

CONSTRUCTION MANAGEMENT/TRAFFIC PLAN

JN2645 Mountnessing Primary
School

Rev2

Beardwell Construction Ltd
49 Southend Road
Grays
Essex
RM17 5NJ

Revision:	Amendments:	Prepared By:	Checked By:	Date:
1	Tender	B Davidonyte	B Davidonyte	18/09/2019
2	Planning submission	B Davidonyte	B Davidonyte	04/11/2019

This Construction Management/Traffic Plan has been produced by Beardwell Construction for the new build classroom block at Mountnessing Primary School in Mountnessing, Essex.

1.0 Proposed Programme

Contract Works

- Commence: June 2020
- Completion: April 2021
- Duration of Works on Site: 42 weeks

2.0 Introduction

This is a proposal for the site known as Mountnessing Primary School in Mountnessing, Essex. The proposed works comprises the construction of a new single storey classroom block consisting of 3nr classrooms, a staff room, library, practical room, new head office, toilet facilities, a plant room with bin store and external play areas. In addition, carparking spaces will be provided within the confines of the School. The work also includes the removal of 1 nr temporary building with the area of the new building footprint. Also remodelling works within the main lower school comprising of the new toiler facilities and a medical room

The existing school is operational and will remain so throughout the construction process. The works will be phased to minimise the disruption to the school.

The agreed contents of the Construction Management/Traffic Plan must be complied with unless otherwise agreed. The Contracts Manager shall work with the Authority to review the Construction Management Plan should any problems arise in relation to the construction of the development any future revised plan must be approved by the Authority and complied with thereafter.

3.0 Construction Start/Completion Dates

The target dates for the project are:

Phase 1 –refurbishment works within the existing school

- Start date: June 2020
- Completion date: August 2020

Phase 2 Works – Removal of 1 nr Relocatable Classroom and Construction of the New Classroom block

- Start date: August 2020
- Completion date: April 2021

4.0 Proposed hours in which vehicles will arrive and depart

In general, the hours in which vehicles will arrive and depart will coincide with site hours which are approximately 7.30am to 5.00pm in the evening. No vehicles will stop outside the school boundary or on adjacent roads. Only pre-booked deliveries will be allowed to enter the site and will be escorted from the main school gate to the site working area. Deliveries will need to be planned and organised in advance and by agreement with the School. There will be occasions when heavy loads may need to be delivered and removed from site. Good communication and co-ordination with the school will ensure there is the required space to safely deliver equipment and materials to site. A local commercial area in Mountnessing could be used as a holding area for large deliveries. The driver will then phone forward to the Site Manager to gain permission to deliver to site. A Beardwell Construction member of staff/designated banksman will be in attendance at all times and will escort vehicles in and out from the site boundary and to the local highway. Local neighbours will be notified earlier via monthly Newsletter also nearer the time of any large deliveries.

Construction traffic will peak during the early stages of the project with the removal of spoil from site and the delivery of concrete for foundations. We will endeavour to have a maximum of 6-8 deliveries during the same day.

All vehicles will avoid the school's peak times where drop off or pick up of children occur. The entrance to site will be via the school main entrance which is a controlled gate. There vehicles will be greeted by Beardwell Construction site personnel. ALL GATES MUST BE CONTROLLED AND CLOSED AS SOON AS THE VEHICLE IS ON THE SCHOOL PREMISES. The vehicle will then be banked into the site working area. The site working area will be defined by fencing and will have a set of locked gates.

Due to the restricted site access road most of the remainder of deliveries will be with small vehicles. All small deliveries will be arranged and made during off peak times. All orders will be placed with our approved supply chain and clear delivery direction and rules will be issued with all orders.

All vehicles will enter the site straight off the road to the working/waiting area if required or directed straight to the actual site compound. Due to the restricted size of the site area the number of vehicles on site will be limited.

The main new block construction project will be completed in one continuous phase in order to cater for the continued live occupation of the school and its students this phase will require the removal of the RL just at the start of the term in 2020. The remodelling phase will be completed during the School's summer holiday in 2020.

The new extension build will take place from August 2020. Access will be via the existing main schools access entrance. An access route will be identified to the works area. This access will be checked to ensure that pedestrian paths are kept clear as required by the school.

5.0 Access arrangements for Vehicles

Parking for School Staff will remain in the existing hardstanding area at the School. This has a same gated entrance leading directly from the highway. The school entrance to the existing carpark will be utilised for site access.

