

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

|                         |                      |
|-------------------------|----------------------|
| Project Name:           | Gateway 36, Barnsley |
| Project Number:         | G1144                |
| Senior Project Manager: | Gordon Fawcett       |

Prepared by  
**Glencar Group**  
5th Floor,  
St. James Square  
Manchester  
**M2 6DN**

## Document Control

### Document Status

| Rev Date | Status                 | Prepared By | Checked By | Approved By |
|----------|------------------------|-------------|------------|-------------|
| 22/9/22  | Draft for Comment      | GF          | GE         | GE          |
| 6/10/22  | Update for early start | GF          | GE         | GE          |
|          |                        |             |            |             |
|          |                        |             |            |             |

### Project Revision Record

| Rev | Date      | Page Numbers Altered     | Revision Summary         |
|-----|-----------|--------------------------|--------------------------|
| A   | 22/9/2022 | Initial draft for review |                          |
| B   | 6/10/22   | all                      | CoreSP CEMP incorporated |
|     |           |                          |                          |
|     |           |                          |                          |

Extract Taken from Planning Application 2021/1691

- 4 Prior to the commencement of development hereby approved, a Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the local planning authority. The CEMP shall include measures to residential amenity, and to protect the adjacent Dearne Valley Wetlands SSSI and nearby Short Wood and Hay Green LWS from habitat degradation during construction operations including from dust deposition, accidental damage or pollution incidents. Thereafter the development shall proceed in accordance with the approved plan.  
**Reason: To reduce or remove adverse impacts on health and the quality of life, especially for people living and/or working nearby, and to ensure that the SSSI and LWS are not degraded during construction operations including through habitat degradation arising from dust deposition, accidental damage, or pollution incidents and in accordance with Poll1 and BIO1.**

|                                                   |                                                                                                                                                                                                                                                  |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Location:</b>                             | Gateway 36 Phase 3<br>A1695 Dearne Valley<br>Parkway Hoyland<br>Barnsley<br>S74 9LH                                                                                                                                                              |
| <b>Client:</b>                                    | Firethorn Ltd                                                                                                                                                                                                                                    |
| <b>Principal Contractor:</b>                      | Glencor Group<br>5th Floor,<br>St. James Square<br>Manchester<br>M2 6DN<br>Contact Gordon Fawcett – 07796 440892                                                                                                                                 |
| <b>Brief Description of Works:</b>                | Enabling works package including bulk earthworks, reinforced slopes, FW drainage diversion, Temporary works & RC Wall construction<br>Construction works including erection of warehouse facility with lorry / car parking and access spur road. |
| <b>Document Owner:</b>                            | Gordon Fawcett – 07796 440892<br>Senior Project Manager<br>Glencar                                                                                                                                                                               |
| <b>Site based Responsible Persons for Glencar</b> | Gordon Fawcett – Senior Project Manager                                                                                                                                                                                                          |
| <b>Signature of Document Owner</b>                |                                                                                                                                                                                                                                                  |
| <b>Environmental Agency – incident hotline</b>    | 0800 80 70 60                                                                                                                                                                                                                                    |
| <b>Environment Agency – Flood Warning</b>         | 0845 988 1 1 88                                                                                                                                                                                                                                  |
|                                                   |                                                                                                                                                                                                                                                  |

## Contents

|                                               |  |
|-----------------------------------------------|--|
| Introduction                                  |  |
| Project Team & Program                        |  |
| Project Details                               |  |
| Site Working Hours                            |  |
| Existing Environment                          |  |
| Management of the Works                       |  |
| Responsibilities                              |  |
| HGV vehicle routing                           |  |
| plan Site Access Points                       |  |
| Site Compound                                 |  |
| Visitor and Operative Parking                 |  |
| Erection and Maintenance of Security          |  |
| Hoarding Storage of Plant, Materials and Fuel |  |
| Dust Control                                  |  |
| Dust Assessment                               |  |
| Mitigation                                    |  |
| Measures Further                              |  |
| Dust Guidance                                 |  |
| Noise Control                                 |  |
| Surrounding Area                              |  |
| Mitigation                                    |  |
| Measures                                      |  |
| Operating Methods of Noise                    |  |
| Reduction Noise Reduction of                  |  |
| Mobile Plant                                  |  |
| Noise Reduction of Stationary Plant &         |  |
| Tools Control of Noise Propagation on         |  |
| Site Further Noise Guidance                   |  |
| Waste Management                              |  |
| (recycling/disposal) Light Control /          |  |
| Pollution                                     |  |
| Site                                          |  |
| Clearance                                     |  |
| Communicati                                   |  |
| on                                            |  |
| Group Communication to Glencar Staff          |  |
| Communication with Operatives                 |  |
| Communication with the Local                  |  |
| Community                                     |  |

**Proposal:** Erection of 1no. building for industrial (class E(g)(iii)/B2) or storage and distribution (class B8) use with associated spur road, yard, parking, landscaping and drainage infrastructure (Reserved matters of the outline part of hybrid planning permission 2019/1573 for Phase 3 seeking approval of appearance, landscaping, layout and scale) (Amended Plans)

**Location:**

Works package includes the following:

- Bulk Earthworks (Cut & Fill operations to form building plateaus, Service yards, Carparking areas).
- Reinforced slope construction.
- Foul water diversion working in conjunction with Galliford try / Yorkshire Water.
- Temporary Works & RC wall construction Including Soil nailing
- Cladded Steel frame warehouse, office accommodation inc. lift and services
- Goods yard, carparking, access road and services

## Project Team

| Contact           | Role                                  | Organisation                           | Telephone | Email |
|-------------------|---------------------------------------|----------------------------------------|-----------|-------|
| Jon Cumberlidge   | Building Control (Approved Inspector) | C3 Design Approvals                    |           |       |
| Richard Osbond    | Structural and Civil Engineer         | Curtins                                |           |       |
| Neil Wilkinson    | Structural and Civil Engineer         | Curtins                                |           |       |
| Matthew Lomas     | Structural and Civil Engineer         | Curtins                                |           |       |
| Rob Molyneux      | Wellness                              | Delta Simons                           |           |       |
| Callum Campbell   | Mechanical and Electrical Engineer    | Engineering Services Partnership (ESP) |           |       |
| Hugo Briars       | Client (purchaser)                    | Firethorn Developments Ltd             |           |       |
| P Martin          | Client (purchaser)                    | Firethorn Developments Ltd             |           |       |
| James Hutchison   | Ecologist                             | FPCR Environment and Design            |           |       |
| Rui Sun           | Fire Engineer                         | Hydrock                                |           |       |
| Hamish Robertshaw | Planning Consultant                   | Johnson Mowat Planning                 |           |       |
| Hugh Sibbald      | Project Manager / Quantity Surveyor   | Quartz Project Services Ltd            |           |       |
| Keith Sarchett    | Project Manager / Quantity Surveyor   | Quartz Project Services Ltd            |           |       |
| Simon Brereton    | Project Manager / Quantity Surveyor   | Quartz Project Services Ltd            |           |       |
| William Arnold    | Project Manager / Quantity Surveyor   | Quartz Project Services Ltd            |           |       |

