



# **DARWIN GREEN CAMBRIDGE**

SUBMITTED BY BDW TRADING LIMITED  
FOR SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

## **CONSTRUCTION MANAGEMENT PLAN & DETAILED WASTE MANAGEMENT PLAN**



**DARWIN GREEN  
CONSTRUCTION MANAGEMENT PLAN and DETAILED WASTE MANAGEMENT  
PLAN  
PROJECT NO. H4059  
DECEMBER 2013**

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Darwin Green Construction Management Plan & Detailed Waste Management Plan-December 2013

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## 1.0 INTRODUCTION

### a. Background.

The development site NIAB 1 is located in the north western fringe of the City and to its north is the A14 Cambridge Northern Bypass. It comprises part of the land used by the National Institute of Agricultural Botany (NIAB) between Huntingdon Road and Histon Road. Other land parcels are owned by the Chivers Family, Chivers Farms Ltd, Christ's Sydney Sussex College and St Catharine's College, all of whom are party to a consortium for the purpose of this development.

The North West Cambridge Area Action Plan (AAP) produced by South Cambridgeshire District Council and Cambridge City Council identifies land to be released from the Cambridge Green Belt, to contribute towards meeting the development needs of Cambridge's housing requirements of 20,000 new homes.

The site comprises approximately 50.8 hectares of which 48 hectares falls within the administrative boundary of Cambridge City and 2.8 hectares of land within South Cambridgeshire.

Outline planning permission (application reference 07/0003/OUT) was granted on 6<sup>th</sup> August 2010, subject to conditions, by Cambridge City Council for up to 1593 dwellings, primary school, community facilities, retail units (classes A1, A2, A3, A4 & A5) and associated infrastructure including vehicular, pedestrian and cycleway accesses, open space and drainage works.

On the same date, full planning permission (application reference S/0001/07/F) was granted, subject to conditions, by South Cambridgeshire District Council for the formation of vehicular, pedestrian and cycleway access road from Histon Road to serve the urban extension of the City between Huntingdon Road and Histon Road, together with drainage and landscaping works.

This construction plan is prepared to deal with application reference S/0001/07/F for South Cambridgeshire District Council. The CEMP is a strategic document that outlines the overarching details and principles, while making a commitment to the detail that will be picked up in the individual CMP's. Individual development parcels will require their own construction management plan (CMP) in addition to the CEMP.

### b. Site Description.

The site comprises approximately 50.8 hectares of which 48 hectares falls within the administrative boundary of Cambridge City and 2.8 hectares of land within South Cambridgeshire. The land is centred at Ordnance Grid Reference TL 441 612.

The northern boundary of the site coincides with the boundary of Cambridge City and South Cambridgeshire District and is marked with a public right of way which runs along Whitehouse Lane and then on a track towards Histon Road.

To the south and west the site abuts Cambridge's built up area and is roughly 2 km from the historic centre of Cambridge and approximately 4 km from the train station.

To the south of Huntingdon Road lies Cambridge University's North West Cambridge site.

Cambridge Science Park and the Regional College Campus lies 2 km east of the site along King's Hedges Road. Directly east of Histon Road is the new mixed development of Orchard Park.

1 km west of the site is Madingley Road Park and Ride which provides numerous cycle racks, lockers, 1000 car parking spaces and frequent bus services to the City Centre.

The site is served by the A1307 Huntingdon Road and B1049 Histon Road, two major radial routes in to the City Centre. The site has good access to the Histon junction of the A14 which also provides a connection to the M11. The A14 westbound can also be accessed from Huntingdon Road.

The NIAB site is gently sloping with an elevation between 13.2 to 23 m above Ordnance Datum (AOD). It is roughly triangular in plan, comprising arable farmland cultivated at the time of planning application with mainly arable agriculture, in particular large scale crop trials run by the National Institute of Agricultural Botany (NIAB). A network of established hedgerows, tree lines are found on the sites boundaries.

There are several footpaths that border the site, including a Public Right of Way running north to south on the western boundary.

## **2.0 PLANNING CONDITIONS**

### **a. Condition 9 of S/0001/07/F**

Prior to the commencement of development on site a Construction Management Plan (CMP) shall be submitted to and approved by the Local Planning Authority. The Construction Management Plan shall include:

- a. Contractors access arrangements for vehicles, plant and personnel including the location of construction traffic routes to and from the site, details of their signing, monitoring and enforcement measures
- b. Details of Haul Roads within the site
- c. A plan specifying the area and siting of land to be provided for parking, turning, loading and unloading of all vehicles visiting the site and siting of the contractors compound during the construction phase to be agreed on phase basis
- d. Delivery times for construction purposes
- e. Dust management and wheel washing measures
- f. Noise method, monitoring and recording statements in accordance with provisions of BS 5228 (1997)
- g. Concrete crusher if required or alternative procedure
- h. Details of odour control systems including maintenance and manufacture specifications along with
- i. Maximum noise mitigation levels for construction equipment, plant and vehicles
- j. Site lighting
- k. Screening and hoarding details
- l. Access and protection arrangements around the site for pedestrians, cyclists and other road users
- m. Procedures for interference with public highways
- n. External safety and information signing notices
- o. Liaison, consultation and publicity arrangements, including dedicated points of contact
- p. Complaints procedures, including complaints response procedures
- q. Membership of the considerate contractors scheme

All development shall take place in accordance with the approved Construction Management Plan unless formally agreed in writing with the Local Planning Authority.

### **b. Condition 17 of S/0001/07/F**

Prior to commencement on site a detailed Waste Management Plan (DWMP) shall be submitted to and Approved in writing by the Local Planning Authority. The DWMP shall demonstrate how the approval will accord with the principles of the Outline Waste Management Plan. The DWMP shall include details of:

- a. The anticipated nature and volumes of waste
- b. Measures to ensure the maximisation of the reuse of waste
- c. Measures to ensure that effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site
- d. Any other steps to ensure the minimisation of waste during construction
- e. The location and timing of provision of facilities pursuant to criteria b/c/d
- f. Proposed monitoring and timing of submission of monitoring reports
- g. The proposed monitoring and timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development

Unless otherwise agreed in writing, thereafter the implementation, management and monitoring of construction waste shall be undertaken in accordance with the agreed details and no individual building subject to a Detailed Waste Management Plan shall be occupied until the Waste Management Closure Report has been submitted to and approved in writing by the Local Planning Authority.



### **3.0 CONSTRUCTION MANAGEMENT PLAN (CMP)**

#### **a. Contractors access arrangements for vehicles, plant and personnel including the location of construction traffic routes to and from the site, details of their signing, monitoring and enforcement measures**

For access routes to Cambridge and the NIAB site please refer to Appendix A, Vehicle Routes for Major Deliveries and Appendix E, Traffic Management Plan, TMP01.

Access to the site is being promoted as via Junction 14 of the M11 on to the A14 and B1049 Histon Road or A1307 Huntingdon Road, from all directions. This is to avoid significant construction crossing through the city. The enclosed route maps, found at Appendix's A, are to be provided to all contractors and suppliers and will be discussed at pre-start meetings.

Signage is to be provided from Junction 14 of the M11 further to discussion and approval from the Local Authorities.

The primary vehicular access points are located at Huntingdon Road, on the southern boundary of the site and Histon Road on the northern boundary. These primary routes join the secondary route which forms a continuous loop serving the entire development area. Additional tertiary routes meet this secondary route at various locations throughout the development.

No dwellings served from Histon Road shall be occupied until that access has been fully laid out and implemented in accordance with a detailed engineering scheme/plan.

The access strategy will be developed to ensure a clear, accessible and safe network of roads, streets, pathways and cycle ways through the site. It is designed to give pedestrians priority throughout the development to provide clear links to public transport to promote sustainable modes of travel.

Segregation of pedestrians and site traffic will be monitored and adapted as work progresses along with the production of the Emergency Procedures which will be monitored and revised as necessary throughout the construction period.

All traffic management, access and egress to this site is specific to this development and is further detailed on the appendices. All construction traffic entering and leaving the Site will be closely controlled. Vehicles making deliveries to the Site or removing spoil material etc. will travel via designated routes, as denoted on Traffic Management Plans, sent out with contractor and material orders. Clear and concise signs will be erected by Barratt Eastern Counties warning of the nature of the works to be undertaken and a signboard displayed with all relevant contact names including a 24hr telephone number. Details of standard signage are given in Appendix E – Construction Signage Pack.

All deliveries to and from site, in particular H.G.V's, will be carefully controlled to ensure minimal disruption to the local environment is caused. Site and road conditions will be continuously monitored and adequate facilities will be provided for wheel washing and road cleaning should it be necessary.

The site gates will be kept closed whenever possible to prevent unauthorised entry to the site during the working day. The site will be secured at the end of each day. A security hut and gateman will liaise with all delivery drivers to prevent congestion and ensuring records (waste tickets etc) are in place.

During the construction period, there will be 2 construction access and egress roads which will be located off Huntingdon Road and Histon Road.

Any existing accesses to the site that are not retained within the approved development plan shall be permanently and effectively closed within 28 days of the commencement of the development on site. No gates shall be provided to the private residential vehicular accesses within the development, unless the details of such are submitted to and approved in writing by the local planning authority.

