergency conditions.

The potential for emergency situations or accidents at nearby facilities must also be assessed and recorded where appropriate.

Response to Emergencies and Mitigation of Adverse Environmental Impacts

The identification of methods, risks, hazards and controls (based on site / job specific risk assessments) in relation to the above are documented in T.Richard Jones (Betws) Ltd Health and Safety management system which will include

method statements, risk assessments, legislation and PPE required. In the unlikely event of an emergency situation arising that has an adverse environmental impact, emergency response actions (as documented in risk assessments and material safety data sheets), will be implemented.

Upon satisfactory completion of the emergency response, appropriate paperwork documentation as required by the local authority / Environmental Agency / NRW is to be raised and submitted. In parallel with this, post-accident evaluation will be carried out and appropriate corrective and preventive action implemented.

Corrective and preventive action must be documented on the Environmental Report form (EMS02-ERF) and should include details of the emergency situation / accident, root cause, environmental impact, corrective and preventive actions, responsibilities and timescales. A review of the effectiveness of action should also be documented

In the event of an emergency situation, the appropriate elements of the T.Richard Jones (Betws) Ltd Health and Safety documentation will be followed, overseen by the appointed Health and Safety representative, Health and Safety office, and Site Manager. This will include:

- Evacuation of building / affected areas.
- Liaison with emergency services.
- Instigation of communication plan.
- Review of environmental implications.
- Implementation of mitigation and response actions.

Post-accident evaluation will also be carried out and appropriate corrective and preventive action documented on the Environmental Report form (EMS02-ERF) as above.

Other elements of control of non-conformity, corrective action and preventive action are included in the Monitoring, Measurement and Improvement procedure (EMS-P02-MMI).

An emergency response plan is contained in **Appendix 3** of this procedure.

Test and Review of Emergency Preparedness and Response Procedures

The test and review of the Emergency Preparedness and Response process is carried out in accordance with T.Richard Jones (Betws) Ltd Emergency Response procedures. This may include the test / review of elements of disaster recovery, training / performance of emergency response personnel, building evacuation, internal and external communication, availability of risk / hazard information and effectiveness of (planned) mitigation and response actions. The majority of these processes are tested and verified each time an emergency situation arises.

In addition to the above, response to simulated emergency situations is also tested through periodic (at least annual) exercises overseen by the Company Director / Site Manager, in accordance with the T.Richard Jones (Betws) Ltd Health and Safety management system procedures (where applicable). Results of these exercises are recorded, and any improvement opportunities identified.

The evacuation of all T.Richard Jones (Betws) Ltd sites is also tested every 6 months. All office computers are appropriately backed-up, refer to Document Control procedure (EMS-P07-DC). A test of the office back-up process is carried out by the Site Manager on a quarterly basis.

Related documents

- Environmental Aspects and Impacts Registration Form (EMS01-EAIRF).
- Environmental Report Form (EMS02-ERF).
- Register of Environmental Legislation and other Requirements (EMS-ELR-R).
- Monitoring, Measurement and Improvement Procedure (EMS-P02-MMI).
- Control of Documents Procedure (EMS-P07-DC).

4. APPENDICES

Appendix A – Environmental Aspects and Impacts Registration Form (EMS01-EAIRF)



EMS01-EAIRF -
Environmental Aspect

Impact / Aspects Reference No	
1. Description of impact:	
Occurring under normal/abnormal/emergency conditions?	
2. Legal or other requirement applicable?	
Applicability / significance of legal and other requirements (add to total score): High – Score 3, Medium – Score 2, Low – Score 1	
3. Operational control procedures (direct and indirect):	
SCORING: HIGH SCORE = HIGH SIGNIFICANCE (Scores Of 11 Or Above)	
Potential Harm (A)	RATING 1-5
Actual Harm (B)	RATING 1-5
Scale of Aspect (C)	RATING 1-5
Frequency of Occurrence (D)	RATING 1-5
TOTAL SCORE	Date:
(inc. Legislation score)	

Appendix B – Environmental Report Form (EMS-02-ERF)EMS-02-ERF -
Environmental Report

Type (please tick relevant box)					
Customer	☐	Complaint	☐	Report No.:	
Supplier	☐	Corrective Action	☐	Raised by (initials):	
Internal	☐	Suggestion/Feedback	☐	Date Raised:	
Details of Issue (include references as appropriate)					
Root Cause / Potential Benefit / Environmental Impact					
Action to be Taken					
Review of Outcome / Action Effectiveness					
Signatures (to be completed upon closure of this report)					
Originator:				Date:	
Management Representative:				Date:	

Appendix C – Emergency Response Plan

FIRE

If you discover a fire, you should immediately report to the emergency site contact (e.g. Site Manager/Supervisor/Appointed fire warden/marshal or local fire services department, etc)

Emergency Telephone Number for Reporting A Fire

Fire Services Department-Emergency Hotline (Tel: 999)

Procedure for Fire Fighting

Only try to extinguish the fire if it is small and the appropriate fire-fighting equipment is available. Turn off the main power supply before trying to put out electric fire. Do not use water.