|                |                                                |                                 |  |  |
|----------------|------------------------------------------------|---------------------------------|--|--|
|                |                                                |                                 |  |  |
| Wendy McClure  | BREEAM Consultant                              | Synergy Building Services       |  |  |
| Adam Cooper    | Principal Designer Advisor (to UMC Architects) | The Construction Consultants    |  |  |
| Steve Faulkner | Principal Designer Advisor (to UMC Architects) | The Construction Consultants    |  |  |
| Ben Costello   | Architect / Principal Designer                 | UMC Architects                  |  |  |
| Dean Butler    | Architect / Principal Designer                 | UMC Architects                  |  |  |
| Tim Reid       | Landscape Architect                            | Urban Wilderness                |  |  |
| Neil Moore     | Utilities Consultant                           | William Downie Associates (WDA) |  |  |
| Alan Connell   | Structural and Civil Engineer                  | Fairhurst                       |  |  |
| Hugh O'Niell   | Structural and Civil Engineer                  | Fairhurst                       |  |  |
| David Lawrence | Structural and Civil Engineer                  | Fairhurst                       |  |  |
| Tom Kearsley   | Operations Director                            | Glencar Construction            |  |  |
| Gary Edwards   | Operations Manager                             | Glencar Construction            |  |  |
| Gordon Fawcett | Senior Project Manager                         | Glencar Construction            |  |  |
| Simon Moody    | Senior Quantity Surveyor                       | Glencar Construction            |  |  |
| Ben Fisher     | Quantity Surveyor                              | Glencar Construction            |  |  |
| Nick Page      | Site Manager                                   | Glencar Construction            |  |  |

---

## Project Programme

10<sup>th</sup> October 2022 (Enabling)

3<sup>rd</sup> January 2023 (main works)

To

28<sup>th</sup> October 2023

## Site Working Hours

### Monday to Friday, general activities

0800 to 1800 Monday to Friday

### Saturday, by arrangement in advance

0900 to 1300

### Sundays and / or Bank Holidays

No working

Extract Taken from Planning Application 2021/1691

- 12 Construction or remediation work comprising the use of plant, machinery or equipment, or deliveries of materials shall only take place between the hours of 0800 to 1800 Monday to Friday and 0900 to 1300 on Saturdays and at no time on Sundays or Bank Holidays.  
**Reason: In the interests of the amenities of local residents and in accordance with Local Plan Policies GD1 General Development Policy and POLL1 Pollution Control and Protection.**

## Existing Environment

The site, off Dearne Valley Parkway (A6195), is located close to Junction 36 of the M1 Motorway. The centre of Barnsley is located 6 miles to the north. The centre of Rotherham is approximately 9.3 miles to the south-east. Barnsley Roundabout (Junction 36, M1) is located approximately 1 mile to the south-west of the site.

**2no open water courses situated approximately 200m to the north of the site boundary**

OS Grid Ref: **SE 35274 01413 (a)**  
Altitude: **101 m**

OS Grid Ref: **SE 35258 01329** (b)  
Altitude: **103 m**

**1no open water courses situated approximately 50m to the west of the site boundary**

OS Grid Ref: **SE 35185 01064** (c)  
Altitude: **128 m**  
#

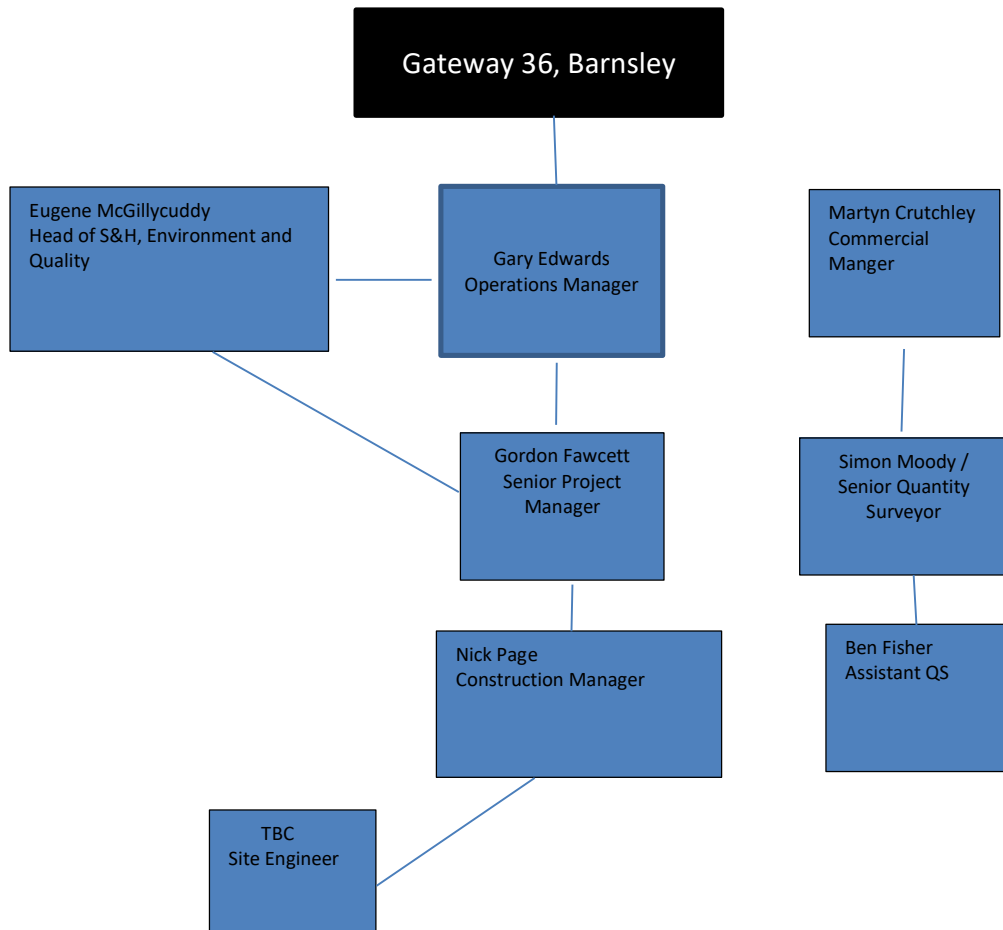


---

## Management of the Works

### Management Structure

The following management structure has been applied to this project:



### Responsibilities

The Directors have overall control over the Company's affairs. This includes its Environmental Management Systems (EMS), although the day-to-day management of this function is undertaken by the Company's Safety and Environmental Department.

