## **Construction Environment Management Plan**

Kings Acre Road, Swainshill

Planning Ref; 184332 & 184333

July 2019

#### **Construction Method Statement**

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# Section 1 – Overview of The Developers Construction Project at Kings Acre Road, Swainshill

Construction Environment Management Plan (CEMP) assimilates standard building practices employed by Cotswold Oak Ltd, as amended to suit the site specific sensitivities in relation to the construction activities necessary to deliver the provision of 17 dwellings and associated infrastructure works, hereto referred to as the `site'. This CEMP will also apply to any subsequent phases of development.

This document details what measures are to be taken to ensure the aforementioned works comply with requirements stipulated in the relevant planning permission to be granted to the development, as well as highlighting the more practical issues on site and how they are intended to be addressed.

Detailed information is provided within this document on:

- Site protective fencing & security measures
- Traffic management (inc access & egress to the project site) and parking
- Site monitoring & liaison
- Noise
- Dust controls
- Project compound arrangements
- Drainage (during the construction process)
- Signage (directional & safety)
- Ecological issues
- General health and safety

The document has been collated for the benefit of all parties and is subject to change by The Developer should the need arise. It is intended as a guide on how to successfully manage activities across the development.

## Section 2 – Site Location and Description

The site is located in the village of Swainshill, to the west of Hereford. The site is broadly rectangular shaped and is accessed directly off an existing access road on Kings Acre Road to the Northern boundary.

The site generally slopes towards the North.

The site is flanked as follows;

North	Existing dwellings - Orchard House & Bramley House
South	Open Fields
West	Existing residential properties off Breinton Lane
East	Existing private access road to properties off Kings Acre Road

Development is for the erection of up to 17 dwellings together with associated landscaping, infrastructure and access roads.

## Section 3 – Site Fencing & Security Measures

#### Site Boundaries and Fencing

As part of the initial works on the project, the perimeter of the site will be identified, marked and construction areas fenced to prevent unauthorised access.

The minimum basic fencing standard for this project will be:

- 1. All perimeter fencing / hoarding will be 2.4m high, as a minimum;
- 2. If mesh fence (Heras) panels are to be used, the mesh will not exceed 30mm depth;
- 3. All fence panels or hoarding will be secured to prevent failure due to vandalism and wind damage; and
- 4. Lockable gates will be provided at all entry and exit points. These will be open at all times during the operating hours of the site & set back from the highway to allow a vehicle to pull clear should they be closed.

The site will be assessed on a site-specific level, with different types of fencing installed suitable to the environment.

Wherever practicable, the permanent fencing will be installed where that area of the site abuts the existing occupied housing or area of open space located in all direction of the compass, around the development. The permanent fencing will not only afford high levels of security both for the project area and also the neighboring occupants, but will also help to achieve noise mitigation measures proposed for the construction activities.

The suitability of the fencing selected & installed will be monitored as a part of the on-going monitoring of the construction activities occurring on site.

The Site Management will implement a procedure to ensure that all temporary/de-mountable fencing is in place and in good order at the end of each day, and all gates have been secured and locked when the site is to be left unattended. The condition of the fencing around the perimeter will form part of the site monitoring, with any repairs, improvements or alterations to the fencing being undertaken in a timely manner.

The site boundaries & security will be discussed during the project-specific site induction for all workers, prior to the commencement of works.

#### Site Security Measures

It is envisaged that thorough measures to enclose the project site perimeter will provide suitable levels of site security for the project works.

Further site security measures (such as manned security outside of working hours, CCTV monitoring etc) will be evaluated as the project progresses.

Both the Developers' senior management and the project site management team will review this aspect of work on a regular basis, with any alterations to security implemented as required.

## Section 4 – Site Operations, Traffic Management (inc access & egress to the project site) and Parking

#### Hours of Operation

Hours of operation will be restricted to 07.30am to 18.00pm Mondays to Fridays with no building operations creating noise starting before 08:00am, and 08.00am to 13.00pm on Saturdays, with no work to take place on Sundays or Public Holidays or other statutory holidays.

All operatives on site will be informed of the site specific operating hours as part of the site induction process which all must attend with The Developers management, which will be monitored by use of an individual passport system.

Delivery times of this development will be restricted to between 8.00am and 5.00pm and will be controlled by the Construction Management team and the Commercial Department who will advise all suppliers in writing of the above.

#### Traffic to the project site

The site access is to be achieved via Kings Acre Road. To ensure minimal disturbance to our neighbours and the community, the management of all deliveries will be strictly controlled to avoid any off site parking and will utilise one point of access. Within the first phase of works the site infrastructure will be constructed to enable all traffic direct access to the development off Kings Acre Road. Further control measures will include restricted delivery times (see above) and phased construction.

