



Baytree Lane Middleton M24 2UL

Construction Environmental Management Plan

Client;

First Choice Homes Oldham

First Place

22 Union Street

Oldham

OL1 1BE

Principal Contractor;

J Walker Homes Ltd

35 Joshua Lane

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Quality Assurance

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1.0 Introduction

1.1 Background

The construction environmental plan (CEMP) has been produced by J Walker Homes and issued to develop a parcel of land off Baytree Lane hereby referred to as “the site”

This CEMP relates to the site works that J Walker Homes will undertake as principal contractor for this development.

1.2 Proposed development

The site is to comprise of 5 houses with associated infrastructure works. The buildings are all proposed for residential use and do not exceed 3 storey in height.

1.3 The site

The site is located on Baytree Lane. The site currently consists of an open area. The site is bordered by residential properties to the North, South and West boundaries.

1.4 Purpose

The planning conditions associated with the planning consent granted 24/00306/FUL for this development requires the client to produce information to discharge this specific condition. This document forms part of that implementation process.

1.5 Applicable environmental legislation

- Control of pollution act (COPA) 1974
- Clean air acts 1993
- The health and safety at work act 1974
- The highways act 1980
- The road traffic regulation act 1984
- Water resources act 1991
- The environmental protection act 1990

2.0 Scope of the CEMP

This CEMP defines responsibilities and methods during the remediation, earthworks and construction phase of this development to manage potential impacts on the environmental and nearby sensitive dwellings

Although the CEMP is prescriptive towards human health, pollution & working hours it is considered pertinent to consider other applicable issues in addition to the prescribed issues set out in the planning conditions, accordingly. The CEMP also addresses the following issues associated with the development;

- Noise and vibration
- Dust emissions
- Archaeology and cultural heritage
- Visual impact
- Ecology
- Water pollution
- Waste management
- Contaminated land
- Construction traffic management
- Lighting
- Community responsibility

3.0 Construction Management Plan

3.1 Roles, responsibilities and reporting.

During the remediation and earthworks phase J Walker Homes will act as principal contractor. The principal contractor is responsible for;

- Implementing the CEMP
- Monitoring sub-contractor's performance to the CEMP
- Developing and implementing mechanisms for dealing with problems and acting as point of contact for consultation and feedback with adjacent landowners, statutory consultees the public and other interested parties.

The principal contractor would be responsible for establishing management procedures for compliance with.

- All relevant legislation (see section 1.5)
- The environmental controls and mitigation measures contained in the CEMP, and any environmental or other codes of conduct required by the applicant.

J Walker Homes site managers will be responsible for the co-ordination and implementing of this CEMP and would assist in ensuring that the principal contractor's CEMP are met.

The client may appoint an independent environmental compliance manager (ECM) to undertake regular environmental inspections to audit compliance of the principal contractors and sub-contractors with the CEMP and to undertake general inspection of the site conditions.

If required the ECM would submit progress reports to the client following site inspections to provide continuous feedback on environmental performance at the site.

3.2 Environmental management principles

Environmental management issues throughout the life of the development will be governed or guided by the following standards, including

- Those contained in legislation (see section 1.5)
- Those established by industry codes of practice (see section 1.5)
- Those that are specific to commitments made during consultation and measures as may be set out in conditions or in other consents.

3.3 External communications

The principal contractor would be responsible for formal external communications particularly those with statutory consultees. The main consultees likely to be involved would include;

- Rochdale Council
- Environmental agency's
- Health and Safety Executive
- Other stakeholders/Client.

The principal contractor and their sub-contractors would therefore be required to attend meetings as appropriate.

A complaints procedure will be established whereby any complaints would be made direct to the principal contractors' project supervisor, details of a telephone number and contact details will be made available to all potential complainants and other interested parties. Details of the complaint its source, its location and the date and time will be recorded in line with the complaints procedures detailed in the site managers site records.

Complaints will be investigated by the site manager (and if required by the ECM), as appropriate. Appropriate action will be taken where necessary, and records of all such complaints and actions will be maintained on-site.

