



Construction, Environment & Management Plan

For

**Proposed Residential development
At Land adjacent to Llay Miners Welfare
Llay New Rd
Llay
Wrexham**

**First Issue:
14th March 2018**

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Site Plan:

Key for Site plan:

- 1. Site Office & Welfare area**
- 2. Site vehicular parking**
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1.0 Introduction

This report is a qualified assessment based on current information and is subject to refinement as the project evolves. This report describes the proposed outline programme and the key activities of the construction phase of the building of the houses at Llay New Rd, Llay

Planning for the construction is necessarily broad at this stage and may be subject to modification during the construction phase. Consequently, a number of aspects of construction in relation to environmental issues can not at this stage, be accurately predicted. For example the number of vehicles required will be dependant on progress of the works against the construction programme.

The above will be monitored and amended as the construction phase progresses.

Gower Homes are a Local Award winning company and value our reputation within the local community and therefore we will keep the local councillors and immediate neighbours informed of critical construction works at any time. Signage will be displayed on all of the boundaries and contact telephone numbers clearly shown on all signage.

2.0 Programme of Works

The total number of weeks for the site set up and construction of the houses will be 52 weeks and will compromise of the following key stages.

- ❖ Site Clearance
- ❖ Site establishment
- ❖ Site hoarding to perimeter
- ❖ Temporary car park for operatives and visitors
- ❖ Foundations
- ❖ Superstructures
- ❖ Roofs and externals
- ❖ On and off site drainage
- ❖ Internal fit out
- ❖ External works including landscaping

3.0 Site Logistics

3.1 Site Accommodation

The plans presented in **Appendix A** show the location of the site office, canteen, storage containers and toilets, which will be fully equipped with hot and cold running water, the compound will be fenced off from the public with 1.8 metre high heras security fencing.

3.2 Access Arrangements

Pedestrian access to the site will be provided from the existing footways off Llay New Road and then via the gated entrance to the development. The pedestrian access will be clearly signed and the gate will be accessible during site hours.

Visitor and contractor vehicle access will be provided from the existing site access off Llay New Road and then via the gated entrance to the site. Clearly marked staff, contractor and visitor parking areas will be provided within the site at the locations shown on the plans in **Appendix A**. It is anticipated that a maximum of 15 contractor vehicles will be on site at any one time.

3.3 Deliveries

Deliveries will be made from the existing site access off Llay New Rd and then via the gated access to the site. It is anticipated that the largest delivery vehicles to access the site will be 10.2m long tipper type vehicles and 12m long flatbed lorries. Swept path analysis has been undertaken of these size vehicles, as shown on the plans presented in **Appendix A**, and demonstrate that these vehicles can safely enter and leave the site in forward gear. It is anticipated that a Banksman will be utilised to guide large delivery vehicles within the site. There will be a requirement to remove existing kerbed islands to facilitate the movements of the delivery vehicles, as shown on the plans presented in **Appendix A**.

All site deliveries will be between 7.30am and 6.00pm Monday to Friday and 8.00am to 2.00pm Saturdays. Any deliveries arriving outside of the permitted hours must not leave their engines running whilst waiting for the site to open, so as not to cause a nuisance to the existing residents.

All construction traffic will enter and exit the site via the Llay New Rd.

A schedule of signage will be submitted to WCBC Streetworks Section and be in place prior to commencement of the works.

3.4 Hours of Work

The hours of work will be between 7.30am and 6.00pm Monday to Friday and 8.00am to 2.00pm on Saturdays. No work will be permitted outside of these hours.

As noted previously, any contractors arriving before the permitted hours of work must not leave their engines running or have their vehicle radios on too loud so as to cause a nuisance to the existing residents.

No Plant engines should be started before the permitted hours of work.

3.5 Site Car park

As detailed earlier, clearly marked staff, contractor and visitor parking areas will be provided within the site at the locations shown on the plans in **Appendix A**. We will remind contractors to avoid parking on Llay New Rd in front of neighbours houses as soon as on site parking is established.

3.6 Unloading Area's

Gower Homes will utilise the “just in time delivery method” to minimise materials on site together with a more controlled and managed area of stock materials.

There will be, from an early stage of construction, a fork lift to distribute materials all around the site.

3.7 Dirt and Dust Suppression

Due to the level of hardstanding already on site and the clean tarmac area to the entrance of the site, we anticipate minimal dust suppression requirements on site, however hosepipes will be used to dampen any areas which are subject to dust and dirt. As the site has lots of existing hard standing we anticipate minimal disruption to existing services and neighbours.

As the site is small there will be no stock piles of waste materials to cause any dust, skips will be covered and should any waste require stock piling then measures such as tarpaulins and hose pipe dampening will take place should the need arise.

Hand held disc cutters will be the only cutting or grinding machinery and although these will not be fitted with dust suppression the impact is low and can be contained in designated areas to be agreed as the construction progresses.