For Evacuation

- Raise the alarm by either pushing the activation button on mobile fire alarms or pushing the plastic panel on fixed wired installations.
- Keep calm. Turn off all electrical apparatus except lights.
- If possible, close doors around the fire area to stop it from spreading.
- Leave the Building immediately. Follow the evacuation queue.
- If it's dark and smoky, get down on your hands and knees and crawl to the nearest exit. By getting close to the floor, you will be able to avoid the deadly carbon monoxide in the smoke. If possible, hold onto your nose with a wet towel or handkerchief. This helps to filter your breath.
- Be aware of the hot exit door and watch out for the thick smoke in the staircase. If the staircase is free from smoke, walk down (don't run) to the street by following the directional signs and handrails.
- Be alert and concentrate on the said procedure for survival.
- Gather at the designated assembly point.

Responsibilities of Emergency Contact Person During Evacuation

- ✓ Check if the nearest fire exits staircase is safe and direct all personnel to an alternative fire exit if necessary.
- ✓ Organise orderly evacuation and show all personnel the way to the designated assembly point. Make sure all personnel including visitors have been evacuated.
- ✓ Special attention should be given to the disabled.
- ✓ Check attendance at the designated assembly point.
- ✓ Report to the Fireman or Police any missing persons.

Preventative Measures Against Fire

- ✓ Do not overload electric sockets with adapters. Use fused plugs wherever possible.
- ✓ Do not store excessive fire hazardous goods.
- ✓ Do not wedge or keep open fire exit doors.
- ✓ Keep all corridors, stairs and exit routes free from obstacles.
- ✓ Ensure that discarded cigarettes are extinguished before leaving.
- ✓ Get familiarised with the operation of fire-fighting equipment.

- ✓ Be familiar with the fire escape routes.
- ✓ Participate in fire drills. (at least once a year)

Spillage of Hazardous Materials

- ✓ Ensure that any spillage of chemical should apply sand / sawdust to absorb the spilled chemical, in order to control the spilled area. Wear protective clothing and appropriate equipment to handle any chemical spillage situation.
- ✓ After cleaning, any used absorbent (e.g. sand / sawdust) should be treated as chemical waste material.
- ✓ Record the occurrence of chemical spillage in the accident report, in order to discuss the preventive action for future.
- ✓ Arrange at least once a year of chemical spillage drill.

Appendix 5 – Emergency Preparedness Plan Plan Contents

Purpose

To ensure that relevant staff are aware of their responsibilities and the process to be followed in the event of a possible, probable or actual incident involving pollution into the adjacent watercourse.

Scope

From: The planning of what is required and what actions are to be taken, should an incident arise, to reduce the impacts of the incident.

To: How to undertake the required actions during an actual incident.

Incident Management Procedure

Local Incident Control

Local incident control is the structure in which the field-based response to an incident operates (i.e. the Site Management team). It refers to essential activities and how they are organised. Formal incident control is an essential element of managing MINOR and MAJOR incidents on the construction site as set out in the emergency procedure below:

Spillage or discharge of a potential pollutant, such as oil, silt, cement or water used to extinguish a fire.

Can it, using on site equipment, be prevented from entering a drain or watercourse or, if airborne, from leaving the site or premises?

Yes = Minor Incident

No = Major Incident

Minor Incident

PREVENT without putting yourself at risk any further spillage or discharge

ELIMINATE any source of ignition

CONTAIN spillage or discharge and prevent it from entering a drain or watercourse

CHECK spillage or discharge has not reached any nearby pond, river, stream etc.

NOTIFY the Site Manager immediately, giving the following information:

- ✓ Location of incident.
- ✓ Cause.
- ✓ Extent of pollution.
- ✓ Substance involved and quantity.

The Site Manager will then notify the company Health and Safety officer and the Director responsible for Environmental compliance.

Major Incident

NOTIFY the Site Manager immediately giving the following information:

- ✓ Location of incident.
- ✓ Cause.
- ✓ Extent of pollution.
- ✓ Substance involved and quantity.

IMPLEMENT

The Site Manager will then implement the emergency response plan (EMS-P04-ER).

In the event of an incident, NRW should be informed e.g. silt entering a watercourse, large chemical spill, hazardous chemical spill. The phone number for NRW is (0300 065 3000) incident hotline.