Visibility splays at road junctions and on the inside of bends shall be laid out and constructed to form part of the highway and not enclosed within the cartilages of adjoining properties.

On site haul routes are restricted to a maximum speed limit of 10 mph. Barratt Eastern Counties will impose a lower speed limit of 5 mph for all vehicles travelling over unmade ground to minimise the likelihood of dust creation. These speed limits apply to all vehicles at all times.

Specific details for the upgrading of Histon Road, including permanent and temporary realignment, diversions and road closures are not available at this stage. However a detailed traffic management plan will be developed and submitted for approval by the local authority prior to works commencing.

Contractors will consult on a regular basis with Barratt Eastern Counties to review traffic management for the work. Traffic management arrangements need to be flexible so they can adapt to needs on site and to local concerns. Any changes or actions will be promptly communicated by Barratt Eastern Counties to Contractors and vice versa and all other residential / commercial developers to comply.

Monitoring and enforcement will be controlled via the Considerate Constructors Scheme (see Section q)

#### **b. Details of Haul Roads within the site**

Please refer to Appendix B, Traffic Management Plan number TMP01

On site haul routes are restricted to a maximum speed limit of 10 mph. Barratt Eastern Counties will impose a lower speed limit of 5 mph for all vehicles travelling over unmade ground to minimise the likelihood of dust creation. These speed limits apply to all vehicles at all times.

The anticipated design for our temporary haul roads will be 150mm thick sub-base of Hydraulic Bound Material (Crushed Rock Coarse Aggregate), topped with 100mm of Asphalt (Dense Bitumen Macadam). These are both the minimum thicknesses in the DMRB (Design Manual for Roads and Bridges). On haul roads with a very short life required, it may be that an alternative design with reduced asphalt thickness would be suitable. The thickness of the sub-base and capping layer beneath will also be dependent on the strength of the underlying sub-grade, the soil type and the water table depth. Silty– clay soils in reasonable conditions (considered to be the site conditions) are likely to have a CBR (California Bearing Ratio) of 3-4% requiring a capping layer of 330mm of material beneath the sub-base layer. It is expected this road design would last for more than the required period and would be equally acceptable for the permanent site road network which will be subject to very low traffic flows except during construction and decommissioning.

The construction process will include the following activities:

- remove any sections of hedgerow/dense vegetation prior to the bird breeding season. Complete topographical surveys, soil bearing capacity surveys, trial pits and any necessary archaeological surveys;
- fence THR easement width (6m) with either post and wire or stock-proof fencing as appropriate along entire length. Vehicle gates to be installed at exits from the route onto public highways;
- deliver plant and equipment to the THR site;
- when soil conditions permit, strip topsoil from road formation width and drainage channel widths using a bulldozer (or 360° toothless bucket tracked excavator on archaeologically sensitive areas) – side cast in temporary storage mounds. Archaeological monitoring / survey / excavation as required;
- excavate / grade formation to required depth using bulldozer;
- install sub-base drainage / land drains using excavator;
- lay geotextile membrane;
- import and lay stone sub-base and compact using vibrating roller, incorporate further reinforcing layers of geotextile as required;

- form surface drainage channels by scarifying subsoil beneath channel and replacing topsoil in channel shape;
- profile soil storage mounds to achieve maximum noise and visual screening.
- surface temporary haul road with asphalt;
- install reflective marker posts and any signage necessary;
- demobilise remaining plant. Maintain fencing as required;

**c. A plan specifying the area and siting of land to be provided for parking, turning, loading and unloading of all vehicles visiting the site and siting of the contractors compound during the construction phase to be agreed on phase basis**

Please refer to Appendix B, Traffic Management Plan number TMP01 and Appendix F, Standard Site Compound layouts.

Various compound positions will be utilised during the developments life, all locations will consist of the following: -

The site compound area (25m x 20m) will consist of site offices, canteens, WC facilities, drying room, safety/induction room and 6 storage containers. These will be provided initially with temporary and when available mains services for both the supply of water and electricity along with a temporary drainage connection which will when feasible be connected to the main foul water drainage scheme. The perimeter to the compound will consist of a plywood hoarding to all elevations. This will further add to the physical segregation and visual separation of the compound when viewed from the nearby boundary areas.

The bulk storage and recycling area (25m x 20m) will be positioned along with the necessary cement silos and waste management area contained within.

The site parking area (25m x 20m) will be positioned alongside the compound, all as indicated on drawings within Appendix I.

**d. Delivery times for construction purposes**

The hours of work will be:

- Monday – Friday 08:00am – 18:00pm
- Saturday 08:00am – 13:00pm

No work will be allowed on Sundays or Public Holidays.