3.4 Training

All site personnel including contractors and sub-contractors would be made aware of their responsibilities with respect to the CEMP, and its appropriate implementation. As part of the implementation of the CEMP the site induction programme will ensure that all site personnel are conversant with

- The CEMP and its on-site implementations
- The environmental sensitivities of the site, particularly in respect of nearby receptors

3.5 Monitoring

The site manager will monitor the environmental effects of the construction phase on a daily basis this would;

- Evaluate the effectiveness of environmental mitigation and identify environmental problems and appropriate responses at an early stage.
- Ensure that the works are carried out in accordance with the provisions of the CEMP
- Identify and implement any environmental improvements that would contribute to the overall environmental performance of the project.

J Walker Homes also undertake monthly health and safety and environmental audits by the contracts manager which covers the environmental issues addressed in this CEMP. Where any non-conformances are identified these will be rectified in line with non-conformance, corrective and preventative action procedures.

4.0 General Code of Construction

4.1 Noise and vibration

Noise

The closest noise sensitive receptors to the site have been identified as;

1. The residential dwellings to the North, South and West.

In the absence of construction noise level criteria being stipulated by Rochdale Council, J Walker Homes will adopt the measures and good practices stipulated within BS 5228-1:2009+A1:2014. These guidelines will be reinforced to site operatives via the site agent at the appropriate induction/"tool box" talks to ensure the development complies throughout the construction period.

Where particularly noisy works have been identified as required (for example, if ground conditions determine particular plant requirements, or for necessary out of hours working) suitable and adequate notification is to

be given to those likely to be effected in the form of a letter drop. Contact information is to be provided of the relevant personnel for any concerns and/or complaints to be made and addressed.

The following general mitigation measures would apply to potentially noisy operations, in particular;

- All plant and equipment to be used for the works would be properly maintained, silenced where appropriate, and operated to prevent excessive noise.
- Vehicle and mechanical plant working at the site will be fitted with effective exhaust silencers.
- All equipment on the site will be maintained in good working order to reduce extraneous noises, such as breaking and squeaking.
- Equipment which is used intermittently will be shut down or throttled down during the periods when not in use, this includes stationary vehicles.
- Noisy plant would be sited as far as is practicable from noise sensitive receptors including adjoining residential properties, and ecological receptors within and adjoining the site
- On site cutting and hammering will be kept to a minimum as much as practically possible.
- Where reasonably practicable, purpose made acoustic screens (i.e. for loading rubble) or enclosures (i.e. for pumps, generators, compressors etc.) will be used around noisy plant and activities.
- All construction activities will be undertaken using “best practical means” as defined in BS 5228-1:2009+A1:2014.
- The working hours detailed in the planning permission should be adhered to as these are outside of sensitive hours at residential dwellings
- Care would be taken when loading or unloading vehicles or dismantling scaffolding or moving materials etc. to reduce noise.
- Good community liaison should be maintained, noise levels are more tolerable if they are expected. Letter drops should be completed to residents likely to be effected giving adequate warning of the works and relevant timescales.
- Letter drops are to contain contact information of the relevant personnel that the recipient is to contact if any concerns and/or complaints arise.

Vibration

In the absence of any construction vibration levels criteria being stipulated by Rochdale Council the effects of construction vibration on building structures associated with the construction works is expected to be negligible.

J Walker Homes will adopt the measures and good practices stipulated within BS 5228-2:2009+A1:2014. These guidelines will be reinforced to site operatives via the site agent at the appropriate induction/"tool box" talks to ensure the development complies throughout the construction period.

