

Construction Environmental Management Plan

Heol Crwys, Cwmafan

April, 2023



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1.0 INTRODUCTION

This Construction Environmental Management Plan (CEMP) has been prepared on behalf of Tai Tarian Ltd and provides details on the requirements for the management of construction of the project.

The details so approved and any subsequent amendments as shall be agreed in writing by the Local Authority shall be complied with in full throughout the construction period.

Tai Tarian Ltd, as the main Contractor for the works will ensure that the actions contained in this CEMP are complied with.

Tai Tarian Ltd will also place a requirement on any Contractors working at the site to comply with the actions set out in the CEMP.

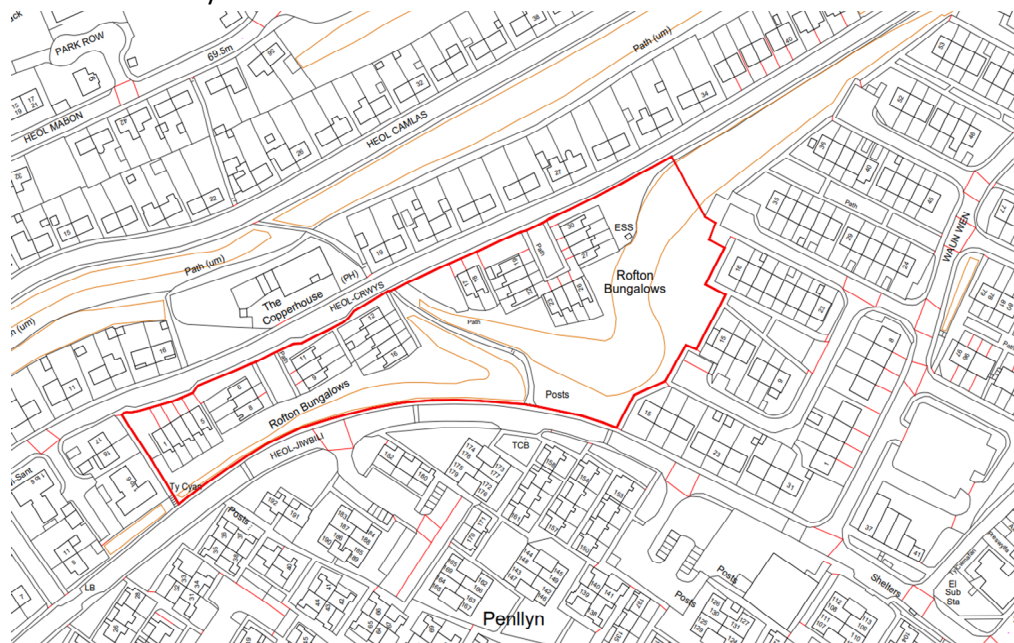
2.0 SITE LOCATION & PLAN

The site is located off Heol Crwys, Cwmafan. It centres on the following grid reference of **E: 278259, N: 192536**.

The site occupies an area of land approximately 1.6 hectare in size. The boundaries are of an irregular shape is adjoined by residential properties to all directions. The site fronts onto Heol Crwys to the north and Heol Jiwbili to the south.

The northern section of the site is generally flat, however the undeveloped southern section drops significantly in level and is considered undevelopable land.

2.1 Site boundary



3.0 SITE SET UP & LOCATION

3.1 Entrance Point

The site can be accessed from the east (via Waun Wen) and the west (via Dan-Y-Coed). Both roads lead onto Heol Crwys. Materials are to be delivered into the site via either access point. All construction traffic is to use the same road networks to access the site.

3.2 Permanent and temporary Construction Access

The construction access will utilise the existing road network (Heol Crwys).

3.3 Compound location, layout and height of temporary structures

The compound will be subject to the appointed contractor's confirmation.

3.4 Temporary Boundary Treatments / Means of enclosure

Where required open boundaries will be secured using 1.8m Heras fencing in order to secure the site, protect the trees and undergrowth and help control movements to and from the construction site.

3.5 Site Parking

All parking is within the curtilage of the site.

Temporary traffic management will take place to ensure that no construction, contractors or visiting vehicles will park outside of the site and impact upon the existing properties.

Signs will be erected stating that any parking associated with the construction site is prohibited outside of the site curtilage.

3.6 Construction vehicular movements

Site construction vehicles will only be operated by those people who have received the relevant training, have produced a copy of their certificates of competency and are authorised to use the vehicle/plant by their employer.