All deliveries will be required to contact the Site Manager by telephone to advise and agree access times and arrangements. Vehicles will enter our site area via Roman Road using the current school entrance road. A holding area has been defined such that the vehicles do not block surrounding roads or the main road as mentioned earlier in the text. Once in the holding area the vehicles will be checked and access given for unloading. Once off loaded at the site working area the vehicles will then turn around and exit to the highway in a forward manner. All deliveries leaving site will be banked onto the highway.

General construction processes have been reviewed and deliveries on and off site have been reduced in order to reduce the impact on the surrounding area.

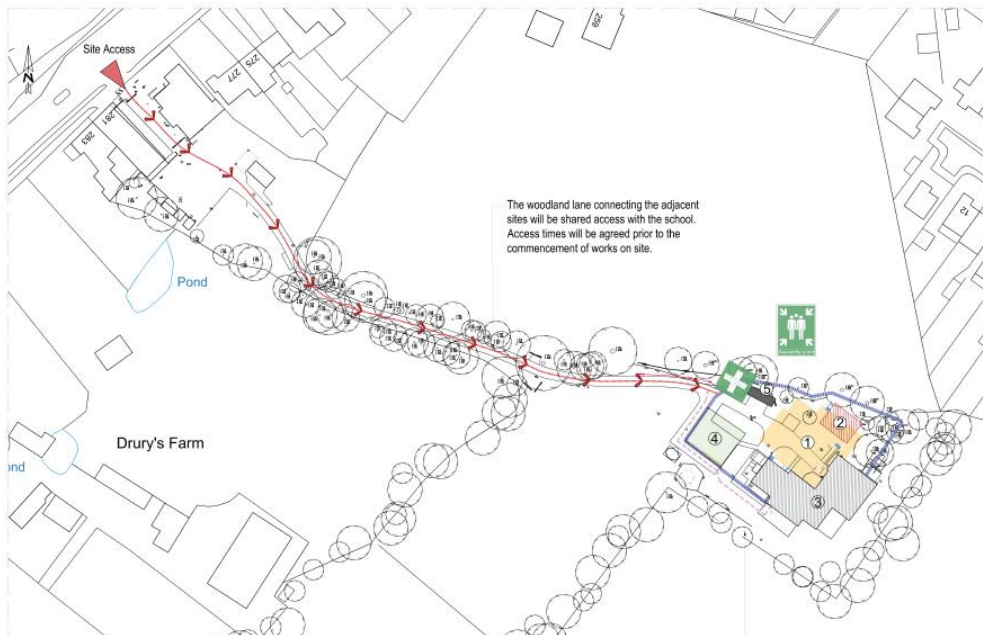
Site Operatives will use when possible a separate construction pedestrian entrance, thereby avoiding any contact with the existing school.

The working site area will be segregated by 'heras' type fencing where required.

The public and school students will continue to use their entrance at the front of the School at all times.

Site Location

SCHOOL DEVELOPMENT: MOUNTNESSING C of E PRIMARY SCHOOL



Banksman/Traffic Marshal – a Key Role

A strict delivery procedure will be implemented to ensure that Roman Road are not overrun with site and delivery vehicles. Our banksmen will ensure that traffic flow on both roads is maintained at all times.

The Traffic Marshall will act as banksman when vehicles enter the site (both entering in forward gear and should the need arise in reversing).

All sub-contractors and suppliers will be required to give 48 hours notices (part of order placement procedure) of deliveries. The movement of materials will also be controlled by our Traffic Marshall. He will be responsible for the coordination and control of all aspects of material deliveries and movement.

Close liaison with school at all times informing about all deliveries and planned operations.

