

# **Construction and Environmental Management Plan**

**For the construction of a 16 bed detached dwelling**

**at:**

**South Lawns, Wigton Lane**

**Alwoodley LS17 8SJ**

**Client: KD Bros  
Document: Construction & Environmental Management Plan  
Planning Ref: 23/03711/FU  
November 2023**

## **1. Introduction**

This provisional construction and environmental management plan has been prepared for KDBros the projects Principal Contractor and is to be submitted as evidence to allow for the discharge of condition 6 of the Decision Notice of Leeds City Council planning application "For the demolition to existing house and erection of 16 bed dwelling at Wigton Lane, Leeds"

During the initial site preparation, demolition and construction phase of the development, materials, equipment and personnel will require movement to and from the site. This provisional plan describes how these movements will be managed. The traffic numbers quoted within the plan are based upon the contractor's experience and knowledge of previous developments within Wigton Lane and within the local area. Prior to any works commencing on site our client shall contact the LHA to arrange a full Dilapidation/Condition Survey of all adopted highways surrounding the site. For the full duration of the construction, the client will be responsible for 'Wear & Tear' /accelerated deterioration' of all existing highways, either adjacent to the site or highways used as access and egress to the site. Any necessary remedial works will be carried out under licence and at the developer's expense.

The total construction period is projected to last 52 weeks.

Details of the project programme and contact details for the KDBros Site Manager and Director will be issued to neighbouring occupants and displayed on the Site Notice board at the site entrance.

## **2. Site Working Hours**

The development will be restricted to 0730 to 1800 hours on Monday to Friday & 0730 to 1300 hours on Saturday, with no work at any other time including Sundays and Public Holidays. In agreement with the Leeds City Council Planning Authority quieter activities (Internal fit out works etc) that do not cause disturbance to neighbouring occupiers can take place outside of these times.

## **3. Provisional Construction Traffic Management Plan**

During the initial site preparation, demolition and construction phase of the project, materials, equipment and personnel will require movement to and from the site. The provisional CTMP describes how these movements will be managed. The traffic numbers quoted within the plan are based upon the experience and knowledge of previous developments on Wigton Lane and within the local area.

The construction period is projected to last approximately 52 weeks.

KDBros are the clients appointed Principal Contractor.

Reference: Site Plan

## **4. Primary Site Entrance off Wigton Lane**

The existing entrance will be widened in compliance with the relevant planning conditions, to allow for the movement of construction traffic and plant. KDBros will ensure the upkeep of the entrances and will ensure that all vehicles accessing and egressing site are of the correct dimensions to safely access/egress the public highway.

The Wigton Lane curtilage will be hoarded

The site gates will be timber and secured at all times

A temporary wheel wash will be positioned at the site entrance.

KDBROS will afford further risk mitigation controls by the positioning of Warning signage in compliance with all regulatory requirements and by having in place the required management controls for all project vehicle movements.

#### 5. Delivery Management and Routing

The onsite KDBros Construction Manager will have full responsibility for the coordination and management of deliveries to and from site. The manager will ensure the appointment of an appointed Banksman to ensure the safety of all on site personnel, the occupants of neighbouring properties, road traffic users and the general public. The appointed manager's role will also include advising delivery drivers of the most appropriate routes to and from site, the most suitable times of deliveries and of any local restrictions on vehicle heights and widths and proposed events etc.

All Loading/unloading will take place within the site boundaries.

Vehicle movements between school hours will be so far as practicably kept to a minimum. All traffic will comply with local rules and traffic conditions.

#### 6. Deliveries to site

Deliveries of plant, materials and equipment will be made by a combination of articulated vehicles and smaller rigid vehicles. To assist with deliveries an on-site a Telescopic handler will be used as well as delivery vehicles having a Hiab Crane attachment.

Table 1 & 2 show the estimated vehicle movements on site. These values are based upon the information from previous similar developments.

Where practicable all materials, plant and equipment will be sourced from local suppliers to minimise the impact upon the highway network

The hours of deliveries to the site of the development will be restricted to 0730 to 1800 hours on Monday to Friday, 0730 to 1400 hours on Saturday, with no work at any other time including Sundays and Public Holidays. In agreement with the authority quieter activities (Internal fit out works etc) that do not cause disturbance to neighbouring occupiers can take place outside of these times.

