

Construction Environmental Management Plan

Coed Darcy phase 1 ,2 and innovative units

09/09/19

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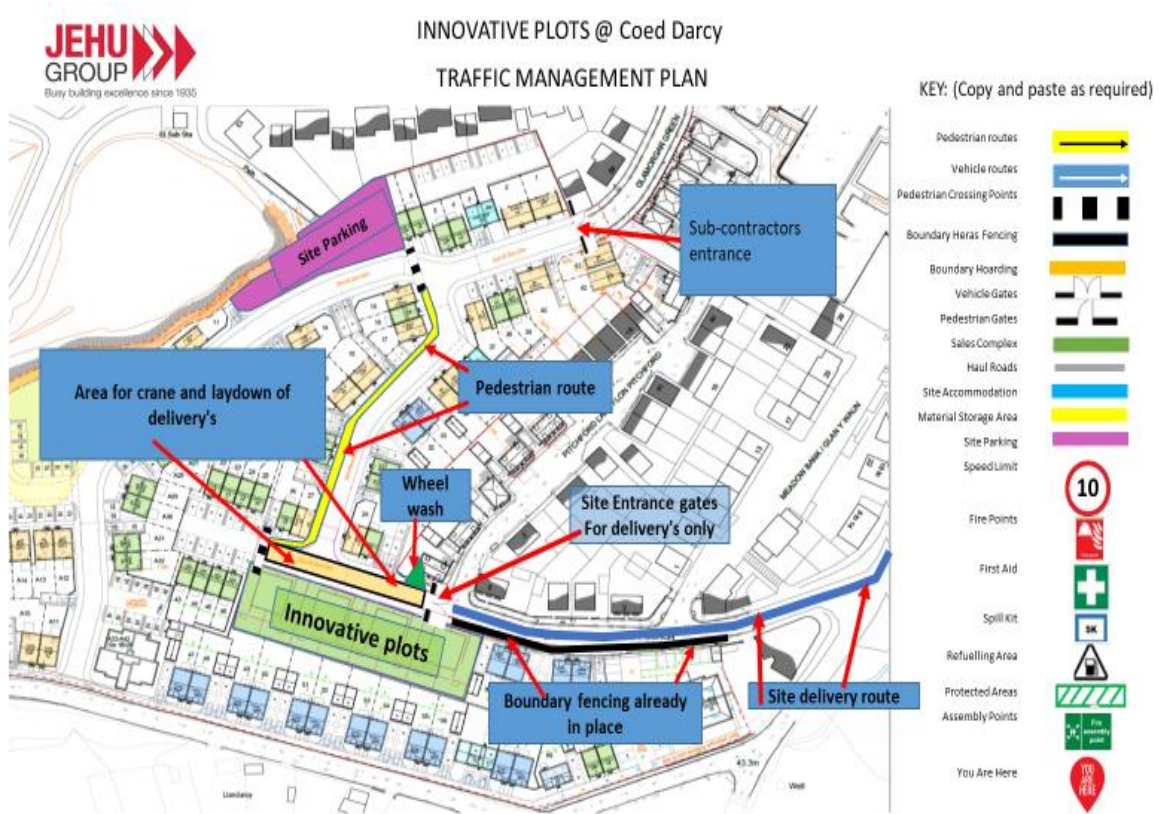
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1.0 INTRODUCTION

This Construction Environmental Management Plan (CEMP) has been prepared on behalf of Jehu Group to satisfy planning permission and provides details on the requirements for the management of construction of the project, including details relating to construction access.

Key Conditions Include:

The Construction Method Statement shall thereafter be implemented in full.”

Waterstone, as the Principal Contractor for the works will ensure that the actions contained in this CEMP are complied with.

Waterstone 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

2. The Site is part of the former Coed Darcy Oil refinery and supported industrial units and roads, now all demolished. The Site is bounded on three sides by new housing with the western boundary also formed in part by a cliff. To the south is well established housing dating to the 1940's and a large green at Prettyman Drive.

