



# HESLINGTON EAST

## CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Version	Date	Prepared by	Comments
v.1	Oct 2007	J Meacock	Issued for Internal Review
Rev 2	Nov 2007	J Meacock	Issued to CYC for Approval
Rev 3	Mar '08	J Meacock	Approved by CYC 22 July 2008

## Heslington East Development Construction Environmental Management Plan

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## 1 Introduction and Purpose

The University of York is developing the campus extension at Heslington East to the east of the existing campus and Heslington village. Planning condition 14 associated with the outline planning consent for this development requires the University to submit a Construction Environment Management Plan (CEMP) for the site. Condition 14 states:

*“Before the commencement of development, a Construction Environmental Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Construction Environmental Management Plan shall identify the steps and procedures that will be implemented to minimise the creation and impact of noise, vibration, dust and waste disposal resulting from the site preparation, groundwork and construction phases of the development and manage Heavy Goods Vehicle (HGV) access to the site. It shall include details of measures to be employed to prevent the egress of mud, water and other detritus onto the public highway. It shall include for the provision of a dilapidation survey of the highways adjoining the site. Once approved, the Construction Environmental Management Plan shall be adhered to at all times, unless otherwise first agreed in writing with the Local Planning Authority.”*

The University is making adherence to the CEMP a contractual requirement of any construction contract associated with Heslington East. It is to cover the management of a contractor’s activities and those of any sub-contractor working under the main contractor’s control. The CEMP defines the minimum requirements that have to be met.

## 2 Scope of the CEMP

The CEMP addresses issues associated with:

- Noise and Vibration
- Air Quality
- Archaeology and Cultural Heritage
- Visual Impact
- Ecology
- Water Pollution
- Waste
- Contaminated Land
- Construction Traffic Management
- Protection of Existing Services
- Community Responsibility

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

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

### 3 The CEMP Requirements

#### 3.1 Noise and Vibration

##### Relevant Planning Conditions

##### Condition 21:

*“All noise generated during the site preparation, groundwork and construction phases and associated ancillary operations of the use hereby permitted shall meet the following criteria:*

LOCATION	MAXIMUM LIMIT	TIME PERIOD
<i>Western boundary of site adjacent to school’s outside playing areas</i>	<i>50 dB Laeq (30 minutes)</i>	<i>During the School Day</i>
<i>The gardens of dwellings at: (a) western boundary of site on The Crescent (b) northern boundary of site on Field Lane</i>	<i>70 dBA (1 hour)</i>	<i>A continuous period of up to eight weeks in any calendar year, without the prior written approval of the Local Planning Authority</i>
<i>The gardens of dwellings at: (a) western boundary of site on The Crescent (b) northern boundary of site on Field Lane</i>	<i>Not exceeding background noise levels</i>	<i>Before 0800 and after 1800 Monday to Friday Before 0900 and after 1300 on Saturdays At all times on Sundays and Bank Holidays</i>
<i>Within occupied residential buildings on the site</i>	<i>Not exceeding background noise levels</i>	<i>Before 0800 and after 1800 Monday to Friday Before 0900 and after 1300 on Saturdays At all times on Sundays and Bank Holidays</i>

*Before the commencement of development the developer will carry out an acoustic survey on the site boundaries at locations agreed with the LPA to establish background noise levels.*

*Before the commencement of development the developer will submit a scheme to the LPA setting out means of regular monitoring of the noise levels at these locations and this shall be approved and implemented before the commencement of development."*

In accordance with this condition the University will be carrying out acoustic surveying to set the background noise levels. These will be the benchmark from which contractors are to apply the prescribed noise levels. The University will be monitoring noise levels on a regular basis (no less than 3 monthly) to ensure this condition is being adhered to.

**Condition 30:**

*"All piling operations shall be carried out using the method likely to produce the least vibration and disturbance. Full details of the dates, times and duration of operations shall be submitted to, and agreed in writing by, the Local Planning Authority before any piling operations are begun and piling operations shall take place in accordance with the approved details."*

Noise - Additional Requirements

In addition to the above the contractor must comply with the following:

- All statutory or other identified noise control limits
- Where necessary, plant and equipment will be silenced, screened and/or enclosed in accordance with the guidance of BS5228 and particularly noisy activities will be shielded by the erection of hoardings or screening.
- No explosives are to be used on site
- The use of radios on-site is to be controlled so that it does not cause a nuisance

**3.2 Air Quality**

The location of the site and the planned construction activities do not give rise to a serious risk to air quality. However contractors will be expected to take measures to minimise the presence of air borne dust during construction.

It is anticipated that dust will travel a maximum of 200m from where it is generated. The principle mitigation measure to avoid contamination to neighbouring properties and infrastructure is to keep construction activities at a minimum of 200m away from the site perimeter.

As well the following additional measures are to be taken:

- Design controls are to be implemented for construction equipment and vehicles, and appropriately designed vehicles are to be used for materials handling.
- Completed earthworks are to be vegetated as soon as practicable.
- The site is to be regularly inspected and site boundaries checked for dust deposits and removed as necessary. In addition local roads are to be checked and cleaned when necessary.