The Site Manager is the leader of all staff in the field. To ensure properly coordinated response, all other personnel must ensure that the Site Manager is aware of and approves of their activities.

The Site Manager will designate the location of where the incident control is to be established. This could be one of the following:

- ☐ at the site welfare facility; or
- ☐ a fixed safe marshalling point at the site of the incident; or
- ☐ a third-party office.

All staff must be aware that if they arrive on site and commence activities, they are responsible for ensuring the handover/ continuity of those activities when they leave site.

The Site Manager will appoint personnel to cover particular site roles. Individuals may be asked to cover more than one role. Additional persons may be needed to be drafted into the area to undertake roles. If a role cannot be filled locally the Site Manager will resource, it from a third party.

Evacuation Routes & Emergency Contact Numbers

Evacuation Routes

Evacuation route maps are posted in the welfare facility. The following information is marked on evacuation maps:

1. Emergency exits / primary and secondary evacuation routes
2. Locations of fire extinguishers
3. Fire alarm location
4. Assembly points

Evacuation Contact Numbers

Site Address	CHILDCARE UNIT BLAENDULAIS, NEATH PORT TALBOT SA10 9DL
Environmental Director	Mr. Dafydd Jones – Tel: 01269 591103
Health and Safety Director	Mr. John Jones – Tel: 01269 591103
H.S.E. Address	Government Buildings, Ty Glas, Llanishen, Cardiff, CF14 5SH Tel: 02920 263000
Natural Resources Wales	21 Glyn Neath Road, Resolven, Neath Port Talbot Tel: 0800 80 70 60
Police Station	Tel: Non-Emergency number 101 Tel: Emergency number 999
Fire Station	Tel: Non-Emergency number 0370 6060699

	Tel: Emergency number 999
Hospital	Morrison hospital, Heol Maes Eglwys, Cwmrhydyceirw, Morrison SA6 6NL Hospital Switchboard: 01792 702222
Statutory Providers	Western Power – Tel: 01792 784324 Wales and West Utilities – Tel: 0870 1650597 Welsh Water – Tel: 01792 841012 BT – Tel: 01792 638504

Medical & Fire Emergency

Medical Emergency

Call medical emergency phone number (check applicable):

- ☐ Paramedics.
- ☐ Ambulance.
- ☐ Fire Department.
- ☐ Other.

Provide the following information:

- a) Nature of medical emergency.
- b) Location of the emergency (address, building, room number).
- c) Your name and phone number from which you are calling.

- ✓ Do not move victim unless absolutely necessary.
- ✓ Call the following personnel trained in First Aid to provide the required assistance prior to the arrival of the professional medical help.

If personnel trained in First Aid are not available, as a minimum, attempt to provide the following assistance:

- ✓ Stop the bleeding with firm pressure on the wounds (note: avoid contact with blood or other bodily fluids).
- ✓ Clear the air passages using the Heimlich Maneuver in case of choking.
- ✓ In case of rendering assistance to personnel exposed to hazardous materials, consult the Material Safety Data Sheet (MSDS) and wear the appropriate personal protective equipment. Attempt first aid ONLY if trained and qualified.

Fire Emergency

When a fire is discovered:

- Activate the nearest fire alarm (if installed).
- Notify the local Fire Department by calling 0370 6060699 or 999.
- If the fire alarm is not available, notify the site personnel about the fire emergency by the following means:
 - ✓ Voice communication.
 - ✓ Phone.
 - ✓ Radio.

Fight the fire only if:

- The Fire Department has been notified.
- The fire is small and is not spreading to other areas.
- Escaping the area is possible by backing up to the nearest exit.
- The fire extinguisher is in working condition and personnel are trained to use it.

Upon being notified about the fire emergency, all personnel must:

- Leave the work area using the designated escape routes.
- Assemble in the designated area.
- Remain outside until the site Manager announces that it is safe to re-enter.

Site Manager must:

- Disconnect utilities and equipment unless doing so jeopardizes his/her safety.
- Coordinate an orderly evacuation of personnel.
- Perform an accurate head count of personnel reported to the designated area.
- Determine a rescue method to locate missing personnel.
- Provide the Fire Department personnel with the necessary information about the facility.

Site Manager must:

- Ensure that all employees have evacuated the area.
- Report any problems to the Company Health and Safety officer and any enforcing authority.
- Assistants to Physically Challenged should:
- Assist all physically challenged employees in emergency evacuation.

Extended Power Loss

In the event of extended power loss to the work area or welfare facilities, certain precautionary measures should be taken depending on the geographical location and environment of the facility:

- Unnecessary electrical equipment and appliances should be turned off in the event that power restoration would surge causing damage to electronics and effecting sensitive equipment.
- Facilities with freezing temperatures should turn off and drain the following lines in the event of a long-term power loss.
 1. Standpipes.
 2. Potable water lines.
 3. Toilets.
- Equipment that contains fluids that may freeze due to long term exposure to freezing temperatures should be moved to heated areas, drained of liquids, or provided with auxiliary heat sources.

