

# Learning from the past, building for the future



# A&J STEPHEN (BUILDERS) LTD ENVIRONMENTAL MANAGEMENT PLAN PHASE 1, SITE B, FARQUHARSON STREET

#### **CHAPELTON OF ELSICK**

A & J Stephen (Builders) Ltd Environmental Management Plan

#### Contents

#### 1. Introduction and Purpose

A & J Stephen (Builders) Ltd is proposing to develop the second tranche of Site B of the first phase of the new housing development at Chapelton of Elsick in conjunction with the Elsick Development Company (EDC) and two other house builders (Refer to the attached plans in Appendix A). Planning Condition No. 18 of the planning consent for this development requires A & J Stephen (Builders) Ltd to submit an Environmental Management Plan (EMP) for their phase of the site. Condition no. 18 states:

"Prior to the commencement of development on each phase, a full site specific environmental management plan (EMP) must be submitted for the written approval of the Planning Authority, in consultation with SEPA and any other relevant agency, and all work shall be carried out in accordance with the approved plan."

A & J Stephen (Builders) Ltd has provided the EMP to satisfy condition No. 18 and as a contractual requirement of their construction contract with EDC. It covers the management of their activities and those of any sub-contractor working under A & J Stephen (Builders) Ltd control. The EMP defines the minimum requirements that have to be met.

#### 2. Scope of the EMP

The EMP addresses issues associated with the following planning conditions:

Trees marked for retention (condition 6)

Bio-diversity (condition 7)

Archaeology (condition 8)

Contaminated land (condition 9)

Bats (condition 10)

Badgers (condition 11)

Soil audit (condition 13)

Surface water drainage system (condition 15)

Site Waste (condition 16 & 17)

Noise & Vibration (condition 25 & 36)

Working Hours (condition 26)

Construction Method Statement (condition 31)

A number of the planning conditions associated with the planning consent are required to investigate the environmental impact of construction or identify areas of

the site that have to be protected. These conditions have been included their appropriate section of this document.

#### 3. The EMP Requirements

#### 3.1 Trees marked for retention.

#### **Relevant Planning Condition**

Condition 6 – "That no work within a given phase of the development hereby approved shall take place unless the trees marked for retention on the approved plans have been protected by suitable fencing in accordance with BS5837 2012 (Trees in Relation to Construction etc). No works shall commence for that phase unless details of the protective fencing have been submitted to and agreed in writing by the Planning Authority. No materials, supplies, plant, machinery, soil heaps, changes in ground levels or construction activities shall be permitted within the protected areas without the written consent of the Planning Authority and no fire shall be lit in the position where the flames could extend to within 5 metres of foliage, branches or trunks."

There are no trees affected by the first phase of our house construction.

#### 3.2 Bio-diversity

#### Relevant Planning Condition

Condition 7 – "Prior to occupation of works within a given phase of the development hereby approved a Bio-diversity Action plan for that phase shall be submitted to and approved in writing by the Planning Authority. The scheme shall be based on the approved detailed habitat, hydrological and ecological studies. The management proposals for each phase shall be carried out in complete accordance with the approved scheme."

Refer to the recommendations in Chapelton of Elsick, Environmental Impact Assessment, Technical Annex 6 for ecology and bio-diversity.

#### 3.3 Archaeology

#### **Relevant Planning Condition**

Condition 8 – "No works shall take place within the development site, on any phase of development, until the developer has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted by the applicant, agreed by the Aberdeenshire Council Archaeology Service, and approved by the Planning Authority. Thereafter the developer shall ensure that the programme of archaeological works is fully implemented in accordance with any agreed phasing strategy and that all recording and recovery of archaeological resources within the development site is undertaken to the satisfaction of the Planning Authority in agreement with the Council's Archaeology Service."

Refer to the recommendations in Chapelton of Elsick, Written Scheme of Investigation and Data Structure Report for Archaeology.