Table 1 Delivery of Heavy machinery

Description	Vehicle Type	Estimated Number of vehicles
Temporary offices, welfare	Trailer	3 - remain on site
Excavator	Trailer	2- Remain on site- demolition and initial groundworks phase
Teleporter	Self-Propelled	1- Remain on site for construction phase
Cranage	Self-Propelled	2 - at key stages of contract
Concrete Pumps		during construction phase

**Table 2 Delivery of materials and equipment to and from site**

<b>Waste from site demolition and preparation</b>	<b>10 tonne max load</b>	<b>?</b>
<b>General Waste from site</b>	<b>10 tonne max load</b>	<b>2 per week</b>
<b>Aggregates for construction work</b>	<b>10 tonne max load</b>	<b>30 in total</b>
<b>Concrete deliveries</b>	<b>10 Tonne max Load</b>	<b>25 in total</b>
<b>Waste containers and materials during construction</b>	<b>8 tonne max load</b>	<b>90</b>
<b>Delivery vehicles</b>	<b>10 tonne max</b>	<b>Max of 3 per week during specific periods</b>
<b>Site personnel traffic- Site preparation &amp; construction</b>	<b>Vans &lt;2Tonne</b>	<b>2 per day</b>
	<b>Cars</b>	<b>2 per day</b>
<b>Site personnel traffic- Finishing</b>	<b>Vans &lt;2Tonnes</b>	<b>3 per day</b>

## **7. Daily Traffic Movements**

During the site preparation, demolition and construction phase, it is anticipated that the workforce will be generally be between 5-10 (employees and contractors). To reduce the number of trade vehicles, vehicle sharing will be utilised and KDBros will ensure that only essential vehicles will park on site.

## **8. Vehicle parking**

All vehicles will park in the designated-on site car park.

## **9. Site vehicle manoeuvring**

The Construction site manager will ensure that there is a turning circle or suitable room is available to allow for the turning /reversing of vehicles. Reversing will be kept to a minimum, all vehicles entering and leaving site will be managed by a suitably trained banksman.

## **10. Offsite traffic management**

Temporary "Construction site Access warning signage will be displayed at the existing entrances and upon the proposed hoarding at the curtilage of the site. All signage will be in accordance with Chapter 8 Traffic Signs manual, the Construction Design and Management Regulations 2015 and will be provided and maintained for the duration of the construction phase on all approaches to the site.

Suitable warning signs will be located in advance of the site entrance at the approach from all directions on Wigton Lane

So far as reasonably practicably, all parking will be on site, but limited on road parking will be undertaken. All project vehicles who park on the public highway will do so in compliance with local parking restrictions/requirements and all vehicles will at all times be parked in a manner to avoid causing nuisance to road users, pedestrians and local residents.

No Pavement Parking.

## **11. Public Road Cleanliness**

A temporary jet wash facility will be available on site and any vehicle leaving site will be suitably cleaned. The site will be hard cored to reduce the transfer of dirt and debris. In the event of the public highway being affected we will enter into an agreement with a local supplier to ensure the affected area is cleaned.

If so required KDBROS will engage the services of a local Road Cleaner Supplier to afford the cleaning of Wigton Lane that has been affected by their works.

## **12. Site Security**

The site will be secured by the erection of Temporary Hoarding to the Wigton Lane curtilage with double opening security gates and a pedestrian gate. Additional Heras security fencing will be erected at the site boundaries with the neighbouring properties. Warning Notices and Company information will be displayed at the site entrance. The following information to be made available for members of the public

Contact details for the person responsible for dust and emissions generated from the site will be displayed on the site boundary so that local residents are able to contact the developer and/or

contractor to raise any issues that they may have and report complaints. The contractors will keep a record of all such complaints and respond to them as soon as possible. The log of complaints and action taken should be made available to the local authority on request.

### **13. Tree Protection and Ecology**

All protective measures will be in place as determined by the recommendations of the respective surveys and the relevant planning conditions imposed within Planning Notice

### **14. Environmental Strategy - The Control of Dust and Emissions from Site Preparation and Construction**

#### **Health and Safety at Work Act 1974**

The provisions of the Health and Safety at Work Act 1974 apply at all times on demolition and construction sites. The Health and Safety Executive (HSE) is the enforcing authority. Research is continuing into the health effects of airborne pollutants and exposure to PM10, though evidence is emerging that smaller particles within this fraction - below PM2.5 - may be the most harmful. As a first step to protect a worker's health and safety, emissions of airborne pollutants should always be minimized. However, where this cannot be achieved personal protective equipment should be provided and used. Proper planning should be undertaken, and appropriate mitigation decided for demolition and construction projects that will potentially generate large quantities of dust or emissions.