Overall responsibility for all environmental related issues lies collectively with the Directors.

Responsibility for environmental matters associated with the organisation's operations lies specifically with the Operations Board.

Senior Management shall take part in the regular review of the Environmental Management System and the company arrangements that are in place to ensure its application. Members shall attend pre-contract meetings at Head Office, prior to the construction phase of all projects where site-specific environmental matters are discussed.

During the construction phase Senior Management shall attend monthly meetings which shall include a review of the environmental performance of Glencar and its sub-contractors on every construction site that is 'live' at that time.

Senior Management shall attend management review meetings where overall environmental performance is reviewed.

---

## **Manager of Safety**

Responsible for the production, implementation, and review of the organisation's Environmental Management System.

All matters concerning environmental management shall be overseen by the Manager of Safety. He will maintain a sound knowledge of Environmental Law and Industry Standards through training and/or research and, using this knowledge, shall provide advice and environmental assistance to Directors and employees of the organisation.

The Manager of Safety shall liaise with the Contracts Managers to establish training requirements for employees.

The Manager of Safety shall also plan, schedule, carry out and document periodic environmental audits on the organisation's live construction sites.

## **The Commercial Manager**

The Commercial Manager shall have a prominent role in the selection procedure for suppliers and sub-contractors.

Prior to appointment, the Commercial Manager shall ensure that the sub-contractor has been notified of all site specific hazards that are salient to the operation for which that contractor is being considered.

Upon receipt of the bid the Commercial Manager shall ensure that the sub-contractor has allowed sufficient resource in the bid to minimise any potential adverse environmental impact.

## **Contracts Managers**

Contracts managers will work closely with the Manager of Safety to ensure sufficient resources are provided on all construction projects to ensure that all operations that are proposed on site can be carried out with minimal environmental impact.

They will also ensure that adequate resources are provided to reduce the environmental impact where this is practicable.

Contracts Managers shall ensure that Project Specific Risk Assessments and Method Statements are prepared. They shall also attend on-site progress meetings with sub-contractors and assess their environmental performance.

## **Construction Managers, Site Managers**

The Construction Manager/Site Manager shall be responsible for the appropriate allocation of resources on their site to ensure that all operations carried out on site are executed with minimal environmental impact. Such coordination will include the deployment of other site supervisory staff such as Foremen to specific sections or phases of the project.

Construction/Site Managers shall ensure that site supervisory personnel are aware of their roles and responsibilities as laid out in this document and that they discharge their environmental management duties effectively.

Construction/Site Managers shall work closely with the safety/environmental department personnel from the pre- contract stage of a project through to completion. They shall attend pre-contract meetings as well as monthly progress meetings. They will be responsible for the on-site compliance with this Environmental Management System.

Construction Managers' and Site Managers' environmental duties on site include, but are not restricted to:



- Liaise with the client and any other third party to address any site-specific matters.

- 
- ☐ Monitor the performance of sub-contractors employed on site in terms of compliance with environmental requirements and competency. Their findings shall be reported during site progress meetings and monthly progress meetings at Head Office.
  - ☐ When acting as Principal Contractor, develop the Site Waste Management Plan during the construction phase of the project.
  - ☐ Ensure environmental incident reporting procedures are implemented where necessary

### Site Supervisors

The Site Supervisor will be responsible for the day-to-day management of environmental matters on their site (or in their section or phase of a construction project where there is a Construction Manager or Project Manager resident) – Where there is no resident Construction Manager or Project Manager, the Supervisor's environmental duties will also include those outlined in the previous section headed Construction Managers and Project Managers.

When working on site there are several specific matters to which the Site Supervisor must attend. These include, but are not restricted to, the following: -

- ☐ Ensure that all plant, vehicles and work equipment are in good working order. This includes plant/equipment that is brought to site externally (i.e. hired plant). Ensure that regular inspections of plant/equipment are carried out to ensure that the equipment is in good order and is not likely to spill or otherwise release fluids such as fuels and oils, or that exhaust, noise or other emissions are not excessive. Such inspections shall be recorded in the plant and work equipment inspection registers .
- ☐ Ensure that all surface water runoff is controlled so that it does not adversely affect any open water courses, natural habitats or any other existing features or ecosystems.
- ☐ Ensure that all surface water accumulations (e.g. rainwater in excavations) are properly managed and that no silted water is allowed to discharge into an open water course.
- ☐ Ensure that all discharge consents are in place where appropriate.
- ☐ Ensure that all persons new to site receive a site-specific environmental risk awareness briefing and are inducted to site by a member of the site supervisory staff. The induction shall outline specific site rules, site specific environmental hazards and any emergency procedures in place.
- Carry out regular on-site environmental risk assessments throughout the project duration as new hazards present themselves and monitor and review those assessments that are already in place. A record of these assessments (including a summary of environmental hazards and control measures) shall be made in the project's Risk Assessment documents
- ☐ Communicate the findings of risk assessments to the operatives (or other personnel) to which they relate.
- ☐ Carry out periodic toolbox talks or other relevant environment related briefings on site. Such briefings shall be delivered to the site workforce.
- ☐ Ensure that all mandatory prohibition, warning signage and statutory notices are displayed and maintained in good condition.

- 
- ☐ Report all environmental incidents, near misses or dangerous occurrences to the safety/environmental department regardless of whether any environmental impact occurred or not.
  - ☐ Ensure that comments noted on environmental audit reports are addressed and that written confirmation of such is sent back to the author of the report.
  - Ensure that waste on site is kept to an absolute minimum and that the waste that is generated is reused or recycled where practicable and to ensure that where waste must be exported from site it segregated appropriately to facilitate recycling elsewhere. Waste data will be logged on the 'Site Waste Management Plan' [SWMP].
  - ☐ Ensure that waste carriers and the recipients of site generated wastes hold the appropriate licenses or exemption certificates.

Note that the above list is not exhaustive and other environmental matters must also be addressed as site conditions dictate.

### **General Operatives**

Every operative shall receive a site induction which shall take the form of specific environmental risk awareness training.

Operatives shall ensure tools and equipment are without defect prior to their use, maintain them in good condition and report any defects that could potentially cause environmental harm (e.g. fuel leaks) to the Site Supervisor without delay.

Full co-operation with all matters regarding environmental management is required from operatives at all times. Cooperation with Site Supervisors shall be maintained to allow compliance with legal duties.

Any environmental hazard, (or potential hazard), observed on site must be reported to the Site Supervisor so that the appropriate measures can be taken to reduce or eliminate any risk to the environment. Environmental incidents, near misses or dangerous occurrences are to be reported regardless of whether any environmental impact occurred.