#### 3.4 Contaminated Land

**Relevant Planning Condition** 

Condition 9 – "Before commencement of any development within a relevant phase other than the demolition of any existing building:

- a) An investigation of the site shall be undertaken in accordance with BS 10175:2011 'Investigation of Potentially Contaminated Sites Code of Practice' and a report shall be submitted for the consideration and written approval of the Planning Authority.
- b) Where it is determined by the site investigation report that remediation of the site is required an appropriate remediation scheme shall also be submitted and approved in writing by the Planning Authority. The approved scheme of remediation for that phase shall be carried out, in its entirety, before the development in that phase is occupied. Any areas of hardstanding within the application site boundary which are used as part of the agreed remediation scheme shall be retained as such in perpetuity. No disturbance to such areas shall take place without the further written agreement of the Planning Authority in consultation with Environmental Health."

Refer to the recommendations in Fairhurst's Phase 1a Geo-environmental Interpretative Report dated April 2013, Issue 2 (28/10/13). No Contaminants were identified above recognised thresholds and no ground gas defence system is necessary. However, stage 1 radon protection measures are required.

#### 3.5 Bats

#### **Relevant Planning Condition**

Condition 10 – "Unless otherwise agreed in writing no development shall take place in the relevant phase unless the mitigation measures set out in the approved Bat Survey and Draft Licence have been carried out in their entirety. Furthermore, prior to the felling of any trees within the site a licenced bat surveyor should be employed to ensure that no bats are roosting within the trees."

Refer to the recommendations in Chapelton of Elsick, Environmental Impact Assessment, Technical Annex 6, section 6 for bats. This phase of housing does not involve any works that could impact on the protected species, therefore no action is required.

#### 3.6 Badgers

#### **Relevant Planning Condition**

Condition 11 – "Unless otherwise agreed in writing by the planning Authority, in consultation with SNH, no development shall take place unless in the relevant phase the mitigation measures set out in the approved Badger Protection Plan have been carried out in their entirety."

Refer to the recommendations in Chapelton of Elsick, Environmental Impact Assessment, Technical Annex 6, section 7 for badgers. This phase of housing does not involve any works that could impact on the protected species, therefore no action is required.

#### 3.7 Soil Conservation

#### **Relevant Planning Condition**

Condition 12 – "The areas delineated in green lines and identified as indicative only on drawing number 859-200-R are excluded from this permission and no development shall take place until such time as a separate planning application is submitted to and approved by the planning Authority."

Refer to the recommendations in Chapelton of Elsick, Soil Audit. No carbon rich soils were found in the site investigation.

#### 3.8 Surface Water Drainage System

#### Relevant Planning Condition

Condition 15 – "Unless otherwise agreed in writing the proposed surface water drainage system shall be carried out in accordance with the approved plans, and each phase of the development shall not be occupied unless its approved drainage system for that phase has been completed and certified as such by a qualified drainage engineer to the satisfaction of the Planning Authority and SEPA. Following provision of the drainage system it shall thereafter be maintained by the House Builder or their successors in accordance with the approved maintenance scheme. Certification (from an appropriately qualified professional) that the maintenance regime has been implemented shall be provided on an annual basis thereafter, or as otherwise agreed with the Planning Authority"

The surface water drainage system will be approved by both Scottish Water and Aberdeenshire Council.

3.8 Site Specific Construction Method Statement-Surface Water Runoff during Construction

#### **Relevant Planning Condition**

Condition 16 – "No works within a given phase of the development hereby approved shall commence unless a detailed site-specific construction method statement for that phase has been submitted to and approved in writing by the Planning Authority, in consultation with SEPA. The construction method statement shall include details of how surface water run-offs shall be addressed during construction as well as incorporating the principles of all proposed pollution prevention and mitigation measures including a Site Waste and Environmental Management Plan and details of the proposed routing of construction traffic.

The purpose of controlling surface water runoff during construction is to primarily prevent silt from entering the Pheppie Burn.

To reduce the impact of surface water runoff it is proposed to minimise the topsoil strip. This will allow unstripped areas to drain naturally. In addition, the amount of soil stockpiles will be minimised which will hopefully reduce the amount of silty water produced by the works. Due to the underlying soil conditions there are no known land drains that may be affected by the works. None of the trial pits carried out in the site investigation highlighted the presence of land drains, also no land drains have been discovered during sewer construction that has recently completed.