Upon Restoration of heat and power:

- Electronic equipment should be brought up to ambient temperatures

- before energizing to prevent condensate from forming on circuitry.
- Fire and potable water piping should be checked for leaks from freeze damage after the heat has been restored to the work area and the welfare facilities.

Hazardous Substance Spill

The following are the locations of:

- ✓ Spill Containment kit is located in the site store
- ✓ Personal Protective Equipment (PPE) in the site welfare facilities and store:

Refer to COSHH assessment and Material Safety Data Sheet contained in the site file for the specific controls on dealing with spills.

When a Large Chemical Spill has occurred:

- Immediately notify the Site Manager and Company Health and Safety officer.
- Contain the spill with available equipment (e.g., pads, booms, absorbent powder, soil, sand etc.).
- Secure the area and alert other site personnel.
- Do not attempt to clean the spill unless trained to do so.
- Attend to injured personnel and call the medical emergency number, if required.
- Call a local spill clean-up company or the Fire Department (if arrangement has been made) to perform a large chemical spill clean-up.
- Evacuate the work area as necessary.

Name of Spill Cleanup Company:	Phone Number:
Cel-Vac Limited	Tel: +44 (0)1834 845511
The Salterns, Marsh Road	Fax: +44 (0)1834 845522
Tenby, SA70 8EP	Website: http://www.celvac.co.uk/
	http://www.ukspill.org/members-list.php

When a Small Chemical Spill has occurred:

- Immediately notify the Site Manager and Company Health and Safety officer.
- If toxic fumes are present, secure the area (with caution tapes or cones) to prevent other personnel from entering.
- Deal with the spill in accordance with the instructions described in the COSHH assessment and Material Safety Data Sheet.
- Small spills must be handled in a safe manner, while wearing the appropriate PPE.
- Review the general spill clean-up procedures.

Severe Weather

Flood:

If indoors:

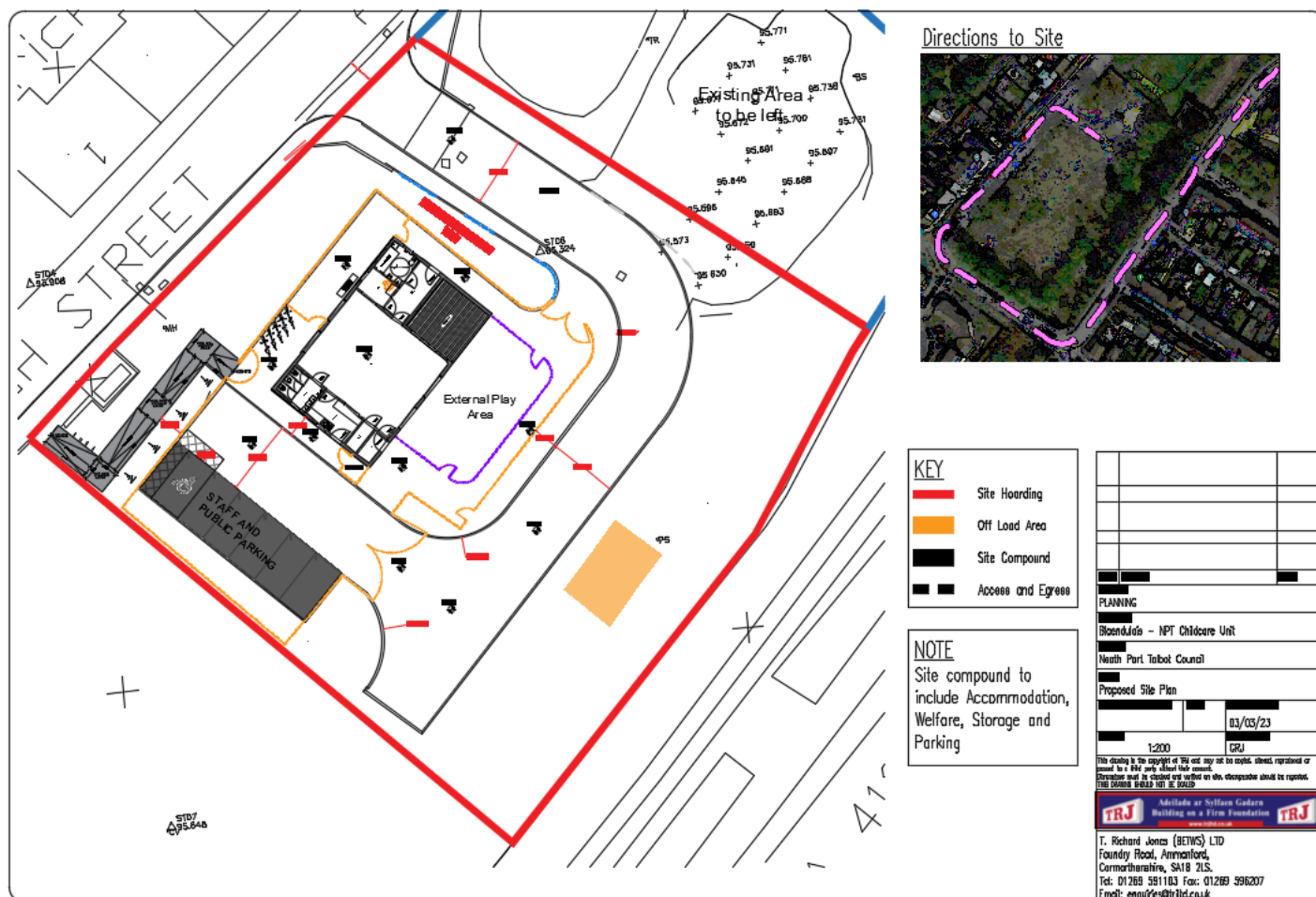
- Be ready to evacuate as directed by the Site Manager.