If it is believed that a task an operative is required to undertake may present an environmental risk, it is the responsibility of each individual or workgroup to cease task and report their concern(s) to any member of the site supervisory staff.

### **Environmental Manager**

Responsible for ensuring that the requirements of this Environmental Management System are implemented on all live construction sites and at the organisation's other premises.

The Environmental Manager will maintain a sound knowledge of environmental Law and industry standards through training and/or research and using this knowledge shall provide advice and environmental assistance to other employees of the organisation. He will also assist with the periodic review of the Organisation's Environmental System.

He will also ensure that, where appropriate, Environmental Plans (including Site Waste Management Plans) are prepared and implemented on the construction phase of a project. The Environmental Manager will also liaise with Contracts Managers and Site Supervisors to produce task specific environmental risk assessments and method statements for site based work activities.

---

The Environmental Manager will investigate and record environmental incidents if and when they occur. This will include “near misses” where there is evidence that an uncontrolled event had a clear potential for environmental harm to have been caused, albeit that no harm was caused.

Environmental Managers shall also conduct and document periodic environmental audits on the organisation’s live construction sites.

The Environmental Manager will also act on behalf of the Manager of Safety in his absence.

---

## HGV Routing Plan

Movement of traffic to and from site will be restricted and controlled at sensitive times, (to be developed and agreed with Council designated representative) and in any event deliveries will be programmed so as not to conflict with peak periods of the day.

After reviewing the traffic conditions at the site boundary, there are no closures currently present on Dearne Valley Parkway which is the road required to be used to access the site both as the existing, proposed, and final solution.

Deliveries to site will be planned and coordinated with each individual sub-contractor to avoid congestion on this main access route given the further restricted nature of the current ongoing construction works.

Deliveries should be made after 8-00am and prior to 4pm to avoid the morning and evening traffic, however it should be appreciated that due to logistics (hold ups in other traffic or at other drop off locations) this will not always be possible, but in the main, will be the case.

There has been no sign of school children walking near the site or along the HGV routes and it would therefore appear that school opening/closing times should not inform the strategy.

We will utilize a booking in system (with deliveries advised 24 hours in advance) so site is ready to receive deliveries and bring them immediately within the site boundary upon arrival.

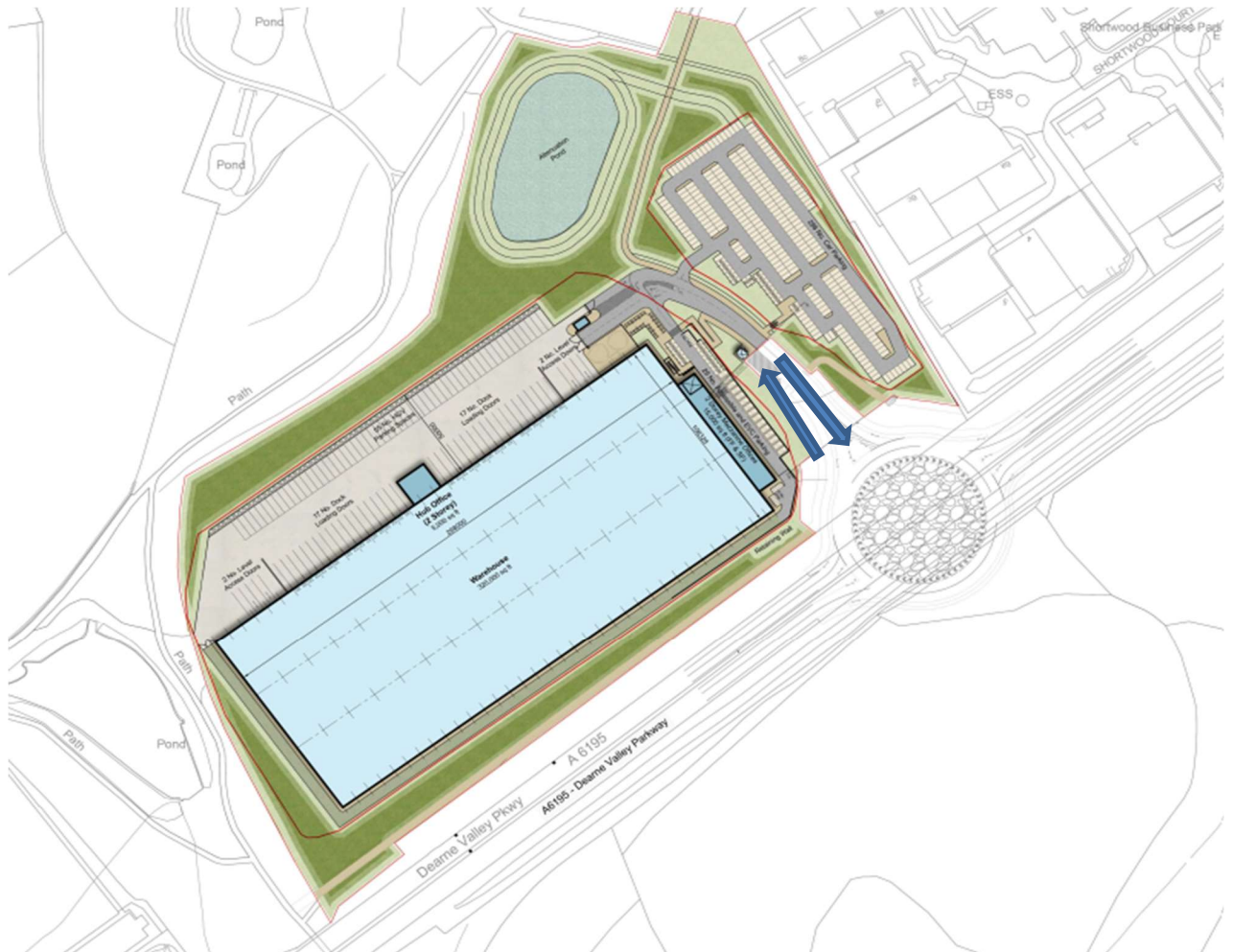
Vehicles will not be stacked along the road, restricting access for road users, they will be brought straight into site.

The supply chain will be briefed on the delivery routes to site, any restrictions on timing of such, and the protocol to be followed upon arrival at site. This will be provided at the point of order. Given the size of delivery vehicles and their starting location it is anticipated that the route to be briefed to contractors will be accessing Dearne Valley Parkway from the Birdwell Roundabout, which is linked to J36 of the M1 motorway.

Should any abnormal loads be required (initial indications are that this should not be the case), the necessary liaison will be undertaken with the relevant parties and agreements obtained.

## Site Access Points

The site will initially be accessed from the existing roundabout entrance on Dearne Valley Parkway Bridge Street via the site entrance gates. This is the arrangement in place for the ground reclamation scheme currently ongoing.