Clear directional signage for both potential sales customers and construction traffic will be clearly displayed. All delivery vehicles and construction related traffic will be using Kings Acre Road (A438) which is the local strategic road which routes traffic to Hereford to the east. The A438 eventually links to the M50 to the east.

Any existing roads adjoining the development area, which have been designated as not permitting construction traffic, would have clear prohibition signage displayed. Similarly, signage necessary to direct movements, where necessary, would be agreed in consultation with other interested parties e.g. the Highway Authority.

Suitability of the traffic management arrangements in place would form part of the on-going monitoring & review process undertaken by the Developers site management team in conjunction with the senior management team of the Developers.

Any areas established as requiring attention / improvement would be actioned promptly.

#### Traffic management within the site

A traffic management plan has been developed for the project site and is appended to this report, this will be detailed to the project workers as part of the site induction process. Changes will be made to this management plan as required by the site manager to suit the building activities ongoing.

The planning for the traffic system will ensure that measures are in place to:

- Reduce the risk of mud/debris being taken onto the public highway;
- Undertake regular cleaning of the access / egress from the site onto the public highway and footpath;

- Reduce the need for vehicles reversing within the project site; and,
- Segregate vehicle & pedestrian movement within the site.

Deliveries of large items (roof trusses, or movement or use of mobile cranes etc) will be coordinated with third parties who may be affected by the delivery / movement and suitable warning signage displayed and site staff / banks men will be used to protect passing pedestrians etc.

The site management team will monitor and review the traffic management system on an ongoing basis and take action to ensure that the arrangements are properly maintained.

#### Type and Number of Vehicles

An estimate of number of vehicles to the development is outlined below;

Phase 1 – Initial Site Start-Up (2 weeks duration – daily movements)
3-4 No. Panel Vans for Contractors
1-2 Car movements for Site Management
2-3 Articulated Delivery Vehicles
6-7 Rigid Delivery Vehicles

Phase 2 – Infrastructure Installation (4-12 weeks duration – daily movements)
3-4 No. Panel Vans for Contractors
3-4 Car movements for Site Management and Visitors
2-3 Articulated Delivery Vehicle
4-6 Rigid Delivery Vehicles

Phase 3 – Plot Construction (to completion – daily movements)
15-20 Van & Car Movements for various trades
2-3 Rigid Delivery Vehicles
3-4 Car movements for Site Management and Visitors

The above are only estimates as to likely movements and these may go up and down with the site activities, and are intended as a guide only. The deliveries and movements will generally be in line with the size of the development.

Suitable turning areas will be provided for these delivery vehicles with a banksman in operation to provide safe access and egress. The turning area will be provided within the confines of the proposed highway infrastructure which will be installed at the early onset of the development.

Deliveries will be controlled between the times of 9am and 3pm.

#### Vehicle Parking

A contractors compound will be set up within the confines of the site boundary. The details of the Contractors Compound, storage areas and car parking arrangement for the Contractors employees and visitors will be advised during the placing of orders and site instructions. Signage will be in place on internal site road advising visitors of the compound and it will be the only on-site parking available, other than those designated by the management team.

The appended site plan shows the location of parking and compound. This will be displayed within the site office. All contractors and visitors to the site will be made aware of the Environment Policy (CEMP); and any construction company specific environmental policies.

The project manager will be responsible for monitoring communications between all relevant parties and to ensure there is sufficient parking available within the site. The site manager will ensure there is no parking on the surrounding residential estate roads.

#### Loading & Unloading of Plant and Materials

Construction Traffic Management will be controlled though early implementation of traffic routes, a Site Traffic Management Plan is appended and through close liaison with the contractors this will be revised to suit site operation, with the site manager giving the contractors clear information on travel restrictions, access routes etc.

All signage directing those visiting to marking deliveries to the site relating to the construction process will be in place prior to commercial traffic visiting the site and will remain in-situ until the completion of construction works associated with the development.

In addition the Traffic Management Plan will address the controls on arrival and departure times for construction vehicles. It will be the responsibility of the Site Manager to advertise the procedures and best practices to all visitors to the site.

All plant should come to the site with a current and up to date record of service and an annual inspection sheet. An on-site weekly inspection will be carried out by the Site Manager to all operated plant and recorded. All plant maintenance is to take place in the site compound only. Refuelling of all plant is to take place in the compound and drip trays area to be employed during the fuelling process.

