This Environmental Management Plan (EMP) is the property of VolkerFitzpatrick Ltd (VF). It has been developed based upon known activities and information available at the time of preparation, in association with the contract documents, including those produced for tender purposes, and is complementary to VolkerFitzpatrick’s Environment and Sustainability Management System.

The EMP has been prepared specifically to address the Environmental and Sustainability Assurance requirements for this contract, including any restrictions that may affect the work, such as neighbouring buildings, utility connections, pollution prevention, and work activities of Network Rail. Any variations to the Company Procedures and documents referred to in the HSEQSS Management System shall be detailed within this document.

The responsibility for the environmental and sustainability management of the Works rests fully and unreservedly with the Principal Contractor. The acceptance of an Environmental Management Plan on behalf of Network Rail and involvement in Studies or Audits does not in any way absolve the Principal Contractor from that responsibility, nor is it intended to confirm or suggest that the Principal Contractor fully meets the statutory requirements.
Environmental Management Plan

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<th>5</th>
</tr>
</thead>
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<tr>
<td>Date:</td>
<td>Jul 2013</td>
</tr>
<tr>
<td>Parent document:</td>
<td>Environmental Policy and Practice Document</td>
</tr>
<tr>
<td>Approved for IMS:</td>
<td>IMS Manager</td>
</tr>
<tr>
<td>Document owner:</td>
<td>Divisional Director Rail</td>
</tr>
<tr>
<td>Workspace file:</td>
<td>11.1</td>
</tr>
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Minor changes to the EMP (e.g. changing a name on the organisation chart) do not require a re-brief of the EMP to the project team. These can be recorded below by entering the issue number and authorising manager.

Major changes, or six subsequent minor changes, do require a full briefing to the project team and a new issue number.

EMP revision record

<table>
<thead>
<tr>
<th>Version No</th>
<th>DATE</th>
<th>SECTION NO</th>
<th>SUMMARY OF CHANGE</th>
<th>AUTHORISED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01/11/2015</td>
<td>1 – 4 INCLUSIVE</td>
<td>Draft inclusion of environmental statement</td>
<td>JM</td>
</tr>
<tr>
<td>2</td>
<td>27/02/2015</td>
<td>ALL</td>
<td>Incorporation of Richard Crossland (Cambridge Hub Manager) and Catherin Morby (Environmental Manager) comments</td>
<td>RC</td>
</tr>
</tbody>
</table>
1.0 GENERAL ENVIRONMENTAL REQUIREMENTS

Start Date: October 2014  Finish Date: TBC  Duration: xx weeks

Site Address: Chesterton Interchange Station, Cowley Road, Cambridge

Employer Name: Network Rail

Employer Address: 9 Kings Place, London N1 9AG

Normal Working Hours:
- 0800 to 1800 Monday to Friday and
- 0800 to 1300 on Saturday

There shall be no working on Sundays and Public Holidays.

The site may operate from 0700 Monday to Saturday but no powered plant, machinery or power tools shall be used or operated externally before 0800 and no deliveries shall be made unless agreed in advance with the local authority.

Out of Normal Hours Working:

Some work may be required outside of normal working hours for health and safety reasons and due to the proximity to the operational railway - see section 7.0 Noise and vibration management plan.

Prior to commencement of works the Cambridge County Council (CCC) EHO will be notified at least three months in advance of the out of normal hours working and residents notified as part of the on-going project communication.

Description of the Work:

Station Building and Landscaping:
A new 450 sq.m Station building, predominantly 2 storeys in scale (with the exception of covered bridge from the building across the Mainline Railway to platforms), including
- passenger waiting facilities, toilets, staffed ticket office, shop unit(s), amenity space, rail staff accommodation and facilities;
- all concourse and external levels designed to avoid use of ramps;
- structural and specimen tree planting will help integrate the Development with the surrounding landscape. New planting will complement the existing retained trees and hedgerows throughout the Site by using similar local species appropriate to the existing landscape character;
- landscape buffer areas around the western boundaries of the Site to provide an interface with the surrounding townscape which will assist in maintaining the rural-urban fringe character of the area;
- Along the perimeter of the Site and within the Development native hedgerows will be used as boundary treatments to reflect the landscape character of the adjacent river corridor;
- Native species of trees and shrubs which are locally occurring will be selected and will include specimen Birch trees and Hawthorn hedges.