Delivery vehicles will be controlled to ensure that unloading only takes place within designated times and within the site boundary. Vehicles will enter site immediately and gates will be manned with a permanent gateman to ensure no deliveries are kept on the highway. All subcontractors will be required to produce a procurement schedule for their materials which will be monitored at their weekly/fortnightly meetings and must book delivery slots with our operational team. Efficient and accurate scheduling of deliveries will minimize the storage capacity required, double handling and congestion around the site and surrounding roads and highway infrastructure.

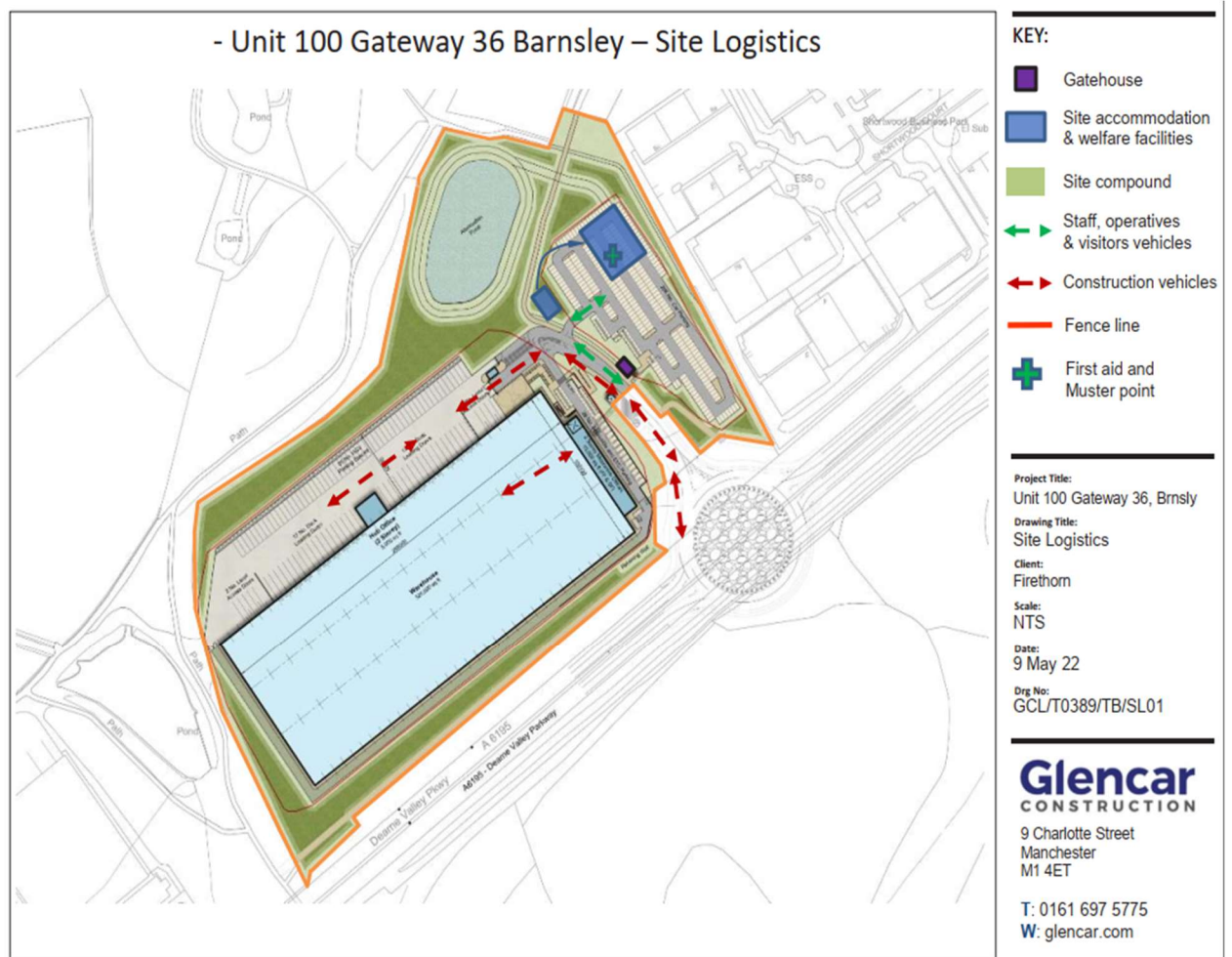
Site storage of materials and plant will be very carefully controlled by restricted allocation of zones to particular trades. Detailed plans of the site will be drawn up regularly to reflect the changing conditions of site.

## Site Compound

The Site compound will be located at the lower end of the domestic carpark, but with a stand-alone gatehouse adjacent to the site entrance.

The intention is to have all carparking and compound on prepared stoned up areas before the main superstructure where the majority of the deliveries/vehicle movements occur.

This will serve two purposes, it will provide a clean, tidy, safe environment for operatives working on the site, and will also remove the risk of fines migration (mud on road) and dust being created by construction traffic.



## Visitor and Operative Parking

Visitors and Operative Parking shall be as per the above plan, all visitors will be required to sign in at the entrance and park in the designated spaces adjacent the site cabins.

## **Erection and Maintenance of Site Security**

The operatives will utilise a safe system of work to ensure the general public are segregated from the works site. All boundaries of the project will be secured by the existing heras fencing. Where tree protection fencing is required to prevent accidental impacts and protect roots, heras fence will be also utilised and where possible trees will sit outside the site boundary fence.

Tree protection fencing will consist of Heras type panels complete with additional units included at every fifth panel to form a triangle which will provide stability and limit potential movement of such. All fencing will be visually inspected daily and maintained accordingly. Gates will be kept closed when not in use and locked securely at the close of each working day and a gateman will be in place during the day, with CCTV coverage for out of hours until the site starts to be enclosed, whereupon a static guard will be used.

## **Storage of Plant, Materials and Fuel**

Site storage of materials and plant will be very carefully controlled by restricted allocation of zones to particular trades. These will generally be stored adjacent the works on the hardstanding / working platform. This will obviously fluctuate depending on activities on site and the stage of the project and hence will change almost on a weekly basis as the work progresses.

Wherever possible materials will be delivered shrink-wrapped and palletised to be unloaded and distributed safely by telehandler. Diesel fuel for site plant will be stored in sealed tanks inside bunded walls with a minimum of 110% of the capacity of the tank. The use of diesel driven plant and equipment will be kept to an absolute minimum. Wherever possible equipment and plant will be electrically powered to reduce noise and prevent emissions.

## **Dust Control**

The control of dust arising from the construction works will be controlled in a number of ways depending on the work source causing/providing the dust and the timing/stage at which the construction works are at. A Separate Dust Management Plan will be held on site.