Where materials which are delivered are not going to be used immediately within the construction process they will be transferred from the delivery vehicle to the designated storage facility.

#### Storage of Plant and Materials

All plant and associated materials will be stored in a safe and secure manner at all times to prevent uncontrolled movement or migration in inclement weather and to prevent attempted theft.

Hazardous materials will be stored in a secure area away from water courses or drainage.

Suitable spill kits, relevant to materials being stored will be held within the storage area and will be used to contain any spills at source.

Any spills that create an environmental issue will be reported immediately to the Environment Agency and all measures to prevent contamination will be undertaken including isolation of the contamination, treatment of the contamination as directed by the Environment Agency.

Any persons failing to adhere to the correct procedures will be stopped from working the management of which is the responsibility of the Site Manager.

#### Wheel Washing & Road Cleaning

The site management team will implement measures to prevent mud & debris being taken onto areas adjacent to the project site and the public highway.

The measures implemented will be appropriate to the location of the construction work and the degree of mud and debris being produced. Traditionally, wheel washing involves significant water supply, proving unsustainable. It has been proven that the early construction of the road network is much more sustainable. Therefore, jet wash & brushes

(with consideration of containment of surface water run-off) will be used throughout the phasing of development to accord with the provision of the roads.

The surface water runoff from these activities will be managed on site and ensured that it does not enter the public highway or drain into any highway gullies. Once major roads are constructed of hard standing, the use of road sweepers will be employed, when deemed necessary.

## Section 5 - Health & Safety, Site Monitoring and Liaison

#### On Site: Heath & Safety and Monitoring

The site management team will continuously monitor the site activities to ensure that all contractors and operatives on site are observing the health, safety & environmental arrangements in place for the project.

The Company's Safety Advisors will visit site on a regular basis to inspect, advise, comment and report on conditions prevailing at that time. Special visits will also be made as necessary.

The Company will hold periodic management meetings on site to ensure continuous compliance with the health, safety & environmental arrangements in place for the project. These meetings will be open to all contractors and operatives on site, in order that they may offer advice on any matter relating to health and safety.

The site management team will monitor the site on a daily basis and will ensure that the statutory and company requirements are enforced and that all statutory inspections are carried out and recorded.

The Construction Director and Contracts Manager will visit the project site regularly to review progress and ensure that the company's health and safety policy and procedures are being implemented accordingly.

All sub-contract companies carrying out construction work on this site will have been assessed prior to their appointment, in respect of their attitudes to Health & Safety, their Health and Safety Policy and their historic performance over the past three years. Only those sub-contract companies who satisfy the standard considered to be appropriate by The Developers will be employed.

#### On Site: Liaison

The Company will hold periodic meetings on site, including tool box talks, to ensure continuous liaison between the various contractors. These meetings will be open to all contractors and operatives on site, in order that they may offer and receive information and advice on any matter relating to the coordination of the works.

#### External Liaison

The scheme particularly promotes active liaison between the developer and local residents via both the site manager – on day-to-day activities, and the Regional Office for advising events such as commencement, etc.

As such, The Developer is committed – as standard practice – to undertake active liaison with adjoining properties. Initial contact will be made via letter to the neighbouring properties, giving advance warning of key activities such as demolition works, implementation of the approved scheme, build programme and contact details for the Site Manager.

The Developers' standard practice is for the Site Manager to provide the initial contact point with regards to the day-to-day operations of site related activities.

## Section 6 – Noise

Measures will be taken to minimise the effect and level of noise generated on site.

Typical measures to be considered include:

- Erection of semi-permanent boundary fencing between the development and the existing residential dwellings in the early stages of setting up the site;
- Consideration of the location of the site set up arrangements (brick store, parking etc);
- Detailed appraisal of the noise levels generated by plant and equipment proposed for work on site. Selection of equipment that generates minimal noise levels;
- Use of plant and equipment that is well maintained and in good order;
- Consideration of noisier works in relation to working hours on site, the overall duration of such works and the possibility of phasing the works; and,
- Effective liaison with adjoining properties to provide information on future operations, which create noise, and to give timescales for the duration of such works.

In addition to the measures to be considered at the pre-planning stage for the project site, the site management team will monitor work activities on an on-going basis, with noise & vibration levels being part of the overall monitoring process.

Prior to commencement of construction, a summarising programme of activities will be submitted to surrounding affected properties.

During construction, contact should be made with the relevant site personnel as follows;

Cotswold Oak Ltd SITE MANAGER . Tel . TBC

## Section 7 – Dust Controls

The following areas of activity have been identified as having the potential to create dust during works on The Developers development:

- Earthworks
- Construction traffic
- Waste transfer & movement

### **Earthworks**

The only works where any form of significant excavation of earth is required will be for the road construction, below ground drainage and formation of foundations.