These hours may be varied in exceptional instances subject to approval with South Cambridgeshire District Council and subject also to any restrictions or requirements that they may impose. Any exceptional circumstances which may require work to be undertaken outside of the agreed hours will be agreed with the local authority prior to implementation. Any agreed out of hours work will be notified to local residents in writing with at least 5 day's notice.

Timing for deliveries and collections as laid down by Local Authority are:

- Monday – Friday 10:00am – 14:00pm
- Saturday 10:00am –14:00pm

No vehicular deliveries or collections will be allowed on Sundays or Public Holidays, unless otherwise agreed in writing by the Local Planning Authority.

Timings for deliveries and plant movement from site are set out by Barratt Eastern Counties and state it is a residential area with occupied houses, and local amenities.

Consideration therefore is to be given to pedestrians, residents, local traffic and children all of whom remain a priority at all times. These instructions have been communicated to buying and surveying teams.



All deliveries will in the main go to the compound area for initial off loading and subsequent distribution by forklift.

Materials will be unloaded from vehicles to either the compound or bulk storage areas by either forklift or "hiab" type Lorries.

Higher value or weather sensitive materials that are normally stored in containers will be distributed horizontally by all terrain forklifts. They will also be used for the vertical transportation of materials; these will be landed on loaded platforms incorporated into the elevation scaffolds as set out in our Health and Safety procedures. At no time will materials be allowed to be stored in any other areas outside those designated and fenced areas.

Appropriate bases for all use of mobile cranes/rotating forklifts will be required for the erection of timber roof members. These would also be used for the loading out of plasterboard, staircases and the like if required.

#### **e. Dust management and wheel washing measures**

Barratt Eastern Counties will adhere to: Mayor of London: The control of dust and emissions from construction and demolition Best Practice Guidance, dated November 2006. Please refer to Appendix G.

All Contractors carrying out activities such as mechanical cutting and grinding of stone, concrete kerb and slab cutting by ground workers, tile cutting at the ridge and verge by roofers, dry cutting will be allowed in the valley so long as roofers adopt a safe system of works.

For all activities involving release of silica dust and persons carrying out sweeping activities, will be expected to be face fit tested and wear a suitable Face Fit P3 mask.

Site transport that creates substantial amounts of dust must ensure the following hierarchy of prevention is implemented:

- Adequate ventilation provided, or
- Water Suppression System used, or
- Local Ventilation Systems (vacuum) systems used

Where the above hierarchy cannot be implemented, those exposed to the dust must wear Respiratory Protection Equipment (RPE) – to grade APF 40 (full face respirator with filter to p3 standard). Contractors must ensure that dust created by their work activities does not affect the health of other workers, residents and members of the public.

Please refer to Appendix K for the Risk Assessment for mortar silos. CPI product is fully enclosed in tanker and silo, preventing contact with persons or release to atmosphere.

We have noted that it is a requirement of the County that the site has the necessary wheel washing installation in place and working prior to the commencement of construction works on site.

Barratt Eastern Counties will therefore be installing and using a bespoke facility to ensure that lorry traffic leaving the site does not take mud/debris out onto the roads surrounding the site. See Appendix D, Drive in Drive out of Wheel Washing System. Where individual development parcels are unable to use the infrastructure wheel washing facility the individual CMP's should indicate the alternative wheel washing facilities.

All waste aggregates, water and sludge type materials resulting from the necessary „cleaning“ process will be removed from site by a licensed waste carrier and taken to a licensed waste disposal facility.

In addition to the provision of a Wheel Washing Facility, Barratt Eastern Counties or our nominated contractors will also provide an approved Mechanical Road Sweeper with vacuum facilities, spray facilities and on board storage. This shall be used for the sweeping and cleaning of the roadway system and the public highway immediately adjacent to the site, on a regular basis or as deemed necessary to prevent nuisance or hazards to other highway users and/or Barratt Eastern Counties. Collected debris is to be disposed of at a licensed waste disposal facility.

We will undertake the “damping down” of any unmade site roads by means of a towed dust suppression unit as and when required by the prevailing conditions on site.

Fuel tanks will be bunded for the duration of the construction phases. Site will also have spillage kits.

There is no current requirement for the use of settling tanks or oil interceptors during the construction phases of the development. They may however be required to be configured in the final development, should this be so, they will be addressed and detailed separately.

**f. Noise method, monitoring and recording statements in accordance with provisions of BS 5228 (1997)**

We are particularly aware of the need to mitigate noise and vibration wherever and whenever practically possible for any properties (sensitive receptors) which neighbour this development. These comprise those properties that face onto the development site.