Refer to Appendix B and Fairhurst Drawing No. 105411-2001 Rev D for details of the surface water management strategy for the construction phase, agreed with SEPA.

Refer to section 3.9 with regards to site waste. Refer to section 3.10 with regards to the routing of construction traffic.

#### 3.9 Site Waste Management Plan

#### **Relevant Planning Condition**

Condition 16 & 17 – "No works within a given phase of the development hereby approved shall commence unless a detailed site-specific construction method statement for that phase has been submitted to and approved in writing by the Planning Authority, in consultation with SEPA. The construction method statement shall include details of how surface water run-offs shall be addressed during construction as well as incorporating the principles of all proposed pollution prevention and mitigation measures including a Site Waste and Environmental Management Plan and details of the proposed routing of construction traffic.

Prior to the commencement of any works in any phase of development, a site waste management plan shall be submitted for the written approval of the planning Authority, in consultation with SEPA, and all work shall be carried out in accordance with the approved plan."

The specific arrangements for collection and segregation of waste on this site will be as follows:

#### **General Building / Construction Materials**

General building waste materials will be collected in 16 yard steel skips as supplied by licensed contractors.

Separated wood waste will be collected in 16 yard steel skips as supplied by licensed contractors

All construction waste material will be removed from site in sheeted or netted steel skips to licensed tips by licensed contractors.

All site generated refuse is collected in separate wheely bins and uplifted regularly by licensed contractors. 1 No. Paper / Cardboard bin and 1 No. Food Waste bin.

#### Special Waste

Any oil or fluid waste collected during routine machine servicing will be returned to our mechanics workshop in Perth for specialist disposal.

Any contaminated cloths/ rags or absorbent mats are collected as above for specialist disposal.

Spent nail gun gas canisters will be collected centrally for controlled disposal by licensed contractors.

Any replaced tyres will be returned to the mechanics workshops for specialist disposal.

Paint / thinners, turps etc cement waste, Gyproc fillers etc will <u>not</u> be washed down into the drainage systems.

# Removal of Contaminated Land (Remediation)

There are no known ground contamination issues on this development which would require any remediation measures.

#### **Relevant Planning Condition**

Condition 31 – "No works within a given phase of the development hereby approved shall commence unless a detailed site-specific construction method statement for that phase has been submitted and approved in writing by the Planning Authority. The construction method statement shall comply with the approved construction method statement."

The following method statement describes how A & J Stephen (Builders) Ltd propose to construct the first phase of housing at Site B, Chapelton of Elsick. We will encourage our sub-contractors to take on board every aspect of our method statement to comply with Condition no. 31 of the Approved Planning Consent.

#### Site Set Up for Compound, Office & Welfare Facilities

AJS will set up a site compound to the west of Site B and plot no. 64 and to the south of Murray Street. The area allocated is approximately 30m x 80m. The compound will be formed in compacted hardcore and comprise an office, toilet, drying room, canteen, 2 steel storage containers, an oil tank and temporary generator until a permanent water, electricity supply and drainage point can be provided. Initially the welfare facility will comprise a self contained oasis unit. With regards to drainage all foul water discharge will connect to a cesspit which will be de-sludged regularly until the 31<sup>st</sup> of October 2014. Thereafter the foul water will discharge via the new foul water sewers and pumping station. All of the accommodation within the compound will be of modular construction, single storey (other than the office and canteen which may be two storey) and delivered via lorries.

#### On Site Employee Parking

Whilst AJS generally encourage employees and sub-contractors to use either company or public transport, wherever possible, this will prove difficult in the early stages of the new development. Unapproved parking on new spine roads will not be allowed. Provision will be made within the compound for essential on site parking only. We will ensure that there is sufficient parking on site including visitors during the construction phase.