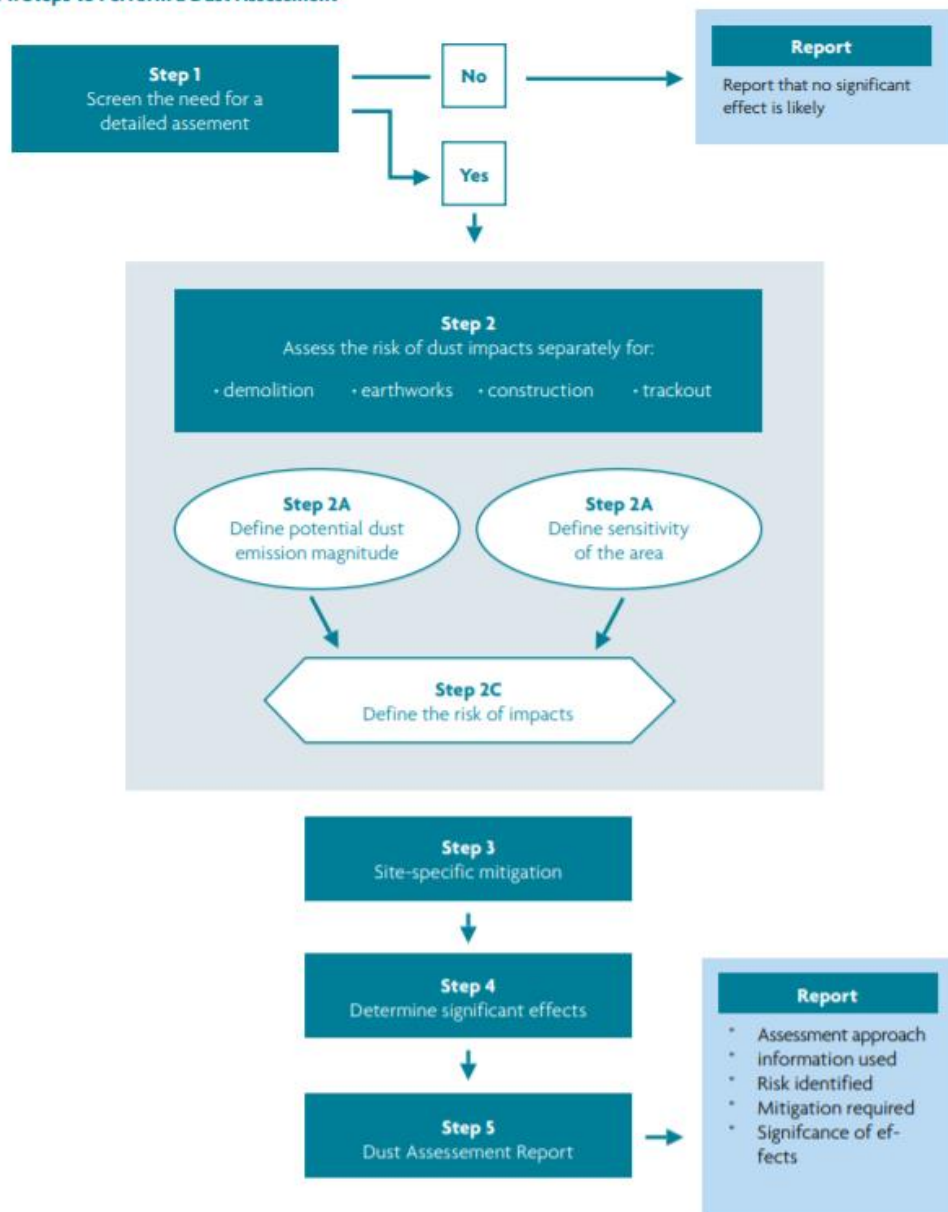
It is possible to employ a number of physical and operational measures in order to reduce the potential effects resulting from construction generated vibration, such measures may include;

- Where reasonably practicable, plant and/or methods of work causing significant levels of vibration at sensitive premises should be replaced by other less intrusive, plant and/or methods of working.
- Working during the site hours only local residents are less at risk from disturbance during the day when local residents are at work.
- All plant should be properly maintained, any defective plant should be replaced immediately.
- Good community liaison should be maintained, vibration levels are more tolerable if they are expected. Letter drops should be completed to residents likely to be effected giving adequate warning of the works and relevant timescales.
- Letter drops are to contain contact information of the relevant personnel that the recipient is to contact if any concerns and/or complaints arise.
- Where processes could potentially give rise to significant levels of vibration or as a result of nearby complaints, on-site vibration levels should be monitored by suitably qualified person on/or near to the site boundary.
- The provision of cut-off trenches in order to interrupt the direct transmission path of vibration.