#### **The Building Act 1984**

This Act and subsequent Building Regulations 2000 aim to ensure the safety of those within and close to a building during works. They are the main mechanism for a LPA to control the impact of demolition. Under the regulations the LPA must be informed of any proposed demolition at least six weeks before work is due to begin. It will then grant a notice for demolition prior to work commencing. Section 82(J) of the Building Act 1984 can be used by the LPA to place conditions on the demolition notice to ensure that effective dust management options are undertaken. To facilitate a smooth application process, developers should consider and suggest to the LPA management techniques for dust control during demolition prior to their application.

#### **Environmental Protection Act 1990**

Under Part III of the Environmental Protection Act (EPA) 1990, emission of dust, fumes and other effluvia from construction sites can be identified as a statutory nuisance if prejudicial to health or a nuisance. Control of a statutory nuisance is contained within section 80 and a local authority is under a mandatory duty to serve an abatement notice on the person responsible for the nuisance (or the owner or occupier of the premises on which the statutory nuisance is present) if it is satisfied that a statutory nuisance exists, or is likely to occur or recur.

### **15. Waste Management**

All waste must be segregated disposed of in the respective waste skips, to allow for recycling or disposal at a Licensed Off-site facility.

## **16. Local Air Pollution Prevention and Control (LAPPC)**

These regulations apply to smaller industrial activities, known as Part B Installations, such as concrete batching or concrete crushing. Local authorities, as the regulators, are responsible for controlling emissions from these premises and set conditions in permits they issue to achieve this. Conditions are based on Best Available Techniques (BAT), which require that the cost of applying a technique is not excessive in relation to the environmental protection it provides. The Secretary of State for Environment, Food and Rural Affairs has produced Process Guidance Notes, which form the statutory guidance on what constitutes BAT for each regulated process. If the regulator believes the operator has contravened, or is likely to contravene any permit conditions, enforcement action can be taken.

**Note:** By following this Best Practice Guidance KDBros are identifying good practice methods for demolition, site clearance and construction activities. Compliance with this document does not necessarily offer exemptions from prosecution under any of the legislation impacting upon demolition and construction, though it should be recognised that using Best Practicable Means (BPM) could be used as a defence from prosecution under the S.80 of the Environmental Protection Act 1990.

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## **17. Demolition Site preparation activities dust and emissions control measures.**

**Note:** The demolition contractor will submit a specific method statement for all demolition and crushing activities.

Potential dust hazards can be assessed according to BS 6187:2011 Code of Practice for full and partial demolition, which includes the initial stages of the project development and management from demolition techniques to re-using or recycling materials. The demolition of buildings may result in a site being classified as medium or high risk during this activity. A specific method statement will be compiled by the appointed demolition contractor, all waste will be recycled and disposed of in compliance with current statutory duties and current best practice.

## **18. Asbestos**

The property will be subject to survey in compliance with the Control of Asbestos Regulations 2012 and in compliance with HSG 264 The Survey Guide. Any asbestos materials will be removed in compliance with the aforementioned regulations and will be done so by a HSE Licensed Asbestos Removal Contractor and removed according to appropriate regulations and approved codes of practice/HSE guidance:

- If appropriate, Notify the Health and Safety Executive of any work
- Always employ competent and licensed contractors
- Clearly identify the location of asbestos containing materials before starting work.
- put in place procedures to sample and analyses suspect materials
- carry out independent air sampling to ensure standards are met
- dispose of asbestos-containing materials to licensed waste sites according to HSE guidelines before the demolition company is given access.

## 1. General Dust Controls

Control measures to control dust for the project also covers other emissions to air, including fumes and smoke. Prior to starting any works which would create excessive dust, site management will notify neighbours as to what activities we plan to do and for how long.

The basic precautions that will be taken to minimize dust generated on the site include covering waste skips, water suppression, segregation and exclusion using impermeable barriers, and avoidance of allowing equipment to run dry whilst engaged in operation. All vehicles carrying waste will be sheeted.

