# Construction Environmental Management Plan

## Herbert Road, Newport

March 2018

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## 1.0 INTRODUCTION

This Construction Environmental Management Plan (CEMP) has been prepared on behalf of Engie/ Pobl Group to support a full planning application for the construction of 206 residential units and associated infrastructure works. The CEMP is submitted as part of the full application in order to limit the number of pre-commencement conditions associated with the proposed development.

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

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

The CEMP will be structured in the following format to address the following requirements:

2.0 Site Location
3.0 Site Set Up & Location
4.0 Managing Dust and other Pollutants
5.0 Managing Nuisance Noise
6.0 Preventing Emissions and Odours
7.0 Ground Contamination
8.0 Considerate Constructors and Managing Complaints

## 2.0 **SITE LOCATION**

2.1 The proposed development site currently comprises of disused land to the south of Glan Usk Primary School, Herbert Road, Newport. The site is of a rectangular shape with the northern third and southern two thirds separated by an existing reen and is bound on the west by the river Usk and to the east by a railway line.

2.2 The proposal is to construct 206 no. dwellings and associated works at land to the south of Glan Usk Primary School, Herbert Road, Newport.

## 3.0 SITE SET UP & LOCATION.

### 3.1 Entrance Point

The construction layout plan for the first phase (included in Appendix 1) illustrates the location of the proposed main entrance to site. Materials are to be imported into site mainly from the adjacent Herbert Road Depot Site. All construction traffic is to use Herbert road to access the site.

### 3.2 Construction Access

The construction access runs along the eastern boundary of the site and will connect with Herbert Road (as shown on site layout plan). A site road runs from the Site compound and runs west towards the River Usk and will link on to the road which is shown in Brown on the construction layout map (Appendix 1).

### 3.3 Compound location

The compound is located towards the south of the site, this is highlighted green on the construction layout plan which is included within Appendix 1.

### 3.4 Temporary Boundary Treatments

Where required open boundaries will be secured using 1.8m Heras fencing.

### 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 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 of site they must be protected by a physical barrier, and high visibility plastic fencing, metal pedestrian barriers, or heras fencing. This will include scaffolding in close proximity to the 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.

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**

The terrain of this site presents no abnormal risk of vehicle overturning. However all dumpers will be fitted will rollover protection and seat belts.

3.9 **High Visibility Clothing**

All personnel and visitors will wear visibility vests/jackets at all times.

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 **Hours of Operation**

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.

## 4.0 MANAGING DUST AND OTHER POLLUTANTS

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. 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

The following measures will be employed to avoid dust generation:

**Roads**

- Construct and tarmac the site roads at 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**

- 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
- 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 down wind 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**

Keepmoat 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 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.

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 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.
- Keepmoat have an environmental plan which states the following for spills: if it is necessary to store petrol for use as fuel for bumpa hoists, angle grinders and other small plant, it will be kept on site in 5 litres plastic containers conforming to the petroleum spirit (plastic containers) Regulations 1982 and marked "petrol-highly flammable". Where large volumes (200 Litres or more) of fuel are required for plant it will be stored in accordance with the control of pollution (oil storage) Regulations 2001 on bunds in specified areas away from sensitive receptors. Drip trays and spill kits will be available at all times. Refuelling method will be followed at all times. COSHH products will be stored appropriately away from a water course, drains and other sensitive receptors.
- 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 tolls 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. There will be no light spill onto the river Usk.

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 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

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.