4.2 Dust emissions

During the construction phase, the primary mitigation to alleviate dust effects from construction activities will be through a daily inspection of the site conditions by the site manager. The following guide extracted from The Institute of Air Quality Management (IAQM) is to be adopted and used to determine the level of site specific mitigation that should be applied:-

Figure 1: Steps to Perform a Dust Assessment



In addition to the above, the following practices will also be implemented as standard throughout the construction phase of the development:-

- Site levels have been designed so cut/fill figures minimise the volume of materials required for off-site disposal and consequently a reduction in wagon movements.

- Site roads will be swept and sprayed with water to prevent dust causing nuisance off site.
- Roads around the site will be inspected on a regular basis for accumulations of dust and mud. All such accumulations will be removed as soon as possible after they have been identified.
- No fires would be allowed on site.
- Where reasonably practicable, potentially dusty activities would be located away from site boundaries.
- Soil/clay stockpiles will be “sealed” using back of excavator bucket.
- Vehicles carrying materials to and from the site would be adequately and securely sheeted
- All vehicles leaving the site will, where necessary be subjected to wheel washing procedure to limit the deposition of mud and dust from the site on off-site road.
- All non-road mobile machinery would use fuel equivalent to ultra-low sulphur diesel and all would comply with current EU emission standards.
- All mobile plant allowed on site would be managed in such a way as to minimise emissions including being switched off when not in use and being located as far as practicable away from site boundaries’.

4.3 Archaeology and Cultural Heritage

Not applicable for this site.

4.4 Visual impact

Contractor’s compounds and areas for material storage areas will be located within the allocated development area. The locations within the development area will be chosen with due regard as to recognise the sensitivity of the outlook from nearby residential dwellings.

4.5 Ecology

No specific ecological issues have been identified.

4.6 Water pollution

General Site Measures.

No water receptors or watercourses have been identified with the site or close to boundaries.

Site managers will observe principals detailed within environment agency document “working at construction and demolition sites PPG6”, pollution prevention guidelines.

As matters of best practice all fuel tanks will be double bund to reduce the risk of spillage to groundwater. Spill kits will be provided and all generators will require a spill tray underneath them.

Waste fuels, oils and chemicals will be disposed of via a registered waste disposal contractor. Spill response equipment in the form of spill kits will be retained on site in a place close to the fuelling area, clearly marked and known to all site staff.

4.7 Waste

As part of the remediation levels design all of the soils contained within the site are expected to be maintained and recycled to form the new development platform. For any surplus soils that do require off-site disposal, consideration must be given to the previous geo-environmental site investigation reports with respect to levels of contamination prior to disposal.

General waste, deleterious material, site waste with welfare use, tree roots and any unexpected hazardous materials are likely categories of waste to be encountered which require off-site disposal.

Should any hazardous waste be encountered the principal contractor will ensure the site is registered as a hazardous waste producer.

4.8 Contaminated land

A full geo-environmental site investigation has been undertaken by GeoAssist Consulting Engineers with respect to the land at the development site. No Contamination was identified, but in the event groundwater or gas contamination are encountered then development shall cease until a report detailing what measures, if any, are required to remediate the land (remediation strategy) is submitted to and approved in writing by the council as local planning authority and the development shall be carried out in accordance with the agreed remediation strategy.

4.9 Construction traffic management

Closures and diversions may be required during construction phase.

It is not anticipated that any permanent road closures and diversions are required during the construction phase but all agreements and permits will be in place prior to any road closures being required

Vehicle movements and exits/entrance to site

As detailed in section 4.1 wagon/haulage movements are expected to be kept to a minimum during the recommendation phase of work due to low requirements for soils disposal and soil import. Site traffic movements are likely to be limited to site vehicles and deliveries of plant and machinery.

The construction traffic into the site during peak hours will be minimised to reduce the impact on the traffic congestion on local roads.