Haul roads will initially be hardcore/crushed material construction and can be sprayed to minimize dust. Once surface bound, they will be swept on a regular basis, the Site Manager will decide the necessary frequency based on the conditions on site. This will allow delivery trucks to be kept relatively clean and significantly reduce the likelihood of dust on roads outside the site.

Cleaning of surfaced site roads will be carried out weekly by a contracted road sweeper, however frequency will increase or decrease as the manager feels necessary. This would include site entrances and the immediate highway. It is important to recognise that this needs to be monitored consistently throughout the contract, in light of site operations and weather conditions and not just in the early stages.

The Site Manager must monitor dust production at regular intervals during the day and record their findings, records to be kept on file in the site office. These records must be made available to the EHO upon request.

Materials will be stored on site. These will include reclaimed materials, and this will be closely monitored to reduce the potential for airborne dust. Material intended for the filling of the low area will be placed as soon as practical. In prolonged periods of dry weather, measures will be taken to

keep the material in a damp condition by water spraying.

Dust suppression can be implemented on small plant when operations are being carried out adjacent to existing properties. Cutting and grinding on site should be kept to a minimum but where necessary; it should be carried out using equipment fitted with silencers and water suppression devices.

We will minimise creation of dust by Elimination - Substitution - Isolation - Control measures. This will be done by shutting plant down when not in use to eliminate the problem. If excessive dust was still a problem, then the problem should be isolated by moving plant to another area of site so as to isolate the problem away from neighbours. If the plant cannot be moved anywhere else, we will then control by erecting screens or enclosures.

20. In the event of a complaint however received, the Site Manager will be responsible for following the complaint through to resolution and initiating any necessary enforcement or corrective action. Remedial action will then be taken to reduce levels and the Site Manager will check and verify that the corrective action has been successful in reducing dust production. Fire Safety

There will be NO waste burnt on site. A specific off-site Fire Risk assessment will be compiled for the undertaking of all construction related activities.

## 21. Vibration



Prior to starting any works which would create excessive vibration, site management will notify neighbours as to what we plan to do and for how long. Generally, there shouldn't be any operations that create excessive vibration. However, in the event of a complaint however received, the Site Manager will be responsible for following the complaint through to resolution and initiating any necessary corrective action. Prior to starting any works which may affect surrounding properties, site management will carry out an existing condition survey of adjacent buildings externally and boundary structures to ensure the existing condition is maintained.

## 22. Noise Control

So far as is reasonably practicable all crushers and breakers will be sited upon crushed or soft materials to reduce the effects of vibration

We will always employ the Best Practicable Means.

The other method we use to control noise from construction sites is to require that all contractors use the 'best practical means' to minimise noise from their activities. This is a very broad (and complicated) area and can include matters ranging from the prohibition of the use of radios on site to the proper maintenance of plant and equipment. It can also include matters such as the choice of appropriate plant for a particular task or putting up noise barriers or screens.

Poorly maintained plant and equipment can give rise to excessive noise and the failure to use the built-in noise control shielding on plant can cause problems.

We encourage the use of mains powered electrical equipment (rather than using generators) and hydraulic breaking or bursting techniques are preferable to impact breaking methods for demolition.

The choice of equipment for a particular task is important in noise reduction. For example, bored piling is usually a lot less disturbing than hammered piling. We therefore insist on the use of bored piles whenever possible. However, sometimes it is necessary to use hammered piling techniques for engineering reasons.

### Simple Purpose-Built Screens and Enclosures

Materials such as plywood or chipboard panels can be lined with sound-absorbing material such as mineral wool to create noise containing screens or enclosures. The length of the barrier should be greater than its height. If possible, the noise source should not be visible, and the barrier located as close as possible to either the source or the receiver. Simple portable screens, located very close together, can effectively reduce the effects of noisy work in small areas, including jack hammering or plate compaction.

Screening may be essential when any noisy work is proposed outside of standard construction hours.

### Concrete Pouring

Concrete pouring starting before 0800am is not normally permitted unless there are good road control reasons. The noise from concrete pumps is likely to cause complaints from nearby residential sites when the neighbourhood is otherwise very quiet, even in the central city. It pays to place concrete orders early so that suppliers can offer a choice of delivery times after 7.30am. To avoid the need to extend construction hours, architects and engineers may be able to incorporate reduced slab sizes in the design. The use of accelerants and heaters should also be considered to reduce setting times. Concrete pumping should be located away from sensitive boundaries.