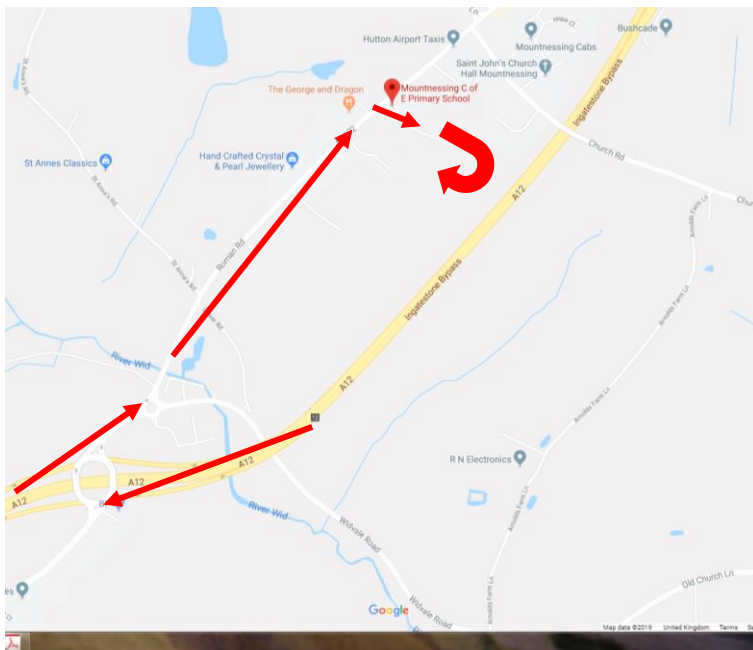
A holding area if required will be established for large deliveries to ensure permission to deliver is given by the site manager.

6.0 Proposed routes for Vehicles to the site

Details of agreed access/egress routes will be issued to all our suppliers and subcontractors. This will be policed as far as practical but it must be recognised that we have no jurisdiction over the vehicles once they have left our site.

Generally, all deliveries will be made from the A12 as shown using the B1002 to Roman Road and then to the school.

All vehicles will need to turn from the highway into the small overspill carpark adjacent to the site near proposed car parking area. They will then be able to access site in a forward direction via the road connecting the two sites (upper and lower)



Access plan

7.0 Size of Vehicles

Numerous types of delivery vehicles will be used to bring materials to and from the site please see our delivery schedule for estimated numbers. These include:

- Skip lorries. These will include standard 8 yard skips for waste (approx. size 7m long and 2.4m wide).
- Muck away lorries (approx. size 7m long and 2.4m wide).
- Tipper lorries (approx. size 7m long and 2.4m wide).
- Concrete lorry (approx. size 8.25m long and 2.45m wide).
- Flatbed delivery vehicles for the delivery of various materials including scaffolding, reinforcement, SIPS panelling, concrete planks, timber, roofing insulation and roof coverings, plaster, joinery etc. (approx. size 8.5m long and 2.45m wide).
- Cranage

The projected vehicle movements are likely to be approximately 10 per week during the main contract off peak works period and a maximum of 16 per week during peak works like concrete pouring. The concrete pours will be very short in duration as these are very limited.

8.0 Tight manoeuvres into the site

All vehicles will enter site in a forward direction accompanied by at least one banksman. For large deliveries at least 2nr banksman will be available to safely manoeuvre on and off site. Vehicles will turn within the confines of the site and leave in a forward direction back on to Roman Road.

9.0 Details of any highway works necessary to enable construction to take place

None required.

10.0 Parking and Loading Arrangements

A strict delivery procedure will be implemented to ensure that local roads are not overrun with site and delivery vehicles. Our banksman will ensure that traffic flow is maintained at all times.

All subcontractors and suppliers will be required to give 48 hours' notice of deliveries. The movement of materials, particularly in the main contract works stage, will also be controlled by our traffic marshall. He will be responsible for the control and coordination of all aspects of material deliveries and movement.

Vehicles will immediately pull into the site for unloading wherever possible.

Materials will be stored within the boundary of the site.

Parking will be permitted on site, where possible on site, to ease traffic in surrounding streets and all sub-contractors will be informed at the pre-order meeting that the surrounding area for parking is permit controlled. All subcontractors will be encouraged to use public transport (Local Bus Route)

11.0 Temporary traffic management orders

None required.

12.0 Proposed overhang of the Public Highway

None required.

13.0 Details of any Hoardings or Fencing

The main site area and the contractor's compounds will be enclosed with Heras type fencing. This will all be within the confines of the school site and within the Schools boundary fencing. It will be adapted as necessary.

14.0 Details of how pedestrian safety will be maintained

When vehicles are entering or leaving the site, these will be supervised by our traffic marshall/banksman

The general public/pedestrians will have right of way along the footpath to the front of the School and to the access to the school's main entrance. The construction site gates will be kept closed and monitored. Only when deliveries are made to the site will they be opened to allow vehicles onto the site, at which time barriers will be put across the pavement to prevent access by pedestrians. These barriers will be manned. All delivery vehicles will be supervised/controlled by BCL banksman.

The appointed Site Manager will also ensure that the external perimeter of the site is regularly inspected (twice a day) to ensure that any debris is kept clear of the entrance or pavement.