Protection of adopted Roads.

The vehicles delivering materials and plant and removing waste from the site during construction would all be operated within their design loads, therefore the maximum pressure exerted by vehicles on roads would not be excessive.

Plans of all utilities in the vicinity of the site would be held at the site office.

It is not anticipated that the ground pressure of construction vehicles would be so great as to damage services beneath public roads.

4.10 Lighting

Lighting issues are not envisaged as works are limited to daylight hours only and no large hoardings are to be erected during any phase of the works.

4.11 Community responsibility

J Walker Homes will liaise with local resident groups if required should issues arise. J Walker Homes will make available to the general public details of the following;

- Details of the site manager, including contact number
- Details of out of hours contact telephone numbers in the event of an emergency.

Appendix A

Glossary of Acoustic Terminology

Noise

Noise is defined as unwanted sound. Human ears are able to respond to sound in the frequency range 20Hz (deep bass) to 20,000Hz (high treble) and over the audible range of 0 dB (the threshold of perception) to 140db (the threshold of pain). The ear does not respond equally to different frequencies of the same magnitude, but is more responsive to mid-frequencies than to lower or higher frequencies. To quantify noise in a manner that approximates the response of the human ear a weighting mechanism is used. This reduces the importance of lower and higher frequencies, in a similar manner to the human ear.

Furthermore, the perception of noise may be determined by a number of other factors, which may not necessarily be acoustic. In general, the impact of the noise depends upon its level, the margin by which it exceeds the background level, its character and its variation over a given period of time. In some cases, the time of day and other acoustic features such as tonality or impulsiveness may be important, and may the disposition of the affected individual. Any assessment of noise should give due consideration to all of these factors when assessing the significance of a noise source.

The most widely used weighting mechanism that best corresponds to the response of the human ear is the 'A' weighting scale. This is widely used for environmental noise measurement and the levels are denoted as dB(A) or LAeq, LA90 etc. according to the parameter being measured.

The decibel scale is logarithmic rather than linear, and hence a 3dB increase in sound level represents a doubling of the sound energy present. Judgement of sound is subjective, but as a general guide 10dB (A) increase can be taken to represent a doubling of loudness, whilst an increase in the order of 3 dB (A) is generally regarded as the minimum difference needed to perceive a change under normal listening conditions.

An indication of the range of sound levels commonly found in the environment is given in the following table

Typical sound levels found in the environment

Sound level	Location
0dB (A)	Threshold of hearing
20 to 30dB (A)	Quiet bedroom at night
30 to 40 dB (A)	Living room during the day
40 to 50 dB (A)	Typical office
50 to 60 dB (A)	Inside a car
60 to 70 dB (A)	Typical high street
70 to 90 dB (A)	Inside a factory
100 to 110 dB (A)	Burglar alarm at 1m away
110 to 130 dB (A)	Jet aircraft on take off
140 dB (A)	Threshold of pain

Acoustic terminology

dB (decibel)	The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure ($2 \times 10^{-5} \text{Pa}$)
dB (A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
LAeq, T	LAeq is defined as the notional steady sound level which, over a period of time(T) would contain the same amount of acoustical energy as the A- weighted fluctuating sound measured over that period.
LAmaz	LAmaz is the maximum A-weighted sound pressure level recorded over the period stated. LAmaz is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little or no effect on the overall Leq noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response
L10 & L90	If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The Ln indices are used for this purpose, and the term refers to the level exceeded for n% of the time, hence L10 is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L90 is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the L10 index to describe traffic noise.
Free field level	A sound field determined at a point away from reflective surfaces other than the ground with no significant contributions due to sound from other reflective surfaces. Generally, as measured outside and away from buildings.
Fast	A time weighting used in the root mean square section of a sound level meter with a 125millisecond time constant.
Slow	A time weighting used in the root mean square section of a sound level meter with a 1000millisecond time constant.
BS4142:1997	The British standard describes a method of determining the level of a noise of an industrial nature, together with procedures for assessing whether the noise in question is likely to give rise to complaints from persons living in the vicinity.