There is to be no burning of materials on site.

### **3.3 *Archaeology and Cultural Heritage***

Areas of the site which have been found to include remains of archaeological significance will be fully investigated prior to any construction commencing in their vicinity. However there will be an ongoing requirement to maintain a watching brief for any archaeological finds during construction activities particularly during excavation work. An Archaeological Remains Management Plan has been issued separately to define the means of carrying out these investigations.

### **3.4 *Visual Impact***

#### **Relevant Planning Conditions**

##### **Condition 23:**

*“Outside the development area shown as “allocated area” on submitted Plan A no temporary works, materials storage or ancillary operations, other than those relating to development hereby permitted outside the allocated development area as shown on the submitted Plan A, shall be carried out.”*

Contractors’ compounds and areas for material storage are to be located within the allocated development area. The locations are to recognise the sensitivity of the outlook from nearby residential properties.

### **3.5 *Ecology and the Protection of Retained Trees***

Existing trees and hedges are to be protected and retained wherever possible. Trees and hedges that are to be retained will be clearly identified and are to be protected from construction activity. In the event that trees and hedgerows have to be removed this needs to be outside the nesting season, and trees should have been surveyed to ensure that there are no bat roosts present.

Trees that are to be retained are to be protected in accordance with the following guidelines:

#### **3.5.1 *Retained Tree Protection***

Retained trees are to be protected in line with British Standard: 5837 “Trees in Relation to Construction”.

The part of the tree most susceptible to damage is the root system. BS 5837 advises that in order to avoid damage to the roots or root environment of retained trees, a root protection area (RPA) should be determined. The RPA is the minimum area which should be left undisturbed during construction and is designed to prevent any significant long term damage to the tree by protecting the root plate and to some extent the lower branches of the tree. Each tree to be retained in an area for construction is to have its RPA calculated and protective fencing erected around the full perimeter of its RPA. The protective fencing should be at least 1.2m and of rigid construction, for example chestnut pale fencing. It must be erected prior to work commencing on site and remain until construction activities have been completed. This protective zone is to be considered sacrosanct.

### **3.6** *Protection of Water Resources*

The following activities give rise to potential risks to water course contamination. The proposed mitigating measures against this have been identified.

#### *a) Deliveries*

Special care is to be taken during deliveries, especially when fuels and hazardous materials are being handled. All deliveries are to be supervised by a responsible person so that storage tank levels are checked before delivery to prevent overfilling and that the product is delivered to the correct tank. Contingency plans are to be agreed and suitable materials available to deal with any incident that occurs. All employees are to be briefed on the actions that are required in the event of a spillage. Any spillages are to be recorded and advised to the University who will inform CYC if they deem it significant.

#### *b) Storage*

Many of the materials used in construction operations, such as oil, chemicals, cement, lime, cleaning materials and paint have the potential to cause serious pollution. All fuel, oil and chemical storage must be sited on an impervious base within a bund and secured. The base and bund walls must be impermeable to the material stored and of an adequate capacity. Leaking or empty oil drums must be removed from the site immediately and disposed of via a licensed waste disposal contractor. The contents of any tank are to be clearly marked on the tank, and a notice displayed requiring that valves and trigger guns be locked when not in use.

#### *c) Security*

All valves and trigger guns are to be protected from vandalism and unauthorised interference and turned off and securely locked when not in use. Any tanks or drums are to be stored in a secure container or compound, which is to be kept locked when not in use. Bowsers should be stored within site security compounds when not in use.

*d) Silt*

Water containing silt is never to be pumped directly into the lake or surface water drains. Silty water can arise from excavations, exposed ground, stockpiles, plant and wheel washing.

i) Excavations

Measures are to be taken to prevent water from entering excavations. This could be by the use of cut-off ditches to prevent entry of surface water and well point dewatering or cut-off walls for ground water. Personnel and/or plant are not to disturb water in the excavation. The means of dewatering excavations in the event there is ingress is to be agreed in advance with the University.

ii) Spoil Heaps

Spoil heaps are to be located and configured in a way that will avoid the risk of contamination of drainage ditches.

iii) Plant and wheel washing

Wheel washes and plant washing facilities are to be securely constructed with no overflow and the effluent should be contained for proper treatment and disposal. Recycling of water is to be included within the design.

iv) Site roads

These are to be kept free from dust and mud deposits. In dry weather dust suppression measures may be required.

v) Dealing with Silty water

Adequate provision for dealing with silty water is to be agreed in advance. Any planned discharges off the site will require prior approval with the appropriate authorities. (A discharge consent can take up to four months to obtain, or longer for difficult cases). To satisfy this consent suitable treatment may be required, including the use of a settlement lagoon or tank or grassed areas.