Should there be any complaints arising from the works, local residents will be able to call personally to the site manager at our site office. Our Managing Director will deal personally with comments or complaints from the public or neighbours and will ensure that they are resolved swiftly. A record will be kept of all comments and complaints.

15.0 Management of traffic to reduce congestion

Within Beardwell's Management Structure is a Site Manager. The Site Manager will be responsible for the day to day management of all deliveries to the site. These will be booked in using a Delivery Schedule so as to prevent lorry congestion to the road network that surrounds the site. Should a lorry/vehicle arrive that has not been booked in, that lorry will be turned away.

Wherever possible lorries will be brought onto site keeping the roads free for general traffic movement.

We shall encourage our sub-contractors to use public transport to travel to site. We shall also inform potential sub-contractors that parking is very restricted in the local

area. We will monitor parking, especially on neighbouring roads, to ensure site parking is dealt with considerately.

16.0 Control of dirt and dust on the public highway

Mud and debris on the road is one of the main environmental nuisance and safety problems arising from construction sites. Beardwell will make provision to minimise this problem.

In the early stages of the project when ground works are being carried out, all vehicles that leave the construction site will be washed down within the compound.

The wash bay area will be impermeable and isolated from the surrounding area by a raised kerb or roll over bund to contain solids. No debris or concrete will be washed into the drainage system.

We will also make provision for cleaning of the road if required by an approved road sweeper.

We will consider spraying a fine spray to suppress dust on the following:

- Unpaved areas that are subject to traffic or wind.
- Sand, spoil and aggregate stockpiles.
- During loading/unloading of dust generating materials.

17.0 Details of consultation with local businesses or neighbours

As individual citizens, as a company and in partnership with Essex County Council and our supply chain, we will take due care of the community and environment within which we will be working.

The site team will have direct responsibility for fostering good community relations with all neighbouring residents and businesses. From the start of this project an individual directly involved in the management of the site will be identified as being specifically responsible for community relations (Community Liaison Representative). This single point of contact will be established for all liaison with the general public.

We will initiate early and honest communications to establish a good rapport with the community which will help reduce problems that may arise during the construction process. Part of the process will be the inclusion of regular Newsletters keeping our neighbours up to date with what has and will happen on site.

This has already commenced as part of the planning consultation at which we were represented.

We will ensure that any particularly sensitive works or issues are dealt with in a professional and accountable manner, with the public and local community kept informed at all times. This may include things like out of hours delivery of large items of plant such as excavators.

Information boards will be displayed on the site boundary which will highlight the key personnel on site including their contact details. The regular newsletters will also

highlight the key personnel and their contact details. In the event of a complaint the Community Liaison Representative will respond by return or as soon as they can. All complaints will be logged, all actions tracked and each item closed out to the satisfactory agreement of all parties.

Prior to any person being allowed on site they have to go through a Health, Safety and Environment Project Induction which, amongst others, will highlight the requirements set out in the Considerate Constructors Scheme and in Beardwell's own project procedures.

18.0 Working Group and other measures to reduce the impact of the site

The communication process with the local community has already started via an open consultation meeting.

Before work commences we will send out letters to the neighbours informing them of what will be happening and giving them our contact name and telephone number.

This will include a 24hr emergency hotline.

We will also maintain full and regular communications with affected neighbours regarding site activity, deliveries and traffic.

Should there be any complaints, as we have stated earlier, local residents will be able to call personally to the site offices. A record will be kept of all comments/complaints.

Other points that we will action:

- Ensure that site lighting does not affect neighbours.
- We will ensure that our workforce maintain a respectable standard of dress code.
- Encourage operatives not to leave site in their dirty work clothes.
- Register the project with the Considerate Constructors Scheme.
- Provide ID hi-viz for all operatives.

19.0 Targeting zero non-hazardous waste to landfill

As part of our environmental approach we seek to source materials from local companies provided that specification requirements and costs are met.

20.0 Energy usage

Where practicable, we seek to source green energy providers for the construction phase. Meters will be supplied for the site enabling energy consumption levels to be monitored.

21.0 Fuel consumption

We strive to procure local contractors for the project therefore minimising transport costs and impact on the local environment.

22.0 Waste Management

Our approach to the treatment of waste is to employ a specialist waste removal supplier. This contractor is responsible for the safe removal of waste from site.