The management team will monitor the works detailed above as a part of their overall monitoring of the project site. Dampening of soil by water will be undertaken if wind & weather conditions are such that soil is being carried by the wind.

#### Construction traffic

The Regional management team will implement measures to prevent mud & debris being taken onto areas adjacent to the project site and the public highway.

The measures implemented will be appropriate to the location of the construction work and the degree of mud and debris being produced. Typical examples include the construction of hard standings, the use of jet wash and brush (with consideration of containment of surface water run off) and the use of road sweepers.

All vehicles carrying loose granular loads will be required to arrive and leave with a sheeted cargo area. Such deliveries will be off loaded, wherever practicable, in the area they are required to prevent excessive movement & handling.

#### Waste transfer and movement

As part of the forthcoming requirement for Site Waste Management Plans, The Developers are evaluating current practices on site and assessing ways in which waste produced can be either recycled (e.g. use of damaged bricks as a fill material) or minimised (through detailed scheduling of materials required).

Waste produced on site is typically solid material (e.g. timber off cuts, plasterboards off cuts etc) that is put into a mini-tipping skip at the plot for transferring to a large skip located centrally to the plots under construction.

Skip lorries removing full skips from site will be required to sheet the load which will reduce the chance of dust and debris being released during transit from the project site.

#### Wheel Wash

A Jet Wash Facility will be permanently available during the construction process, employed as necessary by site personnel as follows;

During Winter Months – To remove mud.

During Summer Months – To damp down dust.

## Section 8 – Project Compound Arrangements

The Developers site compound layout is implemented where practicable on all project sites.

Site size, numbers of workers, volume of plots under construction at any point, site restrictions and utility supply issues can cause the design to have to be amended to suit site's specific requirements.

The Developers site compounds will be enclosed with a hoarded perimeter decorated to the corporate identity. The compound will house (as a minimum):

- A portakabin type stackable site management team office;
- A portakabin type canteen with facilities to warm food, prepare drinks & take breaks;
- A drying room (typically incorporated at one end of the canteen);
- A toilet block (with hot & cold running water);
- Storage cabins for valuable & easily damaged items; and
- Timber rack/store.

The site office will typically be stacked on top of the canteen building, with an external staircase installed for access.

A hard standing area will be created which will form the car parking for workers on site. This facility will assist the site management team in ensuring that workers on site do not park on existing estate roads surrounding the site.

An enclosed bulk store/compound for bricks, blocks and other heavy/bulk items will also be established within the project site. It's positioning will consider the location of the existing residential dwellings.

## Section 9 – Drainage & Contamination (during the construction process)

The two elements of drainage requirements for The Developers during the construction of the development are surface/ground water and foul drainage.

#### Surface/ground water

Measures will be taken to ensure that no contaminated surface water or other liquids or solids, which could cause harm to the environment, are deposited into the surface water storage to the site or surrounding areas.

The Developers Environmental Procedures Manual will be consulted for practical answers regarding silt run off, requirements for fuel storage & re-fuelling etc.

Regular road cleaning will also form part of the procedures to prevent contamination of surface water leaving the development.

#### Foul Drainage

The welfare facilities installed for the workers on the Developers development will initially be connected to a foul drainage storage tank, which will be emptied as required.

Once the foul drainage system for the Developers development is established and has been tested, the welfare facilities will be connected into this system.

#### **Contamination**

Any contamination encountered on-site, other than those raised in the soil survey report, will be identified and geotechnical analysis undertaken to determine treatment and decontamination regime. LPA to approve scheme prior to these works being undertaken.

## Section 10 – Signage (directional & safety)

#### **Directional Signage**

The Developers will ensure that directional signage is positioned giving clear instructions for both potential sales customers and construction traffic.

In addition to directional signage for the Developers development, any existing roads adjoining the development area, which have been designated as not permitting construction traffic, would have clear prohibition signage displayed.

The suitability and effectiveness of the directional signage will be reviewed on a regular basis both by the site management team and by The Developers senior management team at meetings with other developers at the site.

#### Safety Signage

The Developers will install appropriate levels of safety signage throughout their development and around the perimeter.

A multi signboard will be erected at each access/egress point to the Developers development.

### Section 11 – Tree Protection

The trees around the boundaries that will be kept will be provided tree protection fencing throughout the construction phase of the development. This will typically include Heras style fencing panels fixed to a scaffold framework clearly signed creating an exclusion zone to both plant and operatives alike.