

Construction Environmental Management Plan (CEMP)

Project Details

Project:	Wrenbury Way, Cefn Mawr
Project Duration:	65 weeks.
Site Manager:	TBC
Site Manager Mobile:	TBC

Site Management

An experienced Site Manager qualified to the Site Managers Safety Training Scheme or IOSH Managing Safely (as a minimum), will be present on site at all times and will complete a Weekly Site Inspection which will be kept on site. This will be audited by formal visits by our Health & Safety Department who will generate a Site Inspection Report with action(s) taken as necessary and in accordance with the Company's ISO procedures.

The Site Manager will ensure that all site personnel are competent to carry out the work allotted to them. Visitors to site will be made aware of the emergency arrangements and escorted at all times. Toolbox talks will be used to increase operatives' awareness of specific site hazards and how to reduce their associated risks, these will also cover site wide 'environmental' issues such as Vehicle Traffic management and noise / dust minimisation.

Existing Off-Site Environment

The site is situated in a predominantly residential area with houses to the north east of the site. There is an existing detached dwelling within the confines of the site and the local Cefn Mawr Primary School is nearby, so protection of the will be a major consideration from both the initial site set up through to the on-going construction work.

All movement of construction traffic to and from site will be planned and monitored to ensure it complies with the site Traffic Management Plan. This plan will be updated at regular stages of the contract to consider the consistently changing environment on site. The information will be presented to the workforce for their understanding at each revision.

Access to the site

Clear signage will be provided to warn the general public of the presence of the construction site and its entrance and also to direct any visiting works traffic. **Site working hours are 8am – 5.30pm Mon – Fri** (as required). Site working hours will be displayed on the site noticeboard.

We will adopt an in and out access route for deliveries. The deliveries will be via the A539 Llangollen Road, then turning onto Queen Street/ Dolydd Road/ Cae-Gwilym Lane and then onto Heol Berwyn where the access to Wrenbury Way is located. There is a 16 ft height restriction under the bridge just after the turning off the A539 onto Queen Street. We intend to accept, unload and turn all delivery vehicles within the confines of the site.



Site security will be established using a mixture of 2.4m high solid hoarding and 2m high security fencing with gated access points.

A stoned-up compound area will be formed to locate the site office, canteen, toilet facilities and storage containers. The cabins will be located at the entrance to the site and will be stacked to maximise the use of space.

All vehicle movements will be banked and supervised at all times to ensure the safety of pedestrians and other traffic. The Banksmen will wear Hi-Visibility clothing and ensure that drivers are aware of the site traffic management rules. Gates built into the security fencing will be locked at all times when not in use.



The main road (Heol Berwyn) leading to the site access road is considered suitable for the expected deliveries. We would seek to restrict parking for vehicles close to the access and egress gates to allow unobstructed access for delivery vehicles.

Secure storage will be provided for materials and equipment that are required on site for long periods of time. The material storage area will be at the rear of the site on the location of the end of the proposed turning zones.

Consultation with the Planning Authority and/or the Contract Administrator to establish alternative routes for vehicles if necessary. Particular attention will be given to the use of any large delivery vehicles and suitable control measures will be put in place by the Site Management. Signage will clearly prohibit general access to the construction site other than for construction traffic.

Anwyl Partnerships are aware that two-way traffic along Heol Berwyn and the safe unimpeded passage of emergency and public vehicles along with pedestrians is required at all times. Reversing onto the adopted highway **will not** be permitted. Vehicles will enter and exit the site in forward gear at all times. To facilitate works vehicles accessing the site, the following shall be implemented:

- Subcontractors, suppliers and our labour force will be provided with a map showing how to access the site, the direction to approach it, the site manager's contact number and the requirement to observe the speed limit at all times.
- Signs will be erected to direct traffic at the entrance of the site and elsewhere if needed.
- Delivery vehicles will be kept to a minimum and materials will be brought to site as required for the works in hand via the smallest vehicle according to its cargo.
- Drivers of vehicles with wide and long loads will be instructed to contact the site manager prior to delivery (as necessary, the appropriate authorities will be warned about these deliveries), these will be arranged where possible to avoid periods of peak traffic and school drop off and pick-up times and will not be accepted if delivered outside of the agreed time period.
- Anwyl Partnerships will ensure that at all times that the access and egress routes to the site will be kept clear and not be impeded in any way.
- Due care and attention will be paid to pedestrians and public/commercial vehicles.
- A Banksman will be utilised to control pedestrian and vehicular traffic as is necessary during delivery times.
- The removal of construction debris, materials or equipment will be scheduled to avoid busy periods and will not affect the free movement of traffic on the surrounding roads.
- The speed limit on site will be 5mph.
- Vehicles moving around site will be subject to banksman guidance and instructions.
- Vehicles leaving site will be inspected to ensure their loads are secured to prevent any incidents on the public road when leaving site.
- Although the road site access road is constructed up to base course, we will throughout the scheme still adopt suitable measures to prevent materials, dirt and dust from entering the adopted highway. All construction vehicles will be subject, when required, to a manual wheel wash regime i.e., hand-held jet wash operative will be utilised and the extra precaution of a road sweeper will be on call to ensure the local roads are kept clean.

- The majority of vehicles will use the existing constructed Wrenbury Way access road to park their vehicles. Any additional parking of vehicles will be on the adjacent public roads. However, we only envisage small numbers of vehicles will be required to park on the public roads. All operative vehicles will be directed to the public pay and display car parks nearby. Where possible we will look to car share to avoid congestion.
- Site supervision will be adequate to ensure that safe standards are maintained through co-operation and liaison between site personnel and delivery drivers.
- Vehicles will be unloaded within the confines of the works site by the appropriate lifting equipment (usually a telehandler).
- There will be no requirement for other site personnel to be in the unloading area.
- Roads and footways will be established on site that will be adequate for the type and volume of vehicular and pedestrian traffic. The surfaces will be hard and even to minimise the impact from noise and dust.
- Site Operatives and vehicles will be separated by appropriate means such as pedestrian and/or 2m high security fencing with pedestrian crossings where necessary.
- Drivers of delivery vehicles will have a safe pedestrian route to enable them to report to the site office for instruction.
- Unsafe acts such as speeding will be challenged by the Site Manager and disciplinary action taken if deemed necessary.

Site Compound

The site compound area will be positioned at the front right-hand side of the site on the area of land adjacent to proposed plots 1 & 2. Compound and welfare will consist initially of a separate office, canteen/drying rooms, meeting room and male and female toilets.

Adjoining properties

The adjoining properties are located on Heol Cefnydd. It is recognised that certain construction activities may cause dust, noise, odours, etc. Where necessary all such activities will be screened and mitigation measures put in place to avoid disruption to those properties.

The compound and working areas of the site will be clearly signed and demarcated and wherever possible a regular liaison will be established between the occupants of the properties and the Anwyl Partnerships Liaison Officer.

Control of Light: Lighting will be kept to a minimum and only required during the winter months during low light levels. This will be monitored, planned and controlled to eliminate any light pollution to the surrounding properties. All lighting on site will be screened from the adopted highways to prevent pollution and nuisance

Control of Dust: All reasonable steps will be taken to eliminate dust, odours and emissions at its source. To avoid causing complaints, the following steps will be adopted, this list is by no means exhaustive and will continually develop as the scheme progresses;

- Throughout the duration of the scheme we will identify activities likely to give rise to dust, odours or emissions; Initial identified activities include;
 - Demolition
 - Movement of traffic creating dust
 - Cutting activities creating dust and noise
 - Storage of stock piled material
 - Foul drainage from site setup