The Site consists of an area with mainly recovering vegetation following a land remediation project in 2009. With significant amounts of bare ground, most of the vegetation was skeletal, but dense scrub has developed in places. There is a small amenity area at the eastern end of the Site.

None of the habitats present are of significant nature conservation value in their own right; however, the Site could qualify as the UK Biodiversity Action Plan priority habitat Open Mosaic Habitats on Previously Developed Land, listed in Section 7 of the Environment Act (Wales) 2016. However, the complete stripping of soils from the surface of the Site during remediation makes this a poor candidate as many features of typical brown field sites are lacking.

Although no direct evidence of protected species was found during survey, there was potential for breeding birds to utilise the Site for nesting and limited foraging habitat for bats. The Site offers potential for reptiles on first appraisal, however, the history of the Site, discussed in detail in the report text, and development of the surrounding areas makes their presence extremely unlikely.

It was concluded by Hawkswood Ecology that there are no apparent ecological reasons that would prevent a proposed development of the Site going ahead.

3.0 SITE SET UP & LOCATION.

3.1 Entrance Point

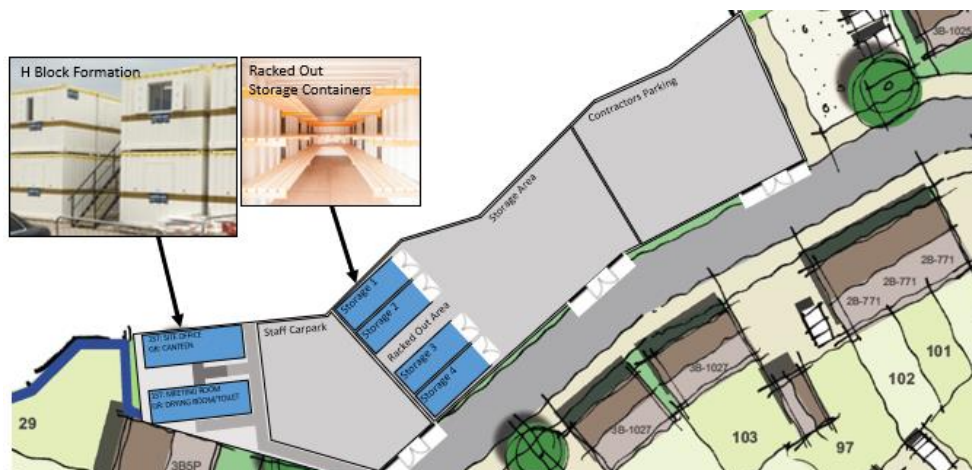


The site may be accessed from Tank Farm Road or Crown way. The main site entrance will be via Ffrodd Coed Darcy then onto Heathland way onto Glamorgan Green which then leads on to site

3.2 Permanent and temporary Construction Access

The construction access will utilise the existing road networks, as per above.

3.3 Compound location, layout and height of temporary structures



As illustrated above, the site compound will be situated on site.
The largest temporary structure will be a mobile crane. The specification of the crane is yet to be established.

3.4 Temporary Boundary Treatments / Means of enclosure

Where required open boundaries will be secured using a mixture of 2.4m high solid site hoarding or Anti climb mesh fence. 1.8m Heras fencing will also be 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

Site parking will be all on site via Ffrodd Coed Darcy then onto Heathland way onto Glamorgan Green which then leads on to site

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 will 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. Excavations close to vehicle and pedestrian routes must be back filled as soon as reasonably 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.

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.

Initially the Development will be secured by means of lockable security gates at the entrance to the site. Whilst the temporary access is in operation it will also be secured by means of a lockable gate. As work proceeds these gates will be repositioned and combined with 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 08:00 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 for internal trades may be used during the agreed planning hours throughout the winter.

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.

About 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- a wheel wash facility will be located adjacent to the site compound. A banksman will wash all vehicle wheels with a high-power pressure washer before they leave the 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. SWMP document will be provided

Refuse & All other waste materials

Waterstone operates a strict Waste Management Policy that involves the onsite segregation of waste to lessen the impact on landfill.

4.5 Wheel Washing Facilities

A designated operative is to carry out the wheel washing of construction vehicles leaving the site (via a handheld 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 'Cartaway' of arising relation to earth work takes place.