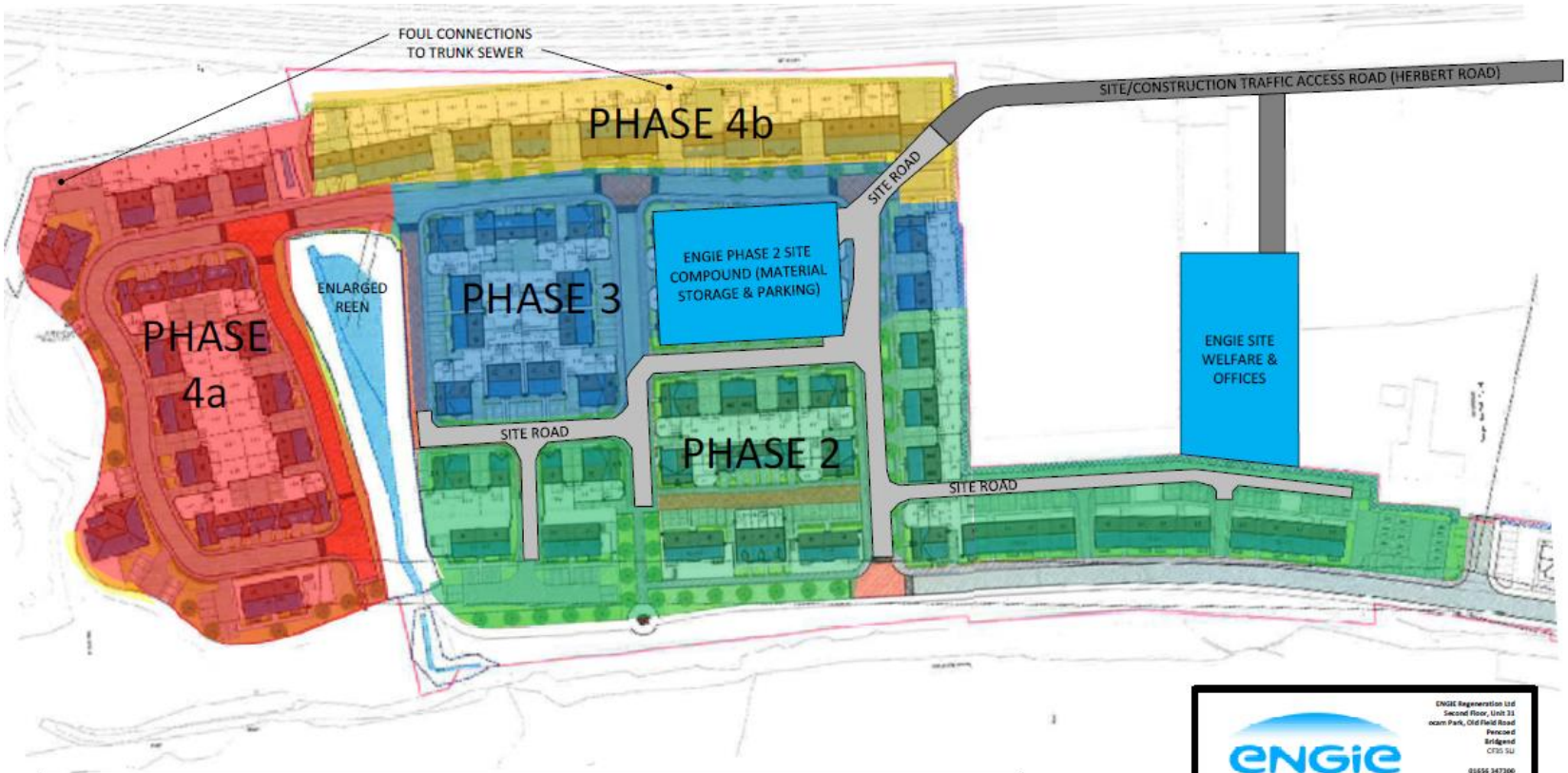
## 8.0 MANAGING COMPLAINTS

Prior to commencement of each phase/stage 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.

The project 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 and this telephone made known to Newport City Planning and Public Protection Department.

Any emergency deviation from shall be notified to, Newport City Planning and Public Protection Department as soon as practically possible.

## APPENDIX 1 - Construction Site Layout and Phasing Details




**SCOPE OF WORKS**

01 206 APARTMENTS IN 4 PHASES.
02 PRIVATE AND ADOPTED ROADS, PARKING AND PAVEMENTS.
03 ADOPTABLE & PRIVATE FOUL DRAINAGE TO DISCHARGE INTO EXISTING FOUL TRUNK SEWER.
04 ADOPTABLE & PRIVATE SURFACE WATER DRAINS DISCHARGING INTO THE ENLARGED REEN.
05 MAIN INFRASTRUCTURE SERVICES FOR NEW DWELLINGS.
06 MAINTAIN EMERGENCY ACCESS TO ADJACENT SCHOOL.
07 REEN, PLOT AND SITE PERIMETER FENCING INCLUDING ACOUSTIC FENCES.
08 HARD & SOFT LANDSCAPING INCLUDING NO DIG BARRIER & IMPORTED TESTED SOIL.

ENGIE

**HERBERT ROAD NEWPORT**

CONSTRUCTION SITE LAYOUT

REVISION: - (14/03/2018)