#### **Construction Vehicle Movements/Deliveries**

Heavy goods vehicle movements during this first phase will be monitored closely and will comply with EDC's traffic management proposals highlighted on Brooks Murray architects drawing no. 859-DV-205-C. Management of the site logistics is key to the success of the project and will require our Site Manger to control and manage deliveries in a just in time principle. This will limit the amount of storage required with deliveries being booked in within 48 hours

prior to arrival on site. Materials and labour will be delivered to the site via the Causey Mounth from the south of the development along a dedicated haul road complete with directional signage. It is anticipated that EDC and all of the house builders will hold regular co-ordination meetings throughout the construction phase of the project to control and manage the site traffic effectively.

#### **Delivery Times**

AJS will adhere to the following key principles on each phase: normal working hours, set by Aberdeenshire Council are generally from 07.00am until 19.00pm Monday — Friday and from 7.00am to 12.00pm on Saturday with no working on Sundays. Deliveries should be expected at any time during the working day.

#### Vehicles Entering and Exiting the Site

The agreed location of the main access to the site is at the new roundabout to the west of the A90 at the entrance to Newtonhill. Due to the width and length of Greenlaw Road, it is not anticipated that there will be any congestion during the working day that could impact on the new house owners. Deliveries and labour will access the development where possible, outwith peak travel.

#### **Road Cleanliness**

During construction Greenlaw Road will be cleaned using a road sweeper to remove mud, stones and any other extraneous materials from the wheels and chassis of construction vehicles. This will ensure that such matter will be fully recovered and will ensure no soil material leaves the site and is deposited on the public highway or the Causey Mounth.

#### Site Waste Management

AJS are acutely aware of the effects that the disposal of waste can have on the environment and our policy is to reduce wastage in all possible areas. Section 3.9 deals with our site waste management.

#### <u>Public Relations/Complaints Procedures</u>

A designated employee will deal with all enquiries and complaints. Any complaints will be logged on-site, fully investigated and reported to EDC.

#### **Training**

All site personnel will be suitably trained and qualified. Specific training needs will be identified at the earliest opportunity. The site induction will include a general overview of environmental issues relating to the site and how they will be managed. Toolbox talks covering topics relating to site activities will be given to all site personnel at regular intervals.

#### Site Security and Public Safety

Heras fencing will be erected around the boundary of the site. The fencing will be relocated as the work proceeds. Safety is paramount in the construction industry and occupies a large part of our site management. As such, all necessary protection, fencing/hoarding will be put in place as and when required. Appropriate signage will be erected on the security fencing as a warning to the public.

#### **Dust Suppression Measures**

AJS acknowledges that dust and other air pollution from construction activities can impact greatly on the life of people working on and living close to our sites. We acknowledge that good management and the use of best practice can reduce emissions from our construction activities.

AJS as far as is reasonably practicable will suppress dust and reduce emissions, where practical, onsite to protect workers and others persons in the immediate vicinity of the development site from its effects. AJS will seek to develop a strategy at the planning stages of the development which will give consideration to:-

Undertaking assessments.

Notification of works to Local Authorities.

Ensuring that emission standards for all site vehicles are in line with the current standards.

Ensuring that there is no burning on any part of the site.

Identification and training of onsite staff responsible for pollution issues.

The Company will follow a hierarchy to control the emissions of dust and other emissions and reduce human exposure;

- 1. Prevention.
- 2. Suppression.
- 3. Containment.

The three principles are embedded in our management plan and are used in a way that is appropriate to the scale of a particular development and the potential exposure of site workers, residential neighbours and other susceptible receptors.

The potential for our construction site to impact on others is dependent on many factors which include the following:-

The location of existing properties in the immediate vicinity. Proximity of sensitive receptors.

The extent of any intended excavation.

The nature, location and size of both top-soil and sub-soil stockpiles and the length of time they are to be on site.

Occurrence and scale of dust generating activities including cutting, grinding and sawing.

Number and type of vehicles and plant required on site and travel distances. Potential for dirt or mud to be made airborne through vehicle movements. Weather conditions.

One of these factors may be the cause of increased or prolonged impact and through our own experience we will provide the knowledge required to judge the likely impact of each activity and adopt a revised/modified method of work to reduce emissions from construction activities.