- Follow the recommended primary or secondary evacuation routes.

If outdoors:

- Climb to high ground and stay there.
- Avoid walking or driving through flood water.
- If the vehicle stalls, abandon it immediately and climb to a higher ground.

Appendix 6 – Map



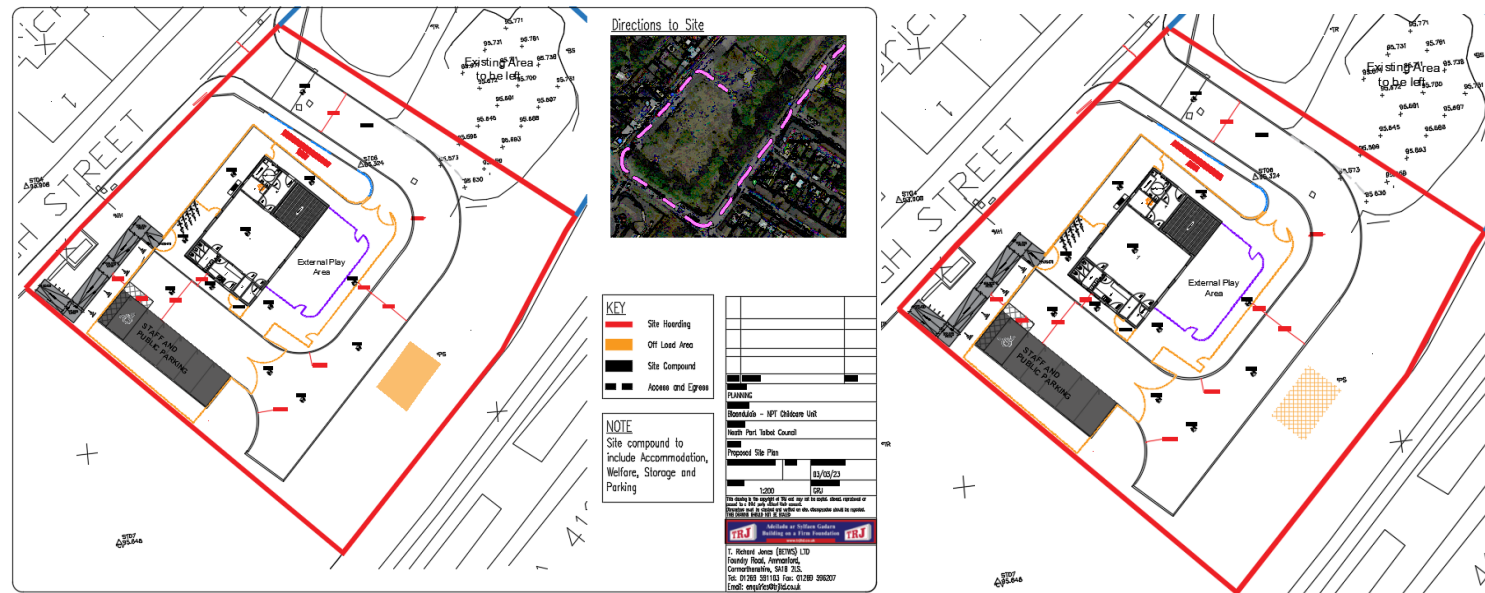
Appendix 7 – Construction Haul Route and Map

The approved route to enter the site is using High Street. All subcontractors and suppliers involved in the project will be briefed on this designated route in advance (orders) and this will also be reiterated via the site induction. Arrangements may be necessary for delivery vehicles to park up temporarily in approved areas in order to make telephone contact with the Site Manager to ensure the site can accept the delivery without causing traffic congestion.

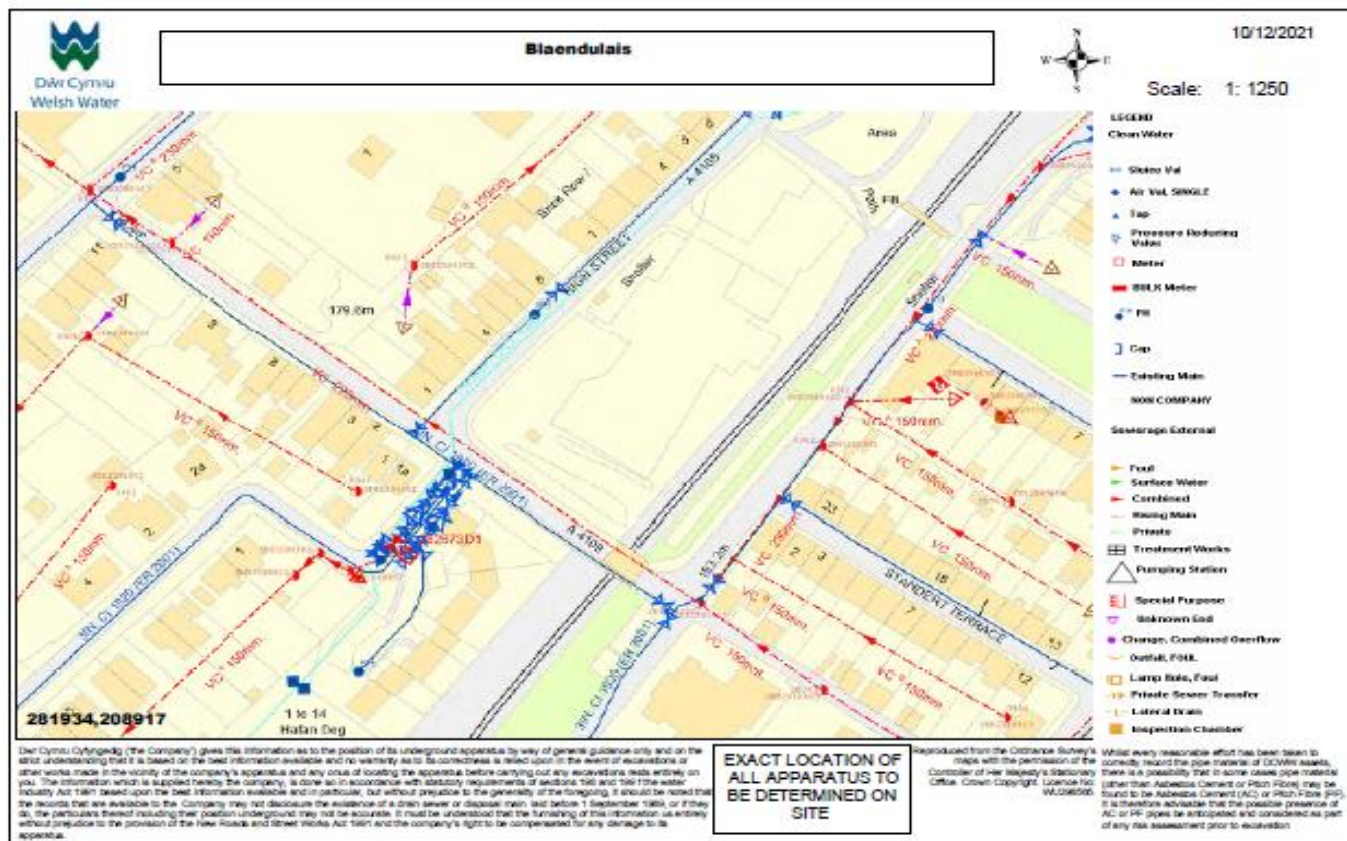
To prevent the spread of contamination (construction waste) from the construction site onto the surrounding roads, the Principal Contractor will construct a hard standing area within the construction site for all vehicles to use. The hard standing area will consist of a tarmac base course with a further subbase surface beyond. By creating a permanent hard standing for the majority of the construction works, the risk of contamination to areas beyond the construction site will be minimal.

The above-mentioned control measures will minimise the likelihood of any contamination to the surrounding roads and pavements etc. In addition, the Principal Contractor will also have a vehicle marshall available to safely escort reversing vehicles from the highway into the construction site. The vehicle marshall will also be responsible for escorting vehicles safely onto the A487 and undertaking any local housekeeping works.

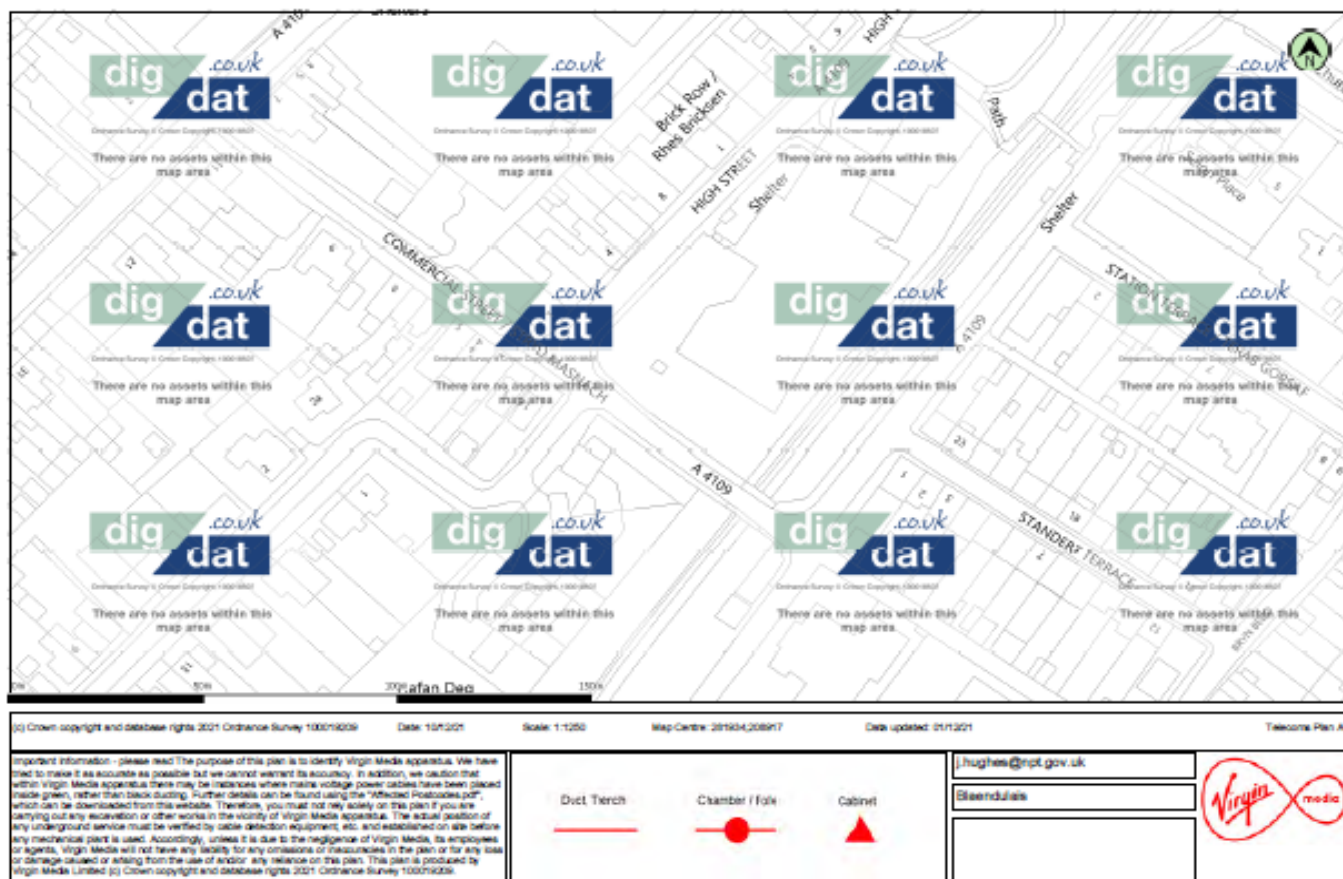
We will ensure that all delivery vehicles are kept off the B4286 highways adjacent to the residential housing. This will reduce disturbance to the general public and local road networks and ensure that there is no on-street loading or unloading.

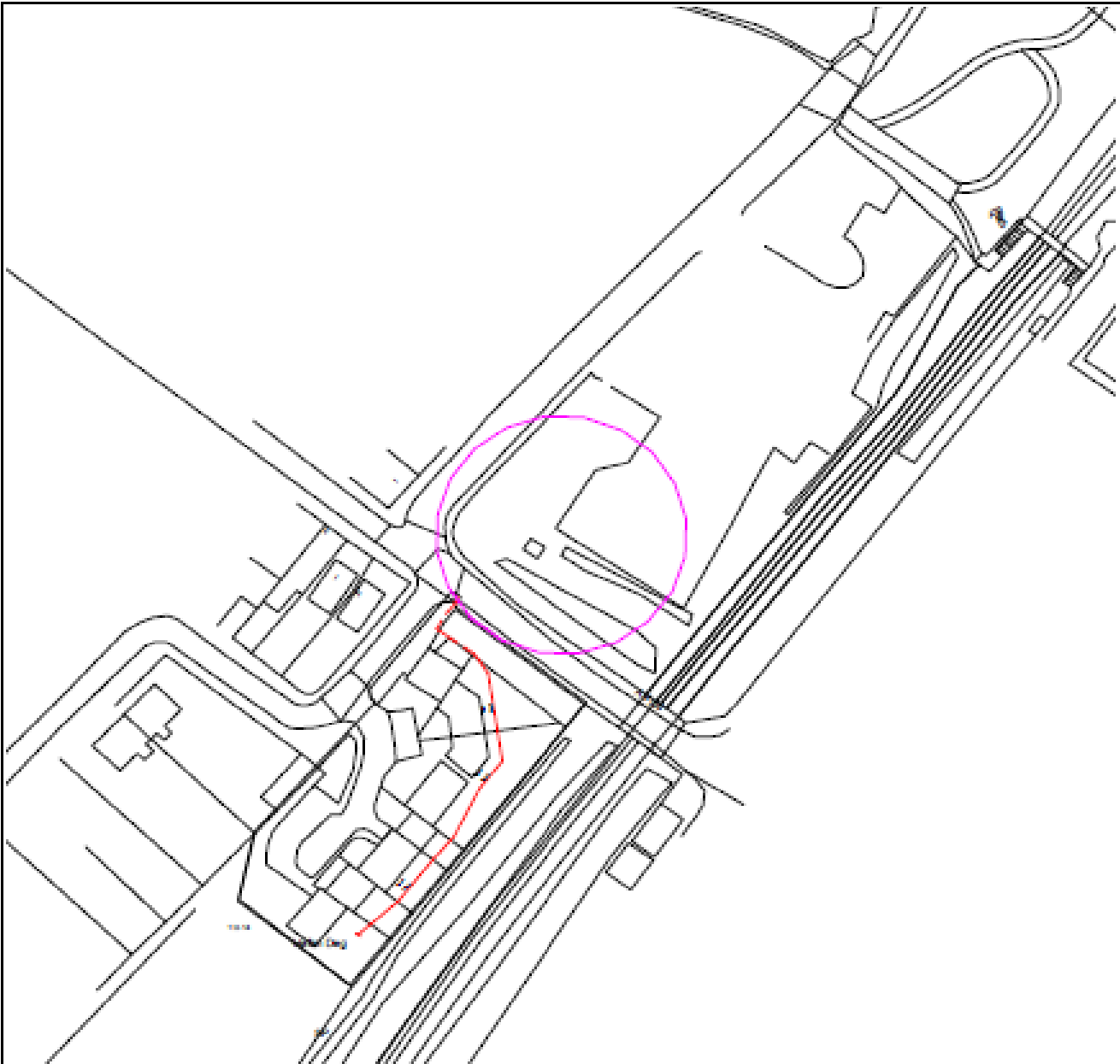


Appendix 8 – Statutory Service Providers Plans Welsh Water



Virgin Media





Date Requested: 10/12/2021
Requested by: Justin Hughes
Job Reference: 24138085

Company: Neath Port Talbot C.B.C.
Your Scheme/Reference: Blaendulais

Key for Mains & Service Pipework

	Existing LP mains or services operating up to 75 millibar gauge
	Existing MP mains or services operating between 75 millibar and 2 bar gauge
	Existing IP mains or services operating between 2 bar and 7 bar gauge

Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.

REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE © CROWN COPYRIGHT RESERVED.

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ESP
UTILITIES GROUP

ESP Utilities Group Ltd
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA
Phone: 01372 587500
Email: PlantResponses@espug.com

Dig Sites:
Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)

Date Requested: 10/12/2021
Job Reference: 24138065
Site Location: 281934 208917
Requested by: Mr Justin Hughes
Your Scheme/Reference: Blaendula
Exact Scales:
1:1250 Area or Circle dig site
1:500 Line dig site

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HS6747.
- When working within 10m of any overhead electric line you should follow the requirements of HSE guidance note GS6.
- For further advice on working near our electricity cables or lines, call our Contact Centre on 0800 096 3080.
- Advice should be sought from the Western Power Distribution Contact Centre for any work that is to take place in proximity to 66kV or 132kV underground cables and 66kV 132kV overhead lines – 0800 096 3080.

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