The potential noise sources from work undertaken in connection with this project may include:

- Earthworks
- Site Clearance
- Excavations
- Transportation
- Processing of reusable materials
- Tree Surgery, Grass Cutting
- Cleaning
- Construction
- Waste Management
- Operational noise from completed project

Barratt Eastern Counties will implement the necessary management and operational controls in order to minimise any adverse impacts on the local community from construction activities. The timing, duration and mitigation measures used are to be designed by the sub-contractor and approved by Barratt Eastern Counties to minimise impact on nearby receptors.

Working hours will be as per those stated within Section d. Work and noise outside of these agreed hours is strictly prohibited without prior agreement of Barratt and the Local Authorities.

Barratt Eastern Counties will ensure all background and on-going noise monitoring is undertaken during the construction phase, to ensure worker protection and mitigate adverse impact on sensitive neighbours.

Contractors will ensure the implementation of best practicable means to reduce noise levels and to ensure compliance with acceptable levels.

Options for the control and mitigation of construction impacts include effective site management, engineering control, acoustic screening, restricted hours of work and the provision of sound insulation and noise monitoring.

Please refer to Section i for maximum noise mitigation levels.

Contractors are to control construction noise and vibration emission in accordance with the recommendations established in the relevant British Standard – for the control of noise on construction and open sites (BS5228-1:2009 and BS5228-2:2009) Additional reference should be made to BS4142 entitled “Methods of Rating Industrial Noise affecting Mixed Residential and Industrial Areas” which although not entirely applicable to construction operations provides useful guidance on assessing potential noise nuisance.

Noise is to be controlled at the source where practicable.

Screening will be considered where work is undertaken against sensitive receptor boundaries. It is considered at NIAB that all boundaries are generally insensitive due to the non-residential nature of the neighbour or the sufficient distance between the source and the receptor.

Prior to commencement of noisy construction works a method statement will be provided including method of works, programme, predicted noise levels and manufacturers specifications for equipment.

Fixed items of plant will be electrically driven.

All noise generated operations, e.g. concrete grinding, will be sited as far as possible from sensitive receptors and will employ suitable noise control measures.

Other protection measures will include:

- All vehicles, compressors and plant will be equipped with effective silencers and noise reducing insulation in accordance with BS5228:2009 part 1, where necessary.
- Plant not in continual operational use will be switched off and noise suppression covers will be used.
- Vehicle noise will be kept to a minimum. (e.g. excessive revving of vehicles will not be permitted)
- Where possible noisy plant and equipment will be sited away from sensitive noise boundaries. Where this is not possible, noise emission will be controlled accordingly by affective shielding.
- Loading and unloading of vehicles, dismantling of site equipment, such as scaffolding, will be conducted in such a manner that noise generation is kept to a minimum.
- Reversing alarms will be set to the minimum required setting by the HSE
- Deviation from approved method statements will only be with prior approval from Barratt and the Local Authority
- Any noise complaints, breaches of Section 60 notices or exceedances of action levels will be investigated by Barratt immediately.

The maximum level of vibration at construction sites will be required to meet the criterion set out in BS 5228-2:2009 as 0.3mm/s.

If vibration at a sensitive receptor is possible, such as in this instance neighbouring properties and it is suggested that it is likely to exceed 0.3mm s<sup>-1</sup>, the sensitive receptor and the Local Planning Authority (CCC) must be pre-notified, in writing, at least 5 full working days prior to work commencing, with the following information: We would note that in this particular development we are not currently aware of any working practices that would result in the creation of vibration at this level. However, we would note the following should an incident be reported:

- Location – the location on site in relation to the sensitive receptor;
- Duration of those site operations, including schedule of operations likely to cause any further vibration and their hours of work;
- Vibration characteristics – e.g. whether it is continuous, intermittent or impulsive;
- Effect on buildings – it is important to assure the community that vibration levels will not cause building damage;
- Details of site operator community liaison – so that the community feel assured that information is available and that complaints will be handled expeditiously.

Vibration levels which have the potential to cause building damage will not be tolerated.

No further sensitive receptors are considered to apply to the development.

All monitoring of noise and vibration will be undertaken by a suitably qualified operative, for example someone who holds the Institute of Acoustics (IOA) certificate of competence.

Noise will be monitored in accordance with BS 5228:2009 part 1 and vibration in accordance BS 5228:2009 part 2.

Monitoring of noise and vibration will be undertaken when:

- Agreed levels are likely to be exceeded
- Upon receipt of substantiated complainants
- At the request of the Local Planning Authority following any substantiated complaints

Records of the monitoring of noise and vibration will be kept until the project is complete and will be available for inspection by of the Local Planning Authority.

Any complaints will be dealt with under the Considerate Constructors scheme.

#### **g. Concrete crusher if required or alternative procedure**

It is envisaged the development will have visits by mobile crushing plant, at various stages as the phase's progress, to recycle inert materials. Emission limits, control techniques, monitoring and recording provisions will be in accordance with Appendix M, Guidance for Mobile Crushing and Screening.