Please note there is no demolition to take place on site and there should not be a requirement for any crusher or screener.

#### **Site Mitigation Measures**

#### Site Planning

No bonfires.

Machinery and dust generating activities shall be located as far away from sensitive receptors as is practicably possible.

Locate surplus stockpiles of topsoil and subsoil as far away from sensitive receptors as is practicably possible.

Seal or vegetate the surface of each stockpile depending upon the distance to a sensitive receptor.

Identify a responsible person in charge.

Apply a hardcore surface to the haul road immediately adjacent to the housing.

#### **Construction Traffic**

All vehicles to switch off engines when possible. No idling vehicles.

Effective vehicle cleaning on leaving the site.

All loads entering and leaving the site to be covered, where appropriate.

No site run-off of water or mud.

All non-road mobile machinery to use low sulphur diesel where available.

Effective cleaning of all site traffic routes and appropriate speed limits applied around the site, where necessary.

#### Site Activities

Minimise dust generating activities.

Suppress dust where applicable, if it assessed that it is likely to become a problem.

Provide an inventory and timetable of all dust generating activities. Due to their being a lack of site presence over weekends appropriate actions will be implemented at the end of each working week to minimise wind uplift of dust. List all dust and emission control methods to be used.

Detail any fuel stored on site.

Prefabricate as many items as possible to minimise cutting, grinding and sawing on site.

#### Site Monitoring

If our best practices are followed correctly then the formation of dust and harmful emissions from our construction site will be minimised as much as possible. However, continuous site monitoring is essential to properly manage dust and emissions from our development.

#### **Relevant Planning Condition**

Conditions 25 & 36 – "Prior to the occupation of any non-residential units, details of any plant and equipment to be installed shall be submitted and approved in writing by the Planning Authority, in consultation with Environmental Health. Details are to include an assessment of noise impact on the nearest residential property. Where required by the Planning Authority details shall also be provided of mitigation measures proposed to reduce the potential for noise disturbance to adjoining residential properties arising from the operation of non-residential units. Units are to be operated in accordance with these measures.

Prior to the occupation of any non-residential units, details of the intended initial use class, and any plant and equipment to be installed shall be submitted and approved in writing by the Planning Authority, in consultation with Environmental Health. Details are to include an assessment of noise impact on the nearest residential property. Where required by the Planning Authority details shall also be provided of mitigation measures proposed to reduce the potential for noise disturbance to adjoining residential properties arising from the operation of non-residential units. Units are to be operated in accordance with these measures."

#### **General Noise Pollution Statement:**

The Company acknowledges that the degree of nuisance or damage caused by noise is related to the nature of the noise generated as well as its volume / frequency.

It is recognised that intermittent noise is more often disruptive than a continuous noise and high-pitched sounds are more disturbing than low frequency sounds.

The Company as far as is reasonably practicable will control noise generated on site to protect workers and other persons in the immediate vicinity of the development site from its effects.

The Company will undertake to notify adjoining properties and land owners, where appropriate, to advise on the practical measures to be employed by the Company during the construction phase of the works to reduce their exposure to noise pollution.

The Company will consider the following items whilst planning construction activities:

The design and layout of the properties and the equipment that will be required during the construction phase.

The location and siting of welfare accommodation and employee / visitor car parking.

Permissible working hours.

Noise levels emitted from construction plant, site vehicles, and site personnel.

Practical noise control measures.

Plant vibration.

Reverberation of noise.

Plant maintenance and servicing requirements.

The Company will where practical, reduce noise levels during construction phases by eliminating or reducing noise at its source.

The core working hours will be in accordance with condition no.26 of the planning consent.

On an infrequent basis, mechanical plant or material deliveries may be delivered and or uplifted out with the above time scales. Instances of this will be kept to the minimum.

As required, the Company will implement and manage effective engineering controls to reduce noise levels by ensuring that plant is well maintained and is operated with all casings in place and with effective exhaust mufflers, where applicable.

Any plant that fails to meet these requirements will immediately be taken out of use.