All vehicles on site will be inspected, tested and serviced at the appropriate intervals laid down by legislation and the manufacturer's instructions. All defects must be reported as soon as possible and, where necessary, the vehicle taken out of use. Records of maintenance inspection and tests must be produced to the site manager and visiting safety advisor.

Where construction vehicles are operating or being used on infrastructure roads or other areas where the public have access roof beacons and headlights must be used.

A tele handler may be used to transport superstructure materials around the site and a speed limit of 5mph will be strictly enforced.

Where specific hazards may produce additional risks to traffic movement on site they must be protected by a physical barrier, and high visibility plastic fencing, metal

pedestrian barriers, or heras fencing. This will include scaffolding near a roadway, and excavations. Excavations close to vehicle and pedestrian routes must be back filled as soon as practicable.

All movements to and from the public highway will be monitored by a suitably trained banksman.

All loading and unloading of plant and materials will take place within the confines of the development.

Consideration will be given to the proximity of any schools. All deliveries will be restricted accordingly.

3.7 Material and delivery storage

Storage of plant and materials will occur throughout the development site subject to the type of operation being undertaken at any specific time.

3.8 Terrain, location and height of proposed spoil heaps

The terrain of this site presents a risk of vehicle overturning. All dumpers will be fitted with rollover protection and seat belts which must always be worn.

3.9 High Visibility Clothing

All personnel and visitors will always wear visibility vests/jackets.

3.10 Monitoring and Control

This will be the responsibility of the site and visiting managers.

Supervisors appointed by sub-contractors will also ensure that persons working under their control comply with the requirements.

All personnel will be acquainted with the site traffic management requirements during their induction training. Personnel failing to comply with the requirements of this traffic plan, thus placing themselves or others at increased risk of injury, will be dealt with in accordance with normal disciplinary procedures which may result in them being removed from site.

The development will be secured by means of Heras fencing in order to maintain the security of areas under construction.

3.11 Site Operation Hours

All works will be carried out in strict accordance with agreed working hours. These will be 08:00 to 18:00 Monday to Friday and 09:00 to 13:00 on Saturdays. All plant and equipment will be 'silenced' in accordance with the manufacturer's designs and will be regularly serviced / inspected to ensure ongoing compliance. Works will be carried out by trained and competent operatives using best practice techniques. No machine will be allowed to 'idle' when works are not in progress. The site will be securely locked outside of these hours.

3.12 Construction Lighting and Hours of Use

Temporary lighting may be required during winter months if light and visibility is poor inside the plots. Lights will only be used during planned working hours.

4.0 PROCEDURES TO MANAGE AND MINIMISE DUST AND VIBRATION POLLUTION.

The local authority has the power under the Clean Air Act 1993, to limit the dust, emissions and odours generated by a site. Failure to comply with these limits can result in abatement notices being served if complaints are made.

Complaints can be avoided by adopting good working practices:

- Identify sensitive receptors and inform the authorities of any likely nuisance that may occur
- Instigate control measures to mitigate any negative impacts
- Develop a daily monitoring regime to record dust conditions while noting weather conditions, construction activities, their location and duration on site.

4.1 Dust Suppression

Dust levels will be kept to a minimum by utilising high pressure hoses to deliver fine mist water sprays onto the working area as necessary. A constant water supply will also be provided to any crushing plant required during the operation. The movement of any crushed material will be kept to a minimum with stockpiles located away from site boundaries and maintained at heights less susceptible to the effects of wind.

With regard to earthworks, during periods of dry weather, when dust is likely to cause a nuisance, specific work areas will be 'damped down'. In relation to dust generated by plant movements this operation will normally be carried out by a suitably specified road brush. At times when the works do not require the full-time attendance of a road brush, water will be introduced to the work area via other means i.e. hose pipe, water bowser, sprinkler etc. In addition, prior to disturbing any stockpile of soil or crushed material, consideration will be given to the introduction of water.

Limiting the speed limit to 5mph will generate less dust.

4.2 Water Damping

As aforementioned, the fine spraying of water is the most effective way of suppressing dust. This will be carried out with a water bowser and hose. Spraying will be repeated regularly during warm and sunny conditions. However, spraying will not be allowed to create excessive mud, which could cause run-off into drainage systems or water courses.

We will consider spraying:

- areas of unpaved work subject to traffic or wind
- sand, spoil and aggregate stockpiles
- during the loading and unloading of dust generating materials

4.3 Avoiding Dust Generation including crushing and screening operations. The following measures will be employed to avoid dust generation:

Roads

- Construct and tarmac the site roads as soon as practicable after site commencement.
- Minimise the length and width of haul roads to reduce the surface area
- Pave heavily used areas and sweep regularly
- Sweep public roads regularly with a vacuum sweeper
- Limit vehicle speeds – slower speeds generate less dust
- Minimise vehicle movements
- Damp down.