## **Dust Assessment**

Environmental risk assessments are completed for every contract and particular attention is focused on statutory nuisance. Dust monitoring will be undertaken regularly in line with the control methods detailed in the risk assessment. Records of this will be maintained on site and available on request. If excessive dust levels are reached, works will be temporarily suspended whilst the Environmental Coordinator is consulted, and further appropriate dust measures are implemented to enable works to recommence. This will be recorded.

Additional dust monitoring will be carried out by Glencar Construction Environmental Coordinator on a regular basis. Control methods as necessary will be identified.

## Mitigation Measures

Measures that may be taken include, but are not limited to:

### Haulage Routes, Vehicles and Construction Plant

| Potential dust Source                                     | Control Measure                                                                                                                                     | Responsibility for implementation |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Haul roads and traffic routes                             | Scheduled deliveries to avoid standing traffic on routes to site.                                                                                   | Project Manager                   |
| Vehicle waiting areas and hard standing                   | Vehicles will be directed into site and unloaded. If waiting is required engines will be switched off                                               | Project Manager                   |
| Site traffic                                              | Speed restrictions will be in place including signage and managed by site personnel to avoid back up                                                | Project Manager                   |
| Public roads                                              | Gateman/Traffic controller to be aware of scheduled deliveries and coordinate traffic and operations affecting access                               |                                   |
| Road cleaning                                             | Road sweeper to be employed on a regular basis for cleaning access roads to site. These operations will be increased when critical activities occur | Project Manager                   |
| High level walkways and surfaces (Scaffolding and others) | Operatives will be briefed at induction to the requirements of debris control and cleanliness                                                       | Project Manager                   |

### Static and Mobile Plant Emissions

| Potential dust Source           | Control Measure                                                                                                                                         | Responsibility for implementation |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Visible exhaust smoke           | All standing/waiting traffic to have engines switched off. All plant brought to site to be well maintained and suppliers advised of this at order stage | Project Manager                   |
| Maintenance                     | All plant and equipment to be maintained off site                                                                                                       | Project Manager                   |
| Servicing                       | All plant and equipment to be serviced offsite                                                                                                          | Project Manager                   |
| Operating time                  | All operations will be conducted in line with the planning conditions and all sub contractors being made aware of restrictions at order stage           | Site Team                         |
| Exhaust time                    | Operating plant to be monitored to ensure it is not left running unnecessarily                                                                          | Project Manager                   |
| Exhaust direction and heights   | Exhausts from plant will be in line with manufacturers specifications and directed from ground to atmosphere                                            | Project Manager                   |
| Location of plant and equipment | Plant and equipment operating close to other businesses and sensitive receptors will be kept to critical activities only.                               | Project Manager                   |

## Surfacing and Coatings

| Potential dust Source                        | Control Measure                                                                           | Responsibility for implementation |
|----------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------|
| Bitumen over heating                         | Control of tar boilers. Ensure equipment is in good working order                         | Project Manager                   |
| Fume Production                              | Ensure protection is in place at all times while heating or maintaining heat              | Project Manager                   |
| Small accidental fires                       | Have emergency procedures in place and brief at induction and toolbox talks. Monitor RAMS | Project Manager                   |
| Housekeeping                                 | Monitored through regular inspections                                                     | Site Team                         |
| Direct application of open Flames (torching) | Avoid overheating and keep to a minimum                                                   | Project Manager                   |

## Material Handling

| Potential dust Source                       | Control Measure                                                                                      | Responsibility for implementation |
|---------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------|
| Material Handling operations                | Handling and movement of materials to be kept to a minimum through planning                          | Project Manager                   |
| Transport of powdery materials              | Loose materials to be moved in containers or remain wrapped until use. Bulk cement to be in tankers. | Project Manager                   |
| Transport of aggregates                     | Use enclosed or sheeted vehicles                                                                     | Project Manager                   |
| Handling areas                              | Keep areas clean and free from dust                                                                  | Project Manager                   |
| Vehicle loading                             | Use methods that minimise the creation of dust. Damp down with water in necessary                    | Project Manager                   |
| Filling Skips                               | Use enclosed skips where possible                                                                    | Project Manager                   |
| Reducing the spread of dust across the site | Use damping down methods                                                                             | Project Manager                   |

### Storage of Powder Materials

| Potential dust Source                               | Control Measure                                                   | Responsibility for implementation |
|-----------------------------------------------------|-------------------------------------------------------------------|-----------------------------------|
| Bulk Cement                                         | To be delivered and stored in tankers/silos                       | Project Manager                   |
| Silos                                               | To be kept in good condition. Regular checks for damage           | Project Manager                   |
| Accidental spillage when filling or operating silos | Emergency preparedness plan in place identifying R+R              | Project Manager                   |
| Dry materials > 3mm                                 | Storage to be kept to minimum. Use materials at point of delivery | Project Manager                   |
| Dry materials < 3mm                                 | Storage to be kept to minimum. Use materials at point of delivery | Project Manager                   |
| Storage                                             | Store materials away from site boundaries and sensitive receptors | Project Manager                   |

### Stockpiles

| Potential dust Source | Control Measure                                                                                                                                                                                                                                                                                                                                           | Responsibility for implementation |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Stockpiles            | Stockpiles will be kept away from sensitive receptors and kept to a minimum; damping down systems will be implemented.<br>Materials with potential to cause dust should be removed from site as soon as possible, unless being re-used on site.<br>Bunds should be employed to prevent run-off from entering sensitive receptors should this pose a risk. | Project Manager                   |
| Building stockpiles   | Ensure any stockpiling is done so that the angle of repose is not such that slippage will occur                                                                                                                                                                                                                                                           | Project Manager                   |
| Short term stockpiles | Ensure that these are kept to a minimum and avoided by use of material at source                                                                                                                                                                                                                                                                          | Project Manager                   |
| Long term stockpiles  | Ensure that these are kept to a minimum and avoided by use of material at source                                                                                                                                                                                                                                                                          | Project Manager                   |

### Site Establishment and Restoration on Completion

| Potential dust Source | Control Measure                                                                 | Responsibility for implementation |
|-----------------------|---------------------------------------------------------------------------------|-----------------------------------|
| Earthworks            | Will be completed in sections to minimize over exposure and as program phasing. | Project Manager                   |
| Completed earthworks  | To be reinstated as soon as possible in line with program                       | Project Manager                   |
| Storage mounds        | Any mounding will be sealed                                                     | Project Manager                   |

|                        |                                                                                                                 |                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|
| Landscaping            | To be in line with program and design. No screening to be on site                                               | Project Manager |
| Transitory soil mounds | Not required                                                                                                    | Project Manager |
| Crushing and screening | Crushing and screening operations to be kept away from sensitive receptors. Ensure compliance with the EPA 1990 | Project Manager |