Through an effective purchasing policy, all hired in plant will be required to meet manufacturers printed instructions relative to noise emission levels.

Preference will be given to alternative plant / equipment which are fitted with acoustic covers, exhaust silencers (where applicable), fitted with noise absorbent engine mountings, to reduce noise generated by vibration.

Where practical, bulk stored materials will be positioned (where appropriate) to form an effective acoustic barrier / screen to surrounding properties.

Plant or equipment operating on the development site will be switched off when it is not in use.

Welfare accommodation and car parking will be positioned as remote as possible from adjoining property owners, all vehicles will be switched off when not in use.

All employees working on this development will receive a comprehensive site induction. As part of the induction process, noise and all necessary controls will be explained.

Competent site supervision will be manage, co-ordinate and control construction activities and contractors working on this development.

Refer to Appendix C for anticipated plant and tools noise levels.

#### 3.12 Working Hours

#### **Relevant Planning Condition**

Condition 26 – "Unless otherwise agreed in writing with the Planning Authority, during the construction of any phase of the development, the normal hours of operation for all activity audible at the boundary of the nearest noise sensitive premises shall be between 07.00 to 19.00 hours Monday to Friday; 07.00 to 12.00 hours on Saturday, with no working on Sundays."

The core working hours will be in accordance with condition No.26 of the planning consent.

# **APPENDIX A**

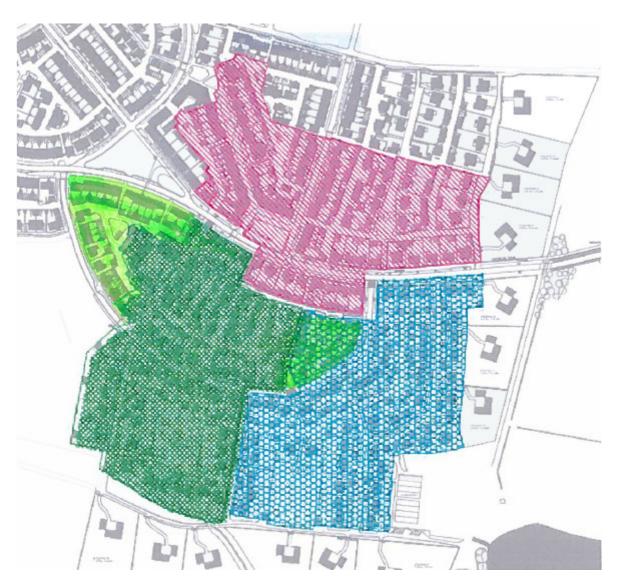
SITE A



SITE B



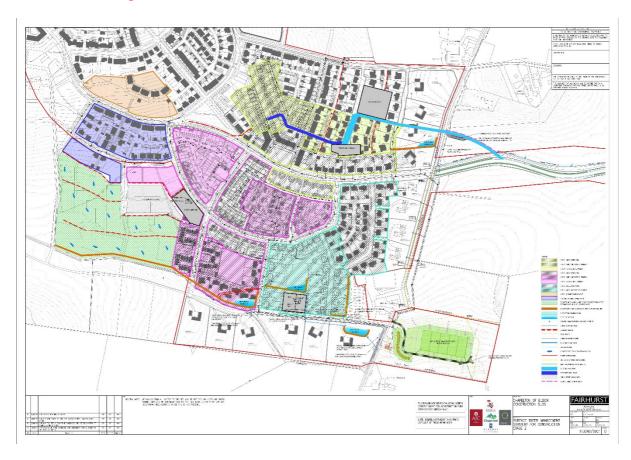
SITE C



Phase 1 Sites A, B & C

#### **APPENDIX B**

# Fairhurst Drawing No. 105411-2001 Rev D



#### **APPENDIX C**

Over the duration of the contracted works the following plant / equipment will be utilised.

Plant / Equipment Noise levels Frequency

Diesel Cement Mixers 98.7 DBA Regular daily use.