#### **h. Details of odour control systems including maintenance and manufacture specifications along with**

No activities likely to create odours are foreseen to be undertaken

#### **i. Maximum noise mitigation levels for construction equipment, plant and vehicles**

Noise from the site when measured 3 metres from the facade (free field) of any noise sensitive property, such as residential, shall not exceed the following levels:

- LAeq (1 hour) 67 dB between 07:00 and 19:00 (including in the normal working hours)
- LAeq (1 hour) 57 dB between 19:00 and 20:00
- LAeq (5 minutes) 37 dB between 22:00 and 07:00

If noise at a sensitive receptor, such as residential, is likely to exceed the levels stated above, the sensitive receptor and the Local Planning Authority must be pre-notified, in writing, at least 5 working days prior to work commencing, with the following information:

- Site Location
- Duration of site operation, including schedule of operations likely to cause noise and their hours of work
- Noise characteristics
- Details of site operator community liaison for community assurance and managing complaints

We would note that in this particular development we are not currently aware of any working practices that would result in the creation of noise at this level or beyond. We also exceed the 3 metre distance from noise sensitive properties in all instances.

## **j. Site lighting**

All activities will be undertaken in accordance with the Assessment of the Problem of Light Pollution from Security & Decorative Light. Please refer to Appendix I

The HSE requires that we have installed adequate lighting –

“Adequate lighting should be provided to all areas and especially to those used in darkness hours, or where loading/unloading can be carried out in poor visibility or diminished lighting conditions. As a minimum, lighting should be provided for junctions, around plant and buildings, pedestrian routes and areas where loading/unloading is to be carried out. Guidance for road lighting can be found in BS 5489 „Road Lighting“.”

The workplace (Health, Safety and Welfare) Regulations 1992 will be complied with in this respect.

Barratt Eastern Counties will install sufficient 50 lux minimum lighting units to enable the safe movements of both vehicles and pedestrians across the site. The initial locations will be along the haul roads and around the site compound and the first working area. We will ensure that these illumination levels do not add light pollution to the neighbourhood throughout the duration of the construction works on site.

Compound lighting and any necessary site task or general lighting will be configured such as to ensure that it is directed to light the area required without illuminating the surrounding area. This lighting will be further controlled by means of time clocks and sensors as required.

## **k. Screening and hoarding details**

Please refer to Appendix B, Traffic Management Plan, TMP01 for location and extent of hoarding.

The height of the hoarding is to be a minimum of 2.4 metres constructed of 18mm plywood on 100mm x 50mm rails on 100mm x 100mm posts set in the ground or boxes depending on whether in soft ground or on existing roadways/paths.

The face of the hoardings will have 150mm x 25mm top header and bottom kicker rails and the joints to the plywood covered with 50mm x 25mm battens. The finished hoarding will be either painted or covered with di-bonded graphics. If used with graphics the 50mm x 25mm battens will be removed to allow a smooth finish.

## **l. Access and protection arrangements around the site for pedestrians, cyclists and other road users**

Barratt Eastern Counties are committed to adhering to the requirements of the Health and Safety Executive (HSE) guides for access and protection around the site and follow the appendices guidance documents produced by the Health and Safety Executive:

- HSG150 Health and Safety in Construction. This book is aimed at the small contractor but also applies to everyone involved in construction. It provides help and assistance on how to work safely on most tasks you will encounter. It will also help to identify the main causes of accidents and ill health and explains how to eliminate hazards and control risks.
- HSG151 Protecting the Public, Your Next Move. This book gives practical advice, especially for those designing, planning, maintaining or conducting on-site work, to prevent risks to those off-site, is provided. It covers the broad spectrum of pertinent issues, most notably legalities, perimeter and boundary matters and premises requiring special attention.

Barratt Eastern Counties will be protecting cyclists by installing the correct barriers in accordance with the chapter 8 works (NRSWA). These barriers will be moved and revised as and when the construction works

progress. We will also install herras fencing and the appropriate signage highlighting the traffic management in the construction areas. These signs will be displayed in a visible area that will be seen by cyclists, pedestrians and motorists.

We will also incorporate pedestrian and cyclist gates that will ensure that the cyclists are not speeding in pedestrian areas and will be forced to demount at the gates.

A gate will be introduced in the highway at designated areas between the site access and the public to ensure members of the public cannot access the site and that all site traffic is managed. A trained banks man will be located at the gates and will manage all site traffic coming in and out of site.