- Use of generators on site
- Vehicle emissions on site
- Wind blown litter and odours from food waste
- We will develop a dust, odour and emission management plan and adopt control measures to mitigate any negative effects. Below is a list of the initial mitigation measures that will be adopted on site;
 - We will enforce an onsite speed limit of 5mph to reduce kicked up dust.
 - We will utilise the existing roadway tarmac surfaces as access which will help to manage the dust on site.
 - We will regularly clean the internal access road and the approach road using a dampening road sweeper.
 - Where required wheel washing will be adopted to prevent the spread of excavated materials onto the surrounding roads.
 - All block cutting activities, where possible, will be utilised by a manual block cutter rather than saw cutting.
 - If saw cutting is required then this will be only be carried out with the appropriate dust suppression system for the tool. E.g. water bottle, vacuum etc.
 - Excavated material stored on site will be kept to a minimum with the surface being dampened during dry periods.
 - Stockpiled material such as sand will be covered to prevent windblown dust during dry periods.
 - The main site setup will be connected directly to the main drainage system to mitigate the requirement of an onsite septic tank. This will prevent foul odours from causing a nuisance.
 - Site setup will utilise a temporary electrical connection to prevent the use of a generator-based power source. This will reduce noise and emissions.
 - All vehicle on site will be regularly serviced and checked on a daily basis to ensure they are maintained and are operating in an efficient manner.
 - All canteen waste will be disposed of via a lidded 11000ltr waste bin which will be emptied on a weekly basis.
 - Skips will have a debris net fitted to prevent windblown waste from causing a nuisance.
- We will also undertake daily monitoring and keep a record of dust management activities and any complaints received;
- We will consider site engineering controls, such as exhaust ventilation through filters to ensure the dust is captured and contained;
- Specialised working methods, which may produce dust, odours and emissions, which are adopted during the scheme will be identified and suitable control measures will be included within the activities risk assessment. This will then also be added to the live dust, odour and emission document on site.

Control of Noise: Where practicable we will locate the site access away from any sensitive receptors. A segregation zone between the main material storage area and the boundary of the adjoining properties will be implemented and utilised as a site pedestrian footpath. Where operations are identified as being sufficiently close to sensitive receptors, noise and/or vibration readings will be taken to ensure compliance and a record made. Monitoring will be undertaken as the activity commences in order to evaluate the effect on receptors. The “Best Practicable Means” (BPM) will be used to mitigate the effects of noise and vibration. The initial identified sensitive receptors would be.

- Residents, public and visitors to the surrounding areas in particular along Heol Berwyn & Heol Cefnydd.
- Staff, visitors and workforce associated with the construction of the scheme.
- Ecology of the surrounding environment.

If required a process and working method to reduce and manage noise before work starts will be implemented. Once approved, the team will work in accordance with the approved methods, including monitoring requirements.

- The material storage area will have its entrance facing away from the existing houses which will help to reduce noise transfer.
- No works will be carried out outside the specified working hours of the site.
- We will ensure that all plant and equipment, including any on hire, is regularly checked to ensure it is in good working order and well maintained and conforms to the manufacturer's standards.
- We will brief all site workforce on noise reduction (shouting should only be permitted in cases where warnings of danger must be given).
- Where practical we will make use of barriers to deflect noise away from sensitive areas. These may be in the form of fencing, stacked materials, stockpiled materials, arrangement of cabins etc.
- To reduce the noise loading of the site, mains power will be used where practicable in preference to diesel generators for the site setup.
- Cutting/drilling will be minimised as much as possible to reduce noise. Manual block/brick splitters will be used instead of mechanical cutting means.
- Service voids to the apartments will be built in at construction stage to minimise the amount of core drilling during the scheme.
- Elements with preformed holes will be preferred to help minimise the amount of onsite coring and drilling.

Existing On-Site Environment

An environment management plan will be developed where required in order to ensure that conservation and environmental issues are addressed ensuring compliance with environmental legislation with continued systematic monitoring.

Trigger points will be built into the project whereby areas for specialist management will be fenced off, and conservation and environmental issues will be inputted into method statements and the Site Induction to ensure that practical measures happen at site level. Communication and monitoring of the measures will be taken at the outset and periodic checks will be carried out by the Health, Safety & Environment Advisor and the site manager to ensure maintenance of the ecological procedures.

A pro-active regime will be established where an environmental risk assessment will be carried out by the site manager during his daily duties in order to look for a potential form of pollution which will include:

- Unwittingly polluted waste incorrectly stored;
- Chemical, fuel and oil stores that may not be banded correctly;
- Plant and machinery – re-fuelling, fuel spills, oil leaks.

We will employ a scheme for recycling waste material resulting from the demolition and construction works. The following will be adopted.

- Masonry and concrete material from the demolition phase will be stockpiled on site and used to form levels to the building footprint and hard landscaping areas.
- Plasterboard, metal and timber waste will be removed from site and segregated off site at a registered recycling unit.
- Materials that cannot be recycled will be sent to a registered landfill site.