(Hatz Engine)

<u>Control Measures</u>: Machines only to be operated with the lids in the closed position. Equipment to be serviced and maintained in accordance with the manufacturers printed instructions. Use of this equipment to be restricted to mixing small quantities of concrete, and roughcasting base and top coats, small quantities of cement pointing material. Mixer positioning to be considered to avoid noise nuisance. Wherever possible mortar from cement silos to be utilised. This equipment will be turned off when not in use. Defective equipment will be taken out of service.

Vibrating Plates 104 DBA Approx. 2hrs intermittent use per plot.

<u>Control Measures</u>: This equipment is only used for short duration's i.e. approx. 20 mins per hour over max 2 day period per plot. Where ever possible preference will be given the use of vibrating double drum rollers. Machines will be serviced and maintained in accordance with the manufacturers printed instructions. Any defective machinery will immediately be taken out of service. This equipment will be switched off when not in use.

Sthil Disk Cutting Saw

113 DBA

Approx. 1.5hrs
intermittent
Use per plot.

<u>Control Measures</u>: This equipment is used frequently for very short durations in the external environment. All machines will be serviced and maintained in accordance with the manufacturers printed instructions. Preference will be given to the use of high quality diamond tipped blades as opposed to disposable blades. Machines will not be left running when not in use. Preference will be given to masonry cutting methods at ground level as opposed to cutting on scaffolding or at roof level. This will be unavoidable when cutting roof valley tiles. Various concrete products will be cut utilising this equipment over the duration of each property at ground level (Concrete kerbs, concrete slabs. Concrete paviours will be cut utilising mechanical block cutters.

JCB (Telehandler) Reversing Alarms 102 DBA

Intermittent short Spells over whole days. <u>Control Measures</u>: Exposure to this sounder in the construction environment is unavoidable. It is a legal requirement for reversing sounders to be fitted to all mobile plant; E.G Telehandlers, 180 degree excavators and 6 wheel lorries are all fitted with reversing sounders. Goods delivery vehicles are also likely to be fitted with reversing alarms or recorded voice messages whilst reversing.

**Petrol Generators** 

98 DBA

Short duration, at specific Intervals.

<u>Control Measures</u>: All petrol generators noise levels will fluctuate when electrical load is required.

Where ever possible consideration will be given to the siting of generators to avoid noise nuisance. All petrol generators will be sited externally at ground level; All petrol-operated generators will be maintained in accordance with the manufacturers printed instructions. Any defective machinery will immediately be taken out of service. This equipment will be switched off when not in use

**Diesel Generators** 

61 DBA @ 7.0m specific Intervals

Short duration, at

<u>Control Measures</u>: Preference will always be given to the use of diesel generators as opposed to petrol generators. Where ever possible consideration will be given to the siting of generators to avoid noise nuisance. All diesel generators will be sited externally at ground level; All diesel-operated generators will be maintained in accordance with the manufacturers printed instructions. All silenced diesel generators will be operated with the acoustic covers in the closed position.

This equipment will be switched off when not in use.

Paslode 350 Roughing Nail Guns

110 DBA

Machine capacity 1000 nails per hour. External use unavoidable over duration of works.

<u>Control Measures</u>: The use of this equipment will be prolific over the duration of all timber kit erection phases. The off site pre-manufacture of kit panels and roof components will only marginally reduce the use of this equipment. This equipment will be used externally at height and on scaffolding which will allow sound to travel. This equipment is silent when not in use.

Paslode 250 Finishing Nail Guns

105 DBA

Machine capacity 1000 nails per hour. External use unavoidable over duration of works.

<u>Control Measures</u>: The use of this equipment will be prolific over the duration of each house construction. 99% of use will be in the internal environment. Where ever possible the

equipment will be used with the individual property windows being closed. This will be unavoidable when taping and filling is applied, as ventilation air changes are required to assist the drying process. This equipment is silence when not in use.

Personal Radios	Varies	Not permitted
		in External
		Environment

<u>Control Measures</u>: **The** use of personal radios is common place in the construction site environment. The use of this equipment in the external environment will be prohibited. Limited use of radios will be permitted internally subject to limited volume control.