Please refer to Appendices J and K

#### **m. Procedures for interference with public highways**

Barratt Eastern Counties are committed to adhering to the requirements of the Health and Safety Executive (HSE) guides over procedures for interference with public highways: and follow the following guidance documents produced by the Health and Safety Executive:

- HSG150 Health and Safety in Construction. This book is aimed at the small contractor but also applies to everyone involved in construction. It provides help and assistance on how to work safely on most tasks you will encounter. It will also help to identify the main causes of accidents and ill health and explains how to eliminate hazards and control risks.
- HSG151 Protecting the Public, Your Next Move. This book gives practical advice, especially for those designing, planning, maintaining or conducting on-site work, to prevent risks to those off-site, is provided. It covers the broad spectrum of pertinent issues, most notably legalities, perimeter and boundary matters and premises requiring special attention.

Please refer to Appendices J and K.

Barratt Eastern Counties will also be committed to meeting any requirements of Cambridgeshire County Highways.

#### **n. External safety and information signing notices**

Please refer to Appendix E, Construction Signage Pack.

Barratt Eastern Counties are committed to providing clear and adequate signage to give warnings, directions, instructions etc. to its workforce, visitors and members of the public. Examples of our signage are given in appendix E.

#### **o. Liaison, consultation and publicity arrangements, including dedicated points of contact**

Liaison, consultation and publicity arrangements, including dedicated points of contact will be provided and managed via the Considerate Constructors Scheme.

A point of contact board will be mounted on the site access gates. This will include all contact details, including during and outside work hours, as well as the details for the Considerate Constructors Scheme.

There will be a designated liaison officer (the Construction Liaison Officer) who will deal with public and other complaints and enquiries. This nominated individual will be named at the Site entrance, with a contact number, and will be identified to SCDC and community groups, prior to the start of site activities, and whenever a change of responsibility occurs.



**p. Complaints procedures, including complaints response procedures**

All complaints will be managed via the Considerate Constructors Scheme.

Response to Complaints. Any complaints will be logged on site and, where necessary, reported to the relevant individual within SCDC as soon as practicable. The required actions will be different in each specific case, depending on the operation, equipment or location or applying additional controls.

All complaints received under the scheme from any source, regarding a registered site or company, are recorded.

All complaints are put into one of the following categories:

- Noise, Dirt and Dust, Parking, Safety, Inconsiderate Behaviour, Road Conditions and Vehicle Movements, Environmental Concerns, Pedestrian Access Obstruction, Property Damage, Site Lighting, Working Hours, Other.

The Scheme has designated staff, trained to deal with any type of complaint.

If the complaint does not relate to an issue covered by the Scheme's Code of Considerate Practice (for example, the Scheme cannot get involved with planning issues or in decisions relating to compensation), the complainant will be pointed in the appropriate direction.

When a complaint is received that is relevant to the Scheme's Codes of Considerate Practice, the Site Manager or company contact will be told what the complaint is about, and given the name and contact details of the complainant (with the complainant's permission). Advice might also be offered as to how they might deal with the complaint.

The Scheme will stay in contact with the complainant until the site or company has investigated and responded to the complaint and until the Scheme is satisfied that the site is adhering to the Site/Company Code of Practice, at which point the complaint will be taken off the „active“ list.

If the Site Manager or company does not deal with a complaint in a satisfactory manner, the complaint will be passed to the Scheme's Chief Executive, who will refer the matter to the construction company's head office contact (as listed on the registration form). In the event that the response is still unsatisfactory, and the contact is not a director, then the complaint will be taken to company director level.

The Scheme may attempt to mediate between the parties during this process. If, at any time, the Scheme's Chief Executive considers that a reasonable settlement has been reached, the complaint will be taken off the active list. Where necessary, an experienced Scheme Monitor may visit the complainant and the Site Manager or company contact to seek resolution.

If a registered site or company fails to deal with a problem in an effective manner or if the Scheme's Chief Executive believes them to be in breach of the Site/Company Code of Considerate Practice, the Chief Executive will provide a report of the incident(s) to the Chairman of the Scheme's Board for a decision.

Where the Chairman's decision is to remove the site or company from the Scheme, the company and the client will be informed by recorded delivery letter.

**q. Membership of the considerate contractors scheme**

The site will be registered with the Considerate Constructors Scheme (CCS).

Membership of the CCS requires principal contractors to adopt a Code of Practice, see appendix L, which seeks to:

- Minimise any disturbance or negative impact (in terms of noise, dirt and inconvenience) sometimes caused by construction sites to the immediate neighbourhood.
- Eradicate offensive behaviour and language from construction sites.
- Provides contact details of the key personnel for the project.
- Results in an improved understanding and respect from residents and others in the community and fewer complaints.
- 

The CCS registration compliments Barratt Eastern Counties' sustainability and environmental management practices and is an essential element in maintaining good neighbour relationships.