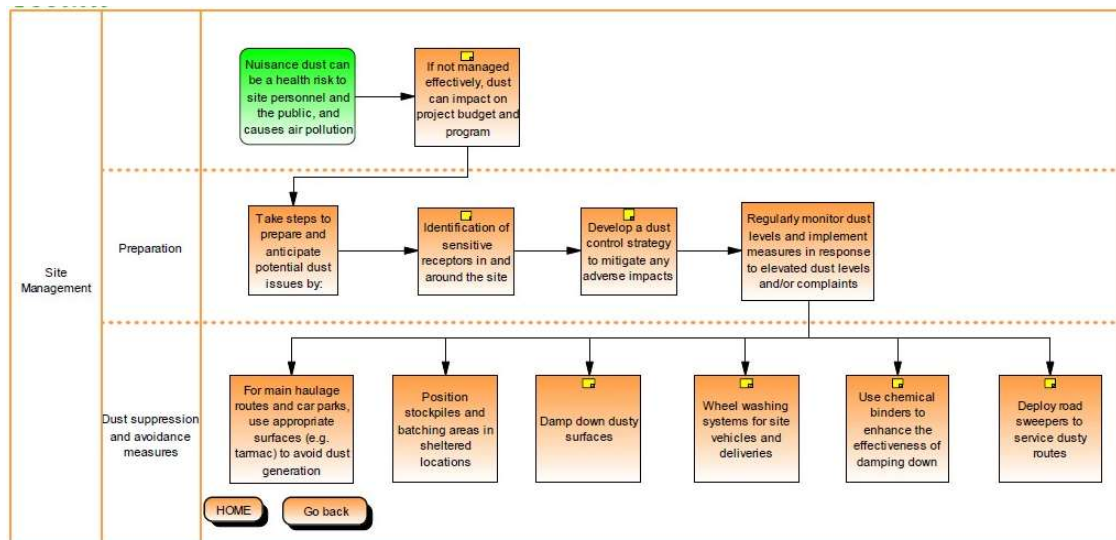
### Construction and Fabrication Process

| Potential dust Source                   | Control Measure                                                                                                                                                                | Responsibility for implementation |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Cutting, grinding, drilling, sawing etc | Consider prefabrication to avoid cutting. Quality checks to prevent errors and re-work. Use dust suppression sprays. Use exhaust ventilation. Robust design to prevent cutting | Project Manager                   |
| Dust control exhaust ventilation        | Always use diamond cutting blades and water sprays                                                                                                                             | Project Manager                   |
| Cutting roads, pavements, blocks        | Always use diamond cutting blades and water sprays                                                                                                                             | Project Manager                   |
| Angle grinders                          | Always use diamond cutting blades and water sprays                                                                                                                             | Project Manager                   |
| Mixing of granular materials            | Use pre mixed materials. Mix under controlled conditions.<br>Store dry powder materials in a safe dry environment                                                              | Project Manager                   |

| Potential dust Source                                    | Control Measure                                                                           | Responsibility for implementation |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------|
| Painting and decorating                                  | Use of suppression or extraction equipment should be used. Vacuum cleaning where possible | Project Manager                   |
| Plastering rendering, finishing and fitting out          | Housekeeping to control dust related activities                                           | Project Manager                   |
| Electrical plumbing systems requiring chasing into walls | Use of suppression or extraction equipment should be used. Vacuum cleaning where possible | Project Manager                   |
| Fire proofing and insulation                             | Use of suppression or extraction equipment should be used. Vacuum cleaning where possible | Project Manager                   |
| Cleaning                                                 | Avoid dry sweeping use vacuum control where possible                                      | Project Manager                   |

## Further Dust Guidance

- 'The Control of Dust from Construction and Demolition Activities' document (BRE, 2003)



## Noise Control

Construction methodologies should be made as efficient as possible to minimise noise impacts to local residential areas and places of work. Additionally, 'temporary' screening, where it is likely to provide effective mitigation, may be deployed.

Locations closest to the scheme are likely to be subject to the highest construction noise levels, although this will depend on topography and existing infrastructure providing natural screening. The level of impact would also vary considerably, dependent on the current ambient noise levels for given areas.

All measures to minimise construction noise would be taken according to best practicable means, as described in the mitigation measures section.

- Appropriate choice of plant and equipment;
- Regular plant maintenance to keep plant in good working condition and reduce noise

- from machinery;
- Careful phasing of the proposed operations; and
- Provision of temporary barriers where sensitive receptors exist

The site staff will be utilising methods of mitigation outlined, alongside regular monitoring and utilising feedback from residents.

This regular noise monitoring will be carried out by the Environmental Coordinator. This may be substituted by sub-contractor's noise readings as stated in their method of work.

## Operating methods of noise reduction

Ensure that all staff and operatives are briefed on the requirement to minimize nuisance from site activities, this will be mentioned within the site inductions, a program of toolbox talks and all method statements. Any significant changes in numbers of workforce on site will force a review of the monitoring program.

No equipment shall operate other than at the manufacturers' rated working levels; site staff shall not 'rev' equipment unnecessarily.

No plant and equipment shall be left running if not required for immediate use. Where this is not practicable, equipment shall be set to idle in the quietest manner to minimize noise emissions and CO2 emissions.

Resilient materials will be used where possible to reduce impact noise where materials are being moved or dropped e.g. lining chutes and dumpers.

## Noise Reduction of Mobile Plant

The movement of plant onto and around the site will have regard to the normal operating hours of the site and the location of any noise sensitive receptors. Audible reversing alarms will be of a type, which whilst ensuring that they give proper warning, have a minimum noise impact external to the site.

Internal haul routes will be well maintained and avoid steep gradients.

Earth moving plant will be fitted with efficient sound reduction equipment and manufacturers' enclosure panels will be kept closed.

Location of the site compound is located to minimise the noise impacts of delivery vehicles on unmade ground.

## Noise Reduction of Stationary Plant and Tools

Noise reduction measures for tools are as follows:

- Use of hydraulic or electric tools where possible;
- Use of alternative quieter equipment for concrete breaking/cutting;
- Fitting suitably designed sound reduction equipment to reduce noise without impairing efficiency;
- Use of damped tool piece or saw blade;
- Enclose in a suitably designed portable or fixed acoustic enclosure with suitable ventilation (with due regard to the health and safety of operatives).

These measures will be considered for selected where appropriate by the Site Manager.