*e) Refueling*

The risk of spilling of fuel is at its greatest during the refueling of plant. Mobile plant is to be refueled in a designated area, preferably on an impermeable surface away from any drains or watercourses. A spill kit is to be available in this location. Hoses and valves are to be checked regularly for signs of wear and turned off and securely locked when not in use. Diesel pumps and similar equipment are to be placed on drip trays to collect minor spillages. These should be checked regularly and any accumulated oil removed for disposal.



*f) Concrete*

Concrete is highly alkaline and corrosive and can have a serious impact on watercourses. It is essential to take particular care with all works involving concrete and cement. Suitable provision is to be made for the washing out of concrete mixing plant or ready mix concrete lorries so that washings do not flow into any drain or watercourse or seep underground.

In the event of a spillage on site, the material must be contained (using an absorbent material such as sand or soil or commercially available booms). All spillages are to be reported to the University who will inform CYC and the Environment Agency In the event of a significant occurrence.

### **3.7 Waste**

A Site Waste Management Plan is to be provided by the Contractor that includes the following:

1. Organisational responsibility for the preparation and implementation of the plan
2. The types and quantity of waste anticipated
3. The measures that will be used to monitor delivery of the plan
4. The available options for waste management and preferences
5. The waste disposal sites and contractors that are proposed. All sites must be approved by the appropriate Waste Regulation Authority
6. Identify how hazardous and non-hazardous waste is to be disposed
7. Include how the necessary familiarisation and training to make the plan effective is going to be implemented
8. The measures to be used to ensure the efficient use of materials and minimise the production of waste and its handling
9. The means of monitoring how much and what types of waste are produced
10. A review process that monitors performance against targets and implements improvement actions where appropriate. The review period is to be every 3 months.

The objectives of the plan are to deliver the following:

- To minimise the creation of waste wherever possible;
- To remove rubbish, debris, surplus material and spoil regularly and keep the site clean and tidy;
- To ensure that waste disposal is managed in a controlled way
- To ensure that surplus material is minimised and any non usable surplus is recycled;
- To provide all necessary waste transfer documentation

### 3.8 *Contaminated Land*

#### **Relevant Planning Conditions**

##### **Condition 31:**

*“Any ground contamination detected during site works shall be reported to the local planning authority. A programme of remediation for this contamination shall be agreed with the Local Planning Authority in writing and fully implemented prior to any further development of that part of the site.”*

##### **Condition 35:**

*“Before the commencement of development, a method of sampling and validation of imported and excavated ground materials shall be submitted to and approved in writing by the Local Planning Authority to ensure that such materials that are used on site are not contaminated. This should include details of the origin of such materials.”*

Because the site is largely green field there is a low risk of ground contamination. The one exception to this is the former land fill site at Grimston Bar. The design of the car park will include the specific measures required to mitigate these risks. Notwithstanding the low risk of ground contamination, the conditions above are to be adhered to.

The University will carry out an annual programme of monitoring gas emissions from the landfill site.

### 3.9 *Contractor and Construction Traffic Management*

#### **Relevant Planning Conditions**

##### **Condition 24:**

*“Construction traffic to the “allocated area” as shown on submitted Plan C (i) shall only enter and leave from accesses to the public highway as shown on submitted plan 2. This will apply to all Contractors and Sub-contractors working on the site*

*All Construction traffic is to use the A1079 to arrive at the University. No construction traffic is gain access to the site from Fulford, Heslington Village or eastwards along Field Lane.”*

A haul road is to be provided off Field Lane in the area indicated on plan2. This is to be the only means of construction access into the site until the permanent road system is in place. At the exit of the haul road is provision for a wheel washing facility. This must be used to prevent any mud going onto the public highway.

#### **Other Traffic Issues**

Before the commencement of development a dilapidation survey of the public highways adjoining the site shall be jointly undertaken with the University and CYC.

In order to avoid aggravating peak hour traffic congestion on the local road infrastructure contractors will be expected to have most of their staff on site by 08.00hrs. The start of the working day needs to recognise the constraints of the condition on noise.

All Contractors' parking is to be on site within the area allocated for development. There is to be no parking of Contractors' staff or deliveries on neighbouring streets.

### **3.10 Protection of Existing Services**

#### **Relevant Planning Conditions**

##### **Condition 16:**

*"No building or other obstruction shall be located over or within 5 metres either side of the centre line of the 700mm water main that crosses the southern edge of the site i.e. a total protected strip width of 10 metres."*

##### **Condition 17:**

*"Before the commencement of development details showing the methodology for protection of the 300mm water main that runs south of the Hull Road access shall be submitted to and approved in writing by the Local Planning Authority, and these protection measures retained in place at all times thereafter."*

##### **Condition 18:**

*"No building or other obstruction shall be located over or within 3 metres either side of the centre lines of existing public sewers i.e. total protected strip widths of 6 metres for each sewer that crosses the site."*

Contractors are to provide information to the University that meets the requirements of the above conditions.

### **3.11 Site Management and Community Responsibility**

The contractor is to liaise with local resident groups so as concerns that they might have can be aired and resolved. Contractors are expected to embrace the objectives of the Considerate Constructors Scheme.