The CCS also requires each site to be independently audited during construction.

All sites and companies registered with the Scheme display a Scheme poster (where appropriate), giving the contact details of both the registered site or company and the Scheme.

Barratt Eastern Counties will be „letter dropping“ all of the properties within the surrounding area, including Ash Cottage, Wood House, Blackhall Road, Orchard Close, Brierley Walk, Blandford Walk, Brownlow Road, Martingale Close, Pelham Court, Cavesson Court, Histon Road, Chancellors Walk, Carisbrooke Road, Holywood Close, Tavistock Road, Fontwell Avenue, Stratfield Close, Arundel Close, Cliveden Close, Windsor Road, Hoardly Road, Woodlark Road, Eachard Road, Sherlock Road, Huntingdon Road, Howes Place, Whitehouse Lane and Thornton Close.

This letter introduces Barratt and furthermore the team who will be working on the development. It also outlines arrangements for future communications.

#### **4.0 DETAILED WASTE MANAGEMENT PLAN (DWMP)**

##### **a. The anticipated nature and volumes of waste**

Please refer to Appendix N, Detailed Waste Management Plan sections 1.4 - Waste Minimisation and 1.5 - Forecast of Waste Quantities.

##### **b. Measures to ensure the maximisation of the reuse of waste**

Please refer to Appendix N, Detailed Waste Management Plan section 1.4 - Waste Minimisation.

##### **c. Measures to ensure that effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site**

Please refer to Appendix N, Detailed Waste Management Plan sections 1.2 - Project Declaration, 1.6 - Project Pre-Commencement Checklist and appendix 3, Barratt Group Standard 29 Waste Management.

##### **d. Any other steps to ensure the minimisation of waste during construction**

Please refer to Appendix N, Detailed Waste Management Plan sections 1.2 - Project Declaration and 1.6 - Project Pre-Commencement Checklist.

##### **e. The location and timing of provision of facilities pursuant to criteria b/c/d**

Please refer to Appendix N Detailed Waste Management Plan sections 1.1 - Project Scope, 1.3 - Site Segregation and appendix B, E & F - standard compound layouts, signage and site plan showing location of compounds.

**f. Proposed monitoring and timing of submission of monitoring reports**

Please refer to Appendix N, Detailed Waste Management Plan sections 1.1 – Project Scope, 1.2 – Project Declaration, 2.1 – Monthly Recycling Reports, 2.2 – Cumulative Recycling Reports, 2.3 – Monthly Site Visit Reports, 2.4 – Monthly Waste Return Reports, 2.5 – Quarterly Review of Plan, 3.1 – Difference from Predicted, 3.2 – Post Completion Checklist, 3.3 – Project Completion Waste Recycling Summary Report, 3.4 – Sign-off, 4.1 – Duty of Care Compliance Matrix / Waste Carrier Licences / Certificates, 4.3 – Waste Transfer Notes and 4.4 – Consignment Notes.

**g. The proposed monitoring and timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development**

Please refer to Appendix N, Detailed Waste Management Plan sections 1.1 – Project Scope, 1.2 – Project Declaration, 2.1 – Monthly Recycling Reports, 2.2 – Cumulative Recycling Reports, 2.3 – Monthly Site Visit Reports, 2.4 – Monthly Waste Return Reports, 2.5 – Quarterly Review of Plan, 3.1 – Difference from Predicted, 3.2 – Post Completion Checklist, 3.3 – Project Completion Waste Recycling Summary Report, 3.4 – Sign-off, 4.1 – Duty of Care Compliance Matrix / Waste Carrier Licences / Certificates, 4.3 – Waste Transfer Notes and 4.4 – Consignment Notes.

# **Appendix A**

## **Vehicle Routes for Major Deliveries**

# **Appendix B**

## **Traffic Management Plan TMP01**

## **Appendix C**

### **Examples of Site Specific Safety Boards**



## **Appendix D**

# **Drive in Drive out Wheel Washing System**

# **Appendix E**

## **Construction Signage Pack**

# **Appendix F**

## **Standard Site Compound Layouts**

**Appendix G**  
**control of dust & emissions from construction &**  
**demolition Best Practice Guidance**

## **Appendix H**

### **Risk Assessment for mortar silos**

**Appendix I**  
**Assessment of the Problem of Light Pollution from**  
**Security & Decorative Light**



## **Appendix J**

### **Health & Safety in Construction (in part)**

# **Appendix K**

## **Protecting the Public, Your Next Move**

# **Appendix L**

## **Considerate Constructors Code of Practice**

# **Appendix M**

## **Guidance for Mobile Crushing and Screening**

# **Appendix N**

## **Detailed Waste Management Plan (DWMP)**