Due to restrictions on space it is unlikely that segregation will be possible on site. However this will occur at transfer stations. We will remove all spoil from site which will be recycled.

We will ensure that all access routes and fire escapes are swept and kept clear of debris on a regular basis to maintain high standards of health and safety on the project. All general areas of the project will be swept clean on a weekly basis.

Sub-contractors will be responsible for removing waste emanating from their works to a central point on site.

Refer to Beardwell's Environmental Statement.

23.0 Bio-diversity Protection Measures

Beardwell have procured and obtained an Extended Phase 1 Habitat Survey (Preliminary Ecological Appraisal) of the site. This highlights the need to be aware of the adjacent tree lined boundary and to allow for certain measures to protect the ecology of the area during construction operations. Badger set closure license will be required prior the demolition and new construction works can take place with the diversion works of the services.

The recommendations contained within the report will be incorporated within our construction operations as follows;

Bats & Lighting

- In order to minimise risk of disturbance to potential features that may provide bat commuting and foraging habitat during the construction phase a low impact lighting scheme will be implemented on site.
 - a) A badger sett was identified in the north-east corner of the site, in close proximity to the proposed development footprint
 - b) Further survey effort has been advised to determine the status of the badger sett and these surveys are currently ongoing. Temporary sett closure is likely to be needed and is likely to require a licence from Natural England. An ecological impact assessment with more detailed advice will be provided once these surveys are completed.
 - c) It is not envisaged that extensive lighting will be used until the envelope of the building has been constructed. Bright internal lighting will not be allowed to escape from windows which face the potential habitat areas.
 - d) The brightness of lights will be as low as possible, and in accordance with British Standard Institute (BSI) and Bat Conservation Trust (BCT) guidance.

- e) Low pressure sodium lights will be utilised to provide an emergency winter escape route. The only entrance to the building is via a single door which faces the existing school and therefore we envisage that external lighting will be contained in this area.
- f) External lighting will not be directed at features that may be utilised by bats such as tree lines, hedgerows and water bodies/water courses.
- g) Any directional lighting will be fitted with hoods and/or cowls.
- h) We do not envisage using security lighting during the construction phase however should this prove necessary then motion sensitive and timers will minimise the amount of time that lights are on.

Radiating badgers/mammals

- To protect any radiating mammals the site working area will be fenced off during construction.
- Our Site Compound is located in a separate area within the heart of the School. Lighting from Site Accommodation will be internal and as such break out lighting will be negligible and will not impact upon the adjacent tree lined boundary. No security lighting will be required to this area as it is covered by existing lighting from the School. Refer to our site logistics plan.
- All excavation trenches will be covered over with wooden sheeting at night.

Protection of Hedgerows and Tree Lined Boundary (Phase 2)

- A survey will be undertaken to ensure that we are aware of any nesting birds in trees or existing bird boxes. Bird boxes will be relocated elsewhere in the school prior to the nesting season.
- Protection measures will be adopted by utilising an exclusion zone and fencing to protect the existing trees, vegetation, birds and mammals during the removal of the RL and new classroom construction works.
- The retention of boundary hedgerows and woodland is advised, along with the provision of a method statement sensitive to great crested newts and hazel dormice in order to eliminate the risk of impacts on these species.

Site Communication and Awareness

The following measures will be undertaken to educate our site workforce and ensure that the protection measures are maintained;

- The location and likely ecological aspects of the project will be communicated to all staff and operatives via Works Orders and Site Inductions.
- This section of this Construction Management Plan will be incorporated into all works orders.
- The key contents of the Ecology Survey and this section of the CMP will be incorporated into all site inductions.
- Our Site Rules, which are incorporated into our Construction Phase Health, Safety and Environmental Management Plan, Works Orders and Inductions which contain specific references to need to manage and maintain fencing, lighting and site protection measures.

24.0 Pollution Prevention Measures

Specific pollution prevention measures will be undertaken. The vegetation corridor to the nearby brook will be maintained throughout the works.

A site investigation has been undertaken and this has identified that there is no contamination present within the soil.

It is unlikely that materials will be stockpiled near to the ecologically sensitive areas due to the limited amount of space available on site. Where materials are stored locally silt bunds will be used to avoid run off.

We will follow our Pollution Prevention Guidance and our own Environmental Procedures which are based upon current legislation.