## Control of Noise Propagation on Site

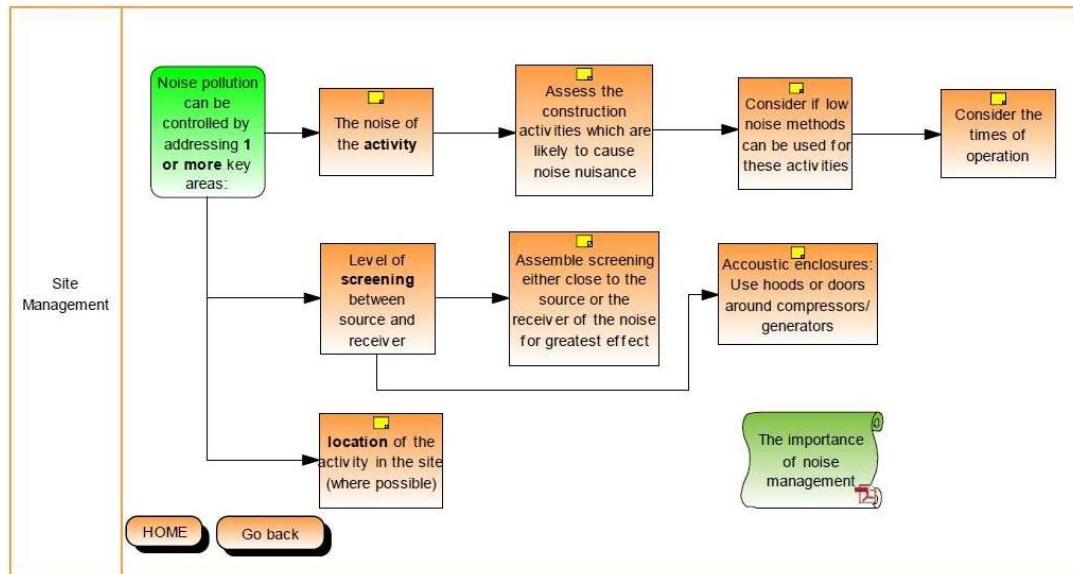
Temporary acoustic barriers, such as hoardings or mounds when positioned close to the source or the receiver will assist in the reduction of noise levels experienced at nearest receivers. The degree of protection will be limited to 5-10dB(A) and care must be taken to avoid reflecting noise and increasing the problem elsewhere

Barriers should be:

- A fairly uniform panel, free from holes with no gaps or openings at joints (uneven ground may leave gaps to be filled);
- Stable and robust enough to stand up to site conditions;
- Of a height and width more than enough to completely cut off sight of the source from the receiver, and
- Preferably at right angles to the line of sight of the receiver.

## Further Noise Guidance

- BS 5228 -1:2009 'Code of practice for noise and vibration control on construction and open sites – Part: Noise'
- BS 5228-1:2009+A1:2014 and BS 5228-2:2009+A1:2014.  
Helpful sections on noise include Section 4 - Community relations, Section 8 - Control of noise, Annex B - noise sources, remedies and their effectiveness, Annex E - significance of noise effects and Annex G - Noise monitoring. Helpful sections on vibration include Section 4 - Community relations, Section 8 - Control of vibration, Section 9 - measurement, Annex B - significance of vibration effects.



## Waste Management (Recycling/Disposal)

An important part of the site management process involves site cleansing, rubbish removal and recycling. We will produce a detailed Site Waste Management Plan which will include details of how we intend to reduce, re-use, recycle and manage site waste. This will be produced and implemented to comply with environmental legislation.

The adopted plan will involve the following provisions:

### Buying and Storing Materials

- Order the amount of materials you need as accurately as possible
- Arrange for 'just in time' deliveries to reduce storage and material losses
- Consider the source of materials.
- Consider the packaging used for materials delivered to the site -can this be reduced or recycled
- Ensure that deliveries are rejected if damaged or incomplete
- Make sure storage areas are safe, secure and weatherproof (where required)
- Store liquids away from drains and in bunded areas to prevent pollution.

### Site Activities

- Ensure options for the use of reclaimed and recycled construction materials, that meet the materials specification, are considered.
- Recycle suitable spoil, demolition materials, prunings, and surplus construction material arising from the works on site to avoid the need to transport materials.
- Keep the site tidy to reduce material losses and waste.

## **Training and awareness**

- Promote good practice awareness as part of health and safety induction / training for workers onsite.

## **Waste Segregation**

- Segregate different types of waste as they are generated using different skips where possible (given the space available).

The responsibility of updating the SWMP belongs to the Glencar Project Manager. An untidy site is NOT TOLERATED by Glencar Construction Ltd.

## **Light Control / Pollution.**

Lighting must be able to provide safe working conditions for staff, and therefore the following measures will be put in place when situating & using site lighting.

- All lighting will be situated in such a manner as to provide as much lighting as is necessary for the work & no more, thereby reducing the risk of light pollution & the use of unnecessary numbers of generators.
- The lights will face downwards/sideways so that they do not shine into any nearby premises. Where this is not possible, hoods or louvres may be employed.
- Appropriate selection of innovative site lighting methods e.g. LED to improve the energy efficiency of the site and minimise the spread of the light beyond where required
- Lighting will be turned off at the end of each shift, unless otherwise required for security arrangements.

## **Site Clearance**

- Clearance of the site vegetation is to take place outside of the bird nesting season.
- There are no demolition works to be undertaken.
- Any suspected Asbestos / or Asbestos containing materials which are discovered on site will be treated as Asbestos until proven otherwise. Areas will be segregated, with an exclusion zone established around the affected area until such time that a specialist team can be deployed to remove the material as per the Control of Asbestos Regulations 2006.

## **Communication**

### **Group communications to GCL**

Alerts are issued via a HSEQ **Bulletin** to communicate urgent environmental information. These are issued to all staff via email, and hard copies displayed in all site cabins.

The Environmental Coordinator will contact any external body such as (Natural England, Environment Agency, Local Authority) when an imperative issue arises, thus keeping continual communication channels open.

### **Communication with Operatives**

It will be mandatory, for all sub-contractors and operatives working on the site to undergo a formal **induction** prior to entering the site where all relevant health, safety & environmental information for the site will be briefed. **Toolbox talks** will also be delivered and records maintained.

### **Communication with the Local Community**

Local residents and businesses that could be disturbed by the works will receive a hand delivered **newsletter** detailing the scheme, including details of proposed start and completion dates and a summary of the work schedule along with contact details for a representative of Glencar. Letters are delivered at least 14 days prior to the start of the works and at regular intervals throughout the works.

A **complaints log** exists on each site that records any feedback from local residents along with any measures taken to resolve. Glencar staff are encouraged to respond proactively to any complaints in a timely and fair manner. All environmental complaints are shared to the Environmental Coordinator to assist with an appropriate response.

During and prior to construction, contact with the public may be necessary. This will be done through site notices, leaflets/ sufficient notice. Complaints will be taken seriously and resolved by the Technical and Construction Team for matters relating to the site development.

A **noticeboard** will be affixed to the hoardings on the site. This will contain:

- Contact details of the Project Manager
- Contact details for the Head Office
- Notification of any work opportunities
- Most recent environmental dashboard that contains information regarding waste and carbon data