3.8 Existing Main Road

Daily monitoring of the existing main road for mud/debris as a result of construction traffic will be in place and should the need arise a road sweeper will be used to maintain the adopted highway.

4.0 Potential Environmental Impacts

Issue	Potential Impacts
Dust/Air Quality	Wind blown 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 particles.
Ecology	Water/mud run off into drains
Energy Usage	Indirect impacts associated with energy consumption such as CO2 emissions, depletion of natural resources, air pollution etc.
Fuel and Construction materials storage	Accidental spills, discharges to drains/stormwater systems, contamination to ground
Hazardous materials & contaminated land	Exposure of the workforce to hazardous materials and contaminated land, mobilisation of any source contaminates and creation of pathway from source to groundwater receptor
Noise	Increased road noise levels from vehicles. Increased noise levels from plant during construction and general construction works on site
Site and surrounding pedestrian access	Restrictions on pedestrian access to walkways, footpaths and roads
Traffic	Traffic congestion caused by site traffic. Increased vehicle movements mainly consisting of HGVs. Transfer of mud and material from vehicles onto public highway. Exhaust emissions
Waste	Waste generation and its disposal
Water and water usage	Increased sediment loadings to stormwater system. Potentially contaminated stormwater runoff. Natural resources depletion
Vibration	Increased vibration levels from vehicles. Increased vibration levels from plant during general construction works.
Wind	High exposure to wind and gusts, ensure all materials are covered, hoarding secured, scaffolding checked daily and skips covered to avoid debris being strewn.

5.0 Dealing with Potential Environmental Impacts

5.1 Dust/Air Quality

Due to the condition of the existing access and levels, we anticipate minimal dust suppression requirements on site, however hosepipes will be available to dampen any areas which are subject to dust and dirt. A jet wash can be situated near the front entrance gates and the banksman will as and when required ensure that the wheels of any vehicles will be washed and cleaned prior to joining the public highway when dust arising from siteworks is considered a hazard.

5.2 Ecology

Gower Homes will continue to follow the planning requirements and NRW licence conditions forwarded separately.

5.3 Energy Usage

Gower Homes will have mains electricity on site as soon as possible after commencement, thus avoiding the use of generators to power the offices and a supply will be made available for contractors small hand power tools, limiting the use of petrol generators. Should generators be used for small plant these will be super silent and only used within the building and within the operating hours as mentioned above. Ready mixed mortar will be delivered to site thus avoiding on site diesel mixers.

5.4 Fuel Storage

All liquids and solids of a potentially hazardous nature (e.g. diesel fuel, oils and solvents) will be stored in bunded/double skinned tanks. Only authorised personnel are allowed to fuel plant and machinery. Site diesel will be kept in a lockable MDPE fully bunded 1400 litre capacity tank and on hard standing.

5.5 Noise

Measures currently planned to be adopted include and existing residents will be notified in writing of any scheduled concrete pecking works. On site good practise procedures will be followed so as to mitigate noise as follows, although this is considered a low risk due to the location and proximity of the neighbours:

- ❖ All plant and equipment to be used for the works to be properly maintained, silenced where appropriate, and operated to prevent excessive noise and switched off when not in use and where practicable.
- ❖ Plant to be certified to meet current legalisation and British Standards.
- ❖ All trade contractors to be made familiar with current legalisation and the guidance which will form a prerequisite of their appointment.
- ❖ Loading and unloading of vehicles, dismantling of site equipment such as scaffolding or moving equipment or materials around site will be conducted in such a manner as to minimise noise generation

- ❖ Noise complaints or exceedances of action levels, will be reported to the contractor and immediately investigated.
- ❖ Wherever possible plant and equipment will be turned off when not in use.

5.6 Site and Surrounding Access

Access will be maintained at all times on the footpaths adjacent to the development, no materials or cars to be parked on the footpath.

The site pedestrian access is clearly sign posted and clearly marked and access is off the existing development entrance.

All the site boundaries are fenced off using 1.8m high heras fencing and any site gates will be closed when not in use, thus limiting pedestrian access to construction parts of the site.

Adopted footpaths and roads will be kept clear of construction work and traffic at all times.

5.7 Traffic

Deliveries will be prohibited outside of the set times on material orders, this is to ensure no deliveries occur.

All deliveries will be unloaded/loaded on site so as to avoid wagons queuing off site. Should the need arise, wagons/delivery vehicles will be subject to wheel washing prior to re-entering the main carriageway.

5.8 Waste

Gower Homes will be adopting a detailed Waste Management Plan which will be kept on site for the duration of the contract, and will be made available for inspection during the pre, ongoing and post construction phases.

5.9 Site Security

Any lighting for safety or security reasons must not extend beyond the curtilage of the site and be pointed away from existing residents windows.

A contact name and number will be provided on site signboards for residents to report any items of concern or complaint.