These will specifically include;

- Identify and mark the location of all drainage on site.
- Identify the risk of contaminants entering drains or the brook via an Environmental Impact Assessment with specific mitigation measures during the works via Method Statements.
- Settlement tanks will be used to remove silt from stormwater that accumulates on site.
- Any cement mixing on site will be undertaken on a hardstanding at least 10m from the site boundary.
- Concrete vehicles will return to the batching plant before washing out.
- Washdown areas will be provided on hard standing away from the working area and surplus material will be contained and removed from site.
- Excess concrete will be contained within a designated area of hardstanding and will not be allowed to pollute the surrounding area.
- Cut off trenches will be used to avoid the potential of water running off to the nearby brook.
- Oils, paints, chemicals etc will stored safely by way of bunds or enclosed containers.
- All oils, paints etc will be stored away from drains or watercourses.
- Any refuelling of excavators will take place away from the site working area.
- Hazardous materials will be stored in safe storage areas.
- Avoiding storing in high traffic areas – where possible.
- Protecting stored hazardous materials etc against accidental collision damage.
- Supervise oil/diesel deliveries.
- Locking stores when not in use.
- Using drip trays during transfer of oils, fuels etc into vehicles
- Checking fuel tanks regularly for cracks, leaks, collision damage or contamination.
- Keeping all filling and supply hoses within the bunded area.
- Keeping a spill kit nearby in case of spillage.

We will not;

- Discharge into drains
- Refuel or store within 10 metres of watercourse or drain.
- Allow bunds or drip trays to overflow.
- Leave re-fuelling hoses outside bunds after use.
- Use high pressure delivery systems when filling small containers.

IN THE EVENT OF A SPILL reference will be made to our Spill Control leaflet/procedure.

IN THE EVENT OF A SIGNIFICANT SPILL we will immediately advise our Environmental (SHEQ) Manager, Gavin Salmon.

25.0 Asbestos Management Plan

For all works within the existing buildings a refurbishment and demolition (R&D) survey will be undertaken to survey for any Asbestos in the work areas. This will be an intrusive survey and determine if any Asbestos is present.

All operatives on site who carry out intrusive works will have received Asbestos Awareness training. In event of a suspicious hazardous material being found ALL work will immediately cease. The Site Manager will implement the Beardwell Asbestos procedures and no work will continue until the areas effected have been surveyed by a competent contractor and the all clear given.

26.0 DBS Checked Operatives

All Beardwell Construction employees and our approved sub-contractors will be DBS checked. A list of operatives will be made available for the school to have a copy or be reviewed.

Any non-DBS checked operatives on site will be escorted at all times in the school. To identify non-DBS operatives, a BLUE SAFETY HARD HAT will be worn.

Appendix A

Environment & Sustainability

Protecting the environment is of the utmost importance to Beardwell and as such we have developed an environmental management system which is certified to ISO 14001 standards. In addition, we have a comprehensive environmental policy and we issue environmental targets to all staff.

Our site teams are supported by a network of experienced Environmental advisors and they also have access to all company procedures and templates. Most of our sites are required to sign up to the Considerate Constructor's Scheme, and to target a CCS audit score within the upper quartile.

Sustainability during Construction

Our environmental procedures and targets along with a project specific Environmental Management Plan will form the basis of our operations throughout the duration of the project and will assist us in meeting the sustainability requirements of the client. In brief, we aim to:

- Minimise environment impact
- Prevent pollution
- Minimise energy use
- Minimise mains water use
- Minimise waste
- Maximise waste recycling
- •Maximise the use of recycled and sustainable materials
- Increase environmental awareness of staff
- Improve environmental performance of subcontractors and suppliers
- Implement and maintain environmental operating procedures

Minimising On-Site Energy Usage

We carefully monitor all gas, electricity, water and fuel usage on our sites against the company targets. On some projects we calculate an overall carbon footprint for our operations. We are also able to monitor the CO2 produced by the transportation of goods and people to and from site. Effective monitoring allows us to identify areas for improvement and helps meet requirements such as BREEAM. The following measures are used to minimise emissions:

- Reducing the use of CO2 intensive generator electricity, by connecting to grid electricity supplies wherever possible
- Minimising energy demand of site accommodation / offices e.g. using low energy 'Eco Cabins'
- Effective set up of site temporary electricity supply to ensure power can be shut down easily and efficiently
- Use of energy efficient lighting for offices, site and for the building prior to permanent lighting being fitted
- Use of energy efficient plant options e.g. 'soft start cranes/hoists'
- Using our central energy management team to design the most energy efficient site set up early on in project planning