5.0 MANAGING NUISANCE NOISE

The Contractor and their sub-contractors should always 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 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 washed 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 from this source outside of the site.

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

The illuminance of the vehicle lights will have limited radii. 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, the following measures will be employed:

- All road gullies and drainage will be protected from any ground water run off to prevent contamination.
- The groundworks contractor has been provided with the following Environment Agency Guides relating to best practice.
 - EA PPG1 General Guide to the Prevention of Pollution
 - EA PPG2 Above Ground Oil Storage Tanks
 - EA PPG5 Works and Maintenance in or near Water
 - EA PPG6 Working and Construction and Demolition Sites
 - EA PPG13 Jet Washing

The Ciria/dti/E.A. Guide to Good Practice on Site is also provided.

- (Any site-specific surface water run off to adjacent land / watercourses / highways and their prevention measures to be listed here)
- Please refer to documents surface water management plan, technical guidance
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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 Principle Contractors Contact Details:

Waterstone Homes Ltd

Number One, Waterton Park, Bridgend, CF31 3PH

8.2 Emergency Contact Details

Name. Andrew Payne, contracts manager
Contact No. 07917435450

Alternate Name. Ian John, H & S Advisor
Contact No. 07815593428

Alternate Name. Kevin Roberts, site manager
Contact No. 07920011213

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

(Information taken from Hawkswoods Ecology Report)

Summary

Although no direct evidence of protected species was found during survey, there was potential for breeding birds to utilise the Site for nesting and limited foraging habitat for bats. The Site offers potential for reptiles on first appraisal, however, the history of the Site, discussed in detail in the report text, and development of the surrounding areas makes their presence extremely unlikely.

9.1 Birds

The Site was considered to hold some value for breeding birds and potential for supporting reptiles. In relation to birds, there are opportunities in the goat willow and gorse scrub. It is unlikely any ground nesting birds would utilise the Site due to its relatively small size and lack of protection from disturbance. The rock face could be of use to some species of bird; pied wagtail and kestrel could both take advantage of this part of the Site for nesting. It is too low a cliff and too open an area to be safe for peregrine falcon, and should they nest it is unlikely they would survive.

9.2 Common Reptiles

Reptiles prefer a mosaic of habitats allowing places to bask in the sun and warm up with cover for protection. This type of habitat is also likely to support invertebrates to provide prey. Surveys across the wider site reported by Atkins (2012) identified habitats suitable for reptiles but considered away from hotspots; reptile numbers were likely to be low. Plans for the wider site include areas enhanced for reptiles. The current development Site appears to have been of low value for reptiles as clearance was undertaken in 2010 of the whole Site as part of remediation works (BP Area 1 Remediation Validation Report 2010).

The remediation removed all existing habitats at the time of the works and resulted in a clearance of existing surfaces which included concrete platforms, asphalt car parks and roads. This will have had a devastating impact should reptiles have been present and removed any existing populations.

To some extent the Site was already isolated from neighbouring areas by roads and the cliff on the northern boundary. The development of the adjacent areas since then has increased the isolation of the Site and it is considering the Site is of no significance to reptiles in a local context due to the recent history of the Site and its increasing isolation from adjacent habitats. About birds the Site is of minor significance in a Site context only; in a local or county context it is considered to be of no significance as the habitat available is small and replicated in larger areas locally.

9.3 Bats

The Site supports no suitable roosting habitats for bats apart from the cliff face where crevices are apparent. However, despite the potential for this to be used by bats it is considered unlikely as oil seepage was noted from the cliff face prior to the remediation works. Even should the remediation works have been successful in controlling the seepage, the presence of hydrocarbons in the rock crevices is likely to exclude bats for using them. It is considered that the proposed development will be of no significance to bats and measures are outlined in Section 8, Recommendations, to prevent factors affecting bat commuting routes.

9.4 Tree Protection / Hedgerows None identified



APPENDIX 1 - Construction Site Layout Details

APPENDIX 2 - Phasing Plan

APPENDIX 3 - Draft Construction Programme