Plant and Vehicles

- Ensure vehicle wheels are cleaned before leaving site.
- Exhaust fumes should be directed upwards
- All lorries leaving the site will be fitted with sheet covers to contain dust
- Plant and vehicles should be maintained in good working order
- Drivers must observe site speed limits to minimise dust generation

Material Handling and Storage including crushing and screening materials

- Locate stockpiles out of the wind (or provide wind breaks) to minimise dust generation open storage
- We will keep stockpiles to a minimum height and use gentle slopes – (confirm location of proposed stockpiles here)
- Compact and bind stockpile surfaces if necessary
- Minimise the storage time for materials on site
- Store dusty materials away from site boundaries, main site access roads and downwind of sensitive receptors
- Ensure waste skips are enclosed or covered
- Damp down earthworks during dry weather

Cutting/Grinding/Grouting/Packing

- Minimise cutting and grinding on site where possible
- Use equipment with dust extraction and wet cut where possible
- Spray water during cutting of paving slabs
- Use block splitters

4.4 Site Waste Control & Material Recycling Refuse & all other waste materials

Waste Management Policy that involves the onsite segregation of waste to lessen the impact on landfill. Inert waste, timber waste and general waste will all be segregated.

4.5 Wheel Washing Facilities

A designated operative is to carry out the wheel washing of construction vehicles leaving the site (via a hand held jet wash) to ensure that no mud is to be carried onto the public highway. The effectiveness of the wheel wash facilities will be monitored throughout the construction of the development. The first operation will be to install the access road to tarmac Binder level to reduce dust and mud.

This operation will be carried out within the development boundary, so that resulting water run-off is suitably controlled.

The wheel wash facilities will be repositioned accordingly as the construction of development progresses.

In addition to this a road brush will be in attendance when any 'cart away' of arising relation to earth works takes place.

5.0 MANAGING NUISANCE NOISE

The Contractor and their sub-contractors should at all times apply the principle of Best Practicable Means as defined in Section 72 of the Control of Pollution Act 1974 and carry out all work in such a manner as to reduce any disturbance from noise and vibration to a minimum.

All plant brought on to site should comply with the relevant EC/UK noise limits applicable to that equipment or should be no noisier than would be expected based on the noise levels quoted in BS 5228-1:2009. Plant should be properly maintained and operated in accordance with manufacturers' recommendations.

Electrically powered plant should be preferred, where practicable, to mechanically powered alternatives. All mechanically powered plant should also be fitted with suitable silencers, as appropriate.

Items of plant on-site operating intermittently should be shut down in the intervening periods between use.

Where feasible, all stationary plant should be located so that the noise effect at all occupied commercial and residential properties is minimised and, if practicable, every item of static plant when in operation should be sound attenuated using methods based on the guidance and advice given in BS 5228.

Use of pneumatic breaking should be limited or, better still, alternative techniques should be investigated and utilised; and crunchers should be used in preference to pneumatic breakers; and where breakers are used, they should be of a suitable size for the job.

Whenever possible, deliveries should be programmed to arrive during daytime hours only and care should be taken when unloading vehicles to minimise noise. Deliveries should be routed so as to minimise disturbance to local residents and delivery vehicles should be prohibited from waiting within or near the site with their engines running.

6.0 PREVENTING EMISSIONS AND ODOURS

The following measures will be employed to prevent emission and odours:

6.1 Plant and Vehicles

- Plant and vehicles will be maintained in good working order
- Control deliveries to minimise queuing
- Ensure engines are switched off when not in use
- Refuelling areas will be sited away from the public in open storage with a fuel overspill bund and kit provided.
- No burning of waste materials is to occur on site

6.2 Waste Storage

- Containers will be covered and removed frequently

6.3 Chemicals on Site

- Will take account of wind conditions when planning activities likely to emit aerosols, fumes, odours or smoke
- Position site toilets with effluent tanks away from residential areas

6.4 Nuisance Issues

- i) Dust

We will ensure that all roads are kept damp in dry spells

We will ensure that all grinders and cutters are used as a last resort

Vehicle wheels will always be cleaned as well as practicably possible before leaving the site?
- ii) Emissions

Generator exhausts to point up

Generators to power plant and tools to be used sparingly
- iii) Odours

Consideration will be taken to neighbours when painting, and adhesive operations take place, to where venting will be located.
- iv) Noise

All works will be carried out in strict accordance with agreed working hours. These will be 08:00 to 18:00 Monday to Friday and 09:00 to 13:00 on Saturdays. All plant and equipment will be 'silenced' in accordance with the manufacturer's designs and will be regularly serviced / inspected to ensure ongoing compliance. Works will be carried out by trained and competent operatives using best practice techniques. No machine will be allowed to 'idle' when works are not in progress.

v) Vibration
Vibrating rollers only to be used for short duration where possible, and to be turned off when not in use.

vi) Light
There will be street lighting on site in association with the residential development. These lights will have a vertical emphasis, and there will be no direct back spill of light outside of the site from this source.