Rail Side Infrastructure:
- A single platform and island platform are proposed towards the South of the Site. The through platforms follow the current track alignment whilst the bay platform is a connection off the existing
alignment. The opportunity has been taken to tidy up the existing redundant connections and the trap points have been relocated to protect the passenger service. The existing Freightliner Siding shall be relocated to connect to the existing track. The access to the DBS sidings remains unchanged under the proposals for this application.

- Both platforms are proposed to be constructed from pre-cast concrete beams and blocks supported on block work cross.
- The total length of each platform is 270m and is capable of accommodating a 12 car train.
- The platforms would be lit and CCTV provided for passenger security.
- A footbridge would span the bay platform and provide access from the station to the platforms, lifts and stairs would be provided on each platform and at the station.

**Sidings Scheme:**
This main project scope is to relocate the two aggregate freight terminals at Chesterton (in north Cambridge); the outputs required include:

- Reconfigure and extend the two existing reception sidings to remove the need to shunt trains via the main running lines and provide connections to the two new freight terminals
- Relocate the Freightliner siding and terminal to the north-east quadrant of Network Rail’s Chesterton site and disconnect the current
- Relocate and fit out the DB Schenker sidings and terminal to the north-east quadrant of Network Rail’s Chesterton site and disconnect the current

It is the responsibility of the Project / Site Manager to authorise the EMP, and to ensure that during the contract period it is reviewed and developed to reflect the contract requirements and works being carried out, including changes in environmental risks.

The controlled distribution of this EMP is detailed in Table 1 below.

Copy No 1 will be retained at the Site Office as the "Master Copy".

Issue of controlled copies can either be completed via email direct to the recipient, or in hard copy using the issue receipt in Table 2.

Acknowledgement of receipt must be obtained from the recipient. If the EMP is issued electronically this shall be via return email, and if the EMP is issued in hard copy, the recipient shall complete the issue receipt in Table 2 (below) and return the photocopied page. This acknowledgement must be retained in the Miscellaneous Appendix of the master copy of the EMP.

**Table 1: EMP controlled copyholders**

<table>
<thead>
<tr>
<th>Copy No.</th>
<th>Recipient</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VF Project / Site Manager</td>
<td>Workspace / Site Office</td>
</tr>
<tr>
<td>2</td>
<td>Network Rail Project Manager</td>
<td>Sent via email</td>
</tr>
<tr>
<td>3</td>
<td>ARC H&amp;S Manager</td>
<td>Sent via email</td>
</tr>
<tr>
<td>4</td>
<td>ARC Project Director</td>
<td>Sent via email</td>
</tr>
<tr>
<td>5</td>
<td>VF Environmental Manager</td>
<td>Sent via email</td>
</tr>
</tbody>
</table>

**Issue no:** 5 **Date:** Jul 2013 **Parent document:** Environmental Policy and Practice Document

**Approved for IMS:** IMS Manager **Document owner:** Divisional Director Rail **Workspace file:** 11.1 **Page 6 of 56**

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EMP PROJECT ACTIONS GUIDE

This plan is complementary to VolkerFitzpatrick’s (VF’s) Environmental Policy and Practice document, and has been prepared to include any environmental considerations brought to VF’s attention by the Network Rail or their representative.

Project and Site Management are responsible for reviewing the proposed work processes of VF and subcontractors in addition to monitoring their activities on site. Part of the review and monitoring includes consideration of the environmental implications of their activities.

Where necessary expert advice may be sought from VF Head Office support or specialist external consultants. Any expert advice given by specialist external consultants must be ratified by the HSEQS team.

The environmental implications of VF’s activities will be considered during design reviews, pre commencement planning meetings, Work Package Plan reviews and on site