## Breaking of Concrete

Use of traditional rock breakers attached to excavators is one of the most common causes of noise complaints, especially if it takes place on or near to a common, or shared wall of an occupied building. Where possible use equipment that breaks concrete by crushing it rather than drilling through it. Always consult the occupants of adjoining properties before work starts. Hydraulic and chemical expansion methods are less noisy methods worth considering. Even explosive methods can be tailor-made for the job and may be appropriate.

## Plant and Machinery

The rating level (LAeq,T) from any plant and equipment associated with the development, when operating simultaneously, shall not exceed the background noise level (LA90,T) at any time when measured at the nearest noise sensitive premises at the quietest time that the equipment would be operating/in use. Noise measurements and assessments will be compliant with BS 4142:2014 "Rating industrial noise affecting mixed residential and industrial areas".

Do not leave engines running when not in use, noisy mufflers on plant and noisy site radios. Make sure that unnecessary metallic impact noise is avoided from dropping scaffolding poles, placement of roading plates, moving metal fencing and the clanking of chains on crane hoists. Ensure that machines are maintained regularly – they will be quieter. Simple maintenance can reduce noise levels by as much as 50 per cent. Check for noise problems if you notice workers having to shout at arms-length to converse. This indicates that the noise level may be above 90 dBA at this location.

Move static plant and equipment as far as possible from sensitive boundaries, as work allows. A distance of four times further away lowers the noise by 12 dBA. A reduction of 10 dBA will sound half as loud. In some cases, quiet plant and machines are available which are specifically designed to produce less noise. Examples are muffled breakers (the noise of a typical silenced breaker can be reduced by 16 dBA if a purpose-made muffler is fitted) and silenced diesel generators and compressors (some units are up to 15 dBA quieter). Generally, electrically powered equipment such as chain saws and cranes are noticeably quieter than diesel-powered equipment and hydraulically powered equipment is quieter than pneumatic power.

Cutting metal using gas cutters is far less noisy than using grinding methods to dismantle metal structures. When replacing exhaust and intake mufflers, ask for quieter options which are often available. Similarly, specified plant and equipment such as excavators can also operate at very different noise levels. Keep machinery covers and panels closed and well-fitted. Bolts and fasteners should be done up tightly to avoid rattles. Avoid equipment that is either over or under powered.

## Saw Cutting of Pavers and Pavement Slabs

A cutting station should be established with the saw enclosed in an acoustic enclosure. A simple screen is unlikely to be effective in residential streets due to reflected noise effects. A water supply should always be made available and the saw blade changed regularly to avoid an annoying high pitched "whining" noise from developing. For any saw cutting choose a saw blade with the greatest number of teeth and of the smallest width. Choose a blade with gullets as small as possible. Choose a blade with built in vibration dampening slots.

## Drop Hammer Piling

This is potentially the noisiest construction site activity. We will choose quieter types such as augured or vibratory piling as a first option. Unless it is shown that there are good engineering reasons to confirm that the ground conditions are not suitable, the choice of drop hammer rigs should be a last resort. Where drop hammer piling is shown to be the only suitable type, other noise reducing techniques should be adopted. These options include reducing the noise from the contact of the hammer with the pile helmet by using purpose-made dollies or blocks of plywood. The design of the equipment and the pile helmet should ensure that damping can be utilised in this way. It is also possible to add shrouds to help contain noise at the hammer or enclose the entire pile and hammer. Planned breaks may be necessary to fit in with the business or activities happening in neighbouring properties.

#### **Audible Reversing Signals**

These signals are very penetrating by design and can be turned off, or the tone changed in some circumstances, but talk with the company safety advisor first to ensure that site safety requirements are maintained.

#### **23. Conclusion**

It is considered that with this proposed Construction and Environmental Management Plan and the site layout traffic management controls, there will be a considerable reduction in risk to all Wigton Lane users, the neighbouring properties and to the general public and project personnel.

The site is capable of allowing the safe movement of project vehicles/plant and with the minor changes will not put at risk, site operatives, the occupants of neighbouring properties, public highway users and the general public.

KDBros have accepted, that if circumstances change which result in changes to the proposed project construction and environmental management plan, they will enter into discussions of the proposed changes with the local authority and ensure that the necessary permissions are granted to allow for those changes to take place.

A newsletter will be issued to local residents together with a sign will be displayed on the front fencing detailing the site managers contact details to access this Plan.