Lights will also be visible on the majority of moving construction vehicles, in order to provide awareness and visibility to people when moving on site.

The illuminance of the vehicle lights will have a limited radius. In addition, vehicles will only be operating within the designated hours of construction. As such, there will be negligible impact upon the surrounding area in terms of light pollution.

It is noted that should a nuisance occur in future, this can be monitored and dealt with under the relevant legislation by the Environmental Health Section.

7.0 GROUND CONTAMINATION CONTROL / SURFACE WATER RUN OFF

In order to control potential ground contamination and surface water run off, the following measures will be employed:

- All road gullies and drainage will be protected from any ground water run off to prevent contamination. Gulley sacks and / or straw Bales with hessian covers will be installed. Temporary bunds will also be placed in areas where run off needs to be controlled in the suDs areas.
- The groundworks contractor will be provided with the following Environment Agency Guides relating to best practice.
 - o EA PPG1 General Guide to the Prevention of Pollution
 - o EA GPP2 Above Ground Oil Storage Tanks
 - o EA GPP5 Works and Maintenance in or near Water
 - o EA PPG6 Working and Construction and Demolition Sites
 - o EA GPP13 Jet Washing
- The Ciria/dti/E.A. Guide to Good Practice on Site is also provided.

SuDS (if required)

- The programming of works relating to the stripping of any soil will be done so as it is done “**just in time**” for any work activities required in that area. Soil will not be stripped as a whole, thus eliminating mud, silt and run off.
- Main contractor along with groundworks supervisor will be responsible for the control of the programme, construction, and completing of the SuDS scheme. They will also act as point of contact for SAB inspections.
- If and where required sediment traps / basins can be installed at appropriate locations.
- Where rain gardens are a requirement, filter strips will be installed at an early construction stage (plot slab) and these will help in the management of runoff during earthworks.
- The final completion of the SuDS operation will be done at landscaping stage using a suitably trained, skilled, and competent contractor with experience in SuDS landscaping. All materials used will be in accordance with all specifications made.
- A meeting will be requested with local authority SAB inspector at the start on site to establish key stage inspections and hand over stage. These inspections will be classed as necessary as any other key stage inspection associated with the construction of the properties.

8.0 MANAGING COMPLAINTS

Prior to commencement of the works, all residents likely to be affected by construction shall be contacted and advised of the type and duration of the works that may affect them.

8.1 Main Contractors Contact Details:

Tai Tarian Limited, Ty Gwyn, Brunel Way, Neath, SA11 2FP.

8.2 Emergency Contact Details

Name. **Richard Oatway / Senior Project Manager**
Contact No. **07837 091302**

Name. **TBC / Site Manager**
Contact No. **TBC**

The Contract Manager / Site Manager shall be nominated to receive any complaints for the duration of the construction works and this person shall either be on site or available by telephone as above.

9.0 MANAGING ECOLOGY / BIODIVERSITY

9.1 Birds

Vegetation clearance will take place during the non-breeding season (September to February) to the main construction area. Works to the perimeter if clearance cannot take place in the non-breeding season, the area will be inspected for breeding birds prior to any works commencing. There is no licence available to allow for the destruction of breeding birds or their nests whilst in use.

9.2 Common Reptiles

Prior to any soil stripping, a pre-clearance search of the site in order to move any vulnerable taxa to safety must be undertaken. The site could play host to reptiles, and assessment for this group would be sensible. Grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), viviparous (common) lizard (*Zootoca vivipara*) and adder (*Vipera berus*) are all protected from intentional or reckless killing and injury under Schedule 5, Section 9(1), of the Wildlife and Countryside Act (as amended) and reinforced by the CROW Act 2000, and all site clearance works must be carried out to ensure humane treatment within the law.

9.3 Tree Protection / Hedgerows

A tree constraints plan has been submitted in support of the application, including root protection plan is included at **Appendix 3**.

APPENDIX 1 - Construction Site Layout Details

APPENDIX 2 - Sensitive Vegetation Clearance Details

APPENDIX 3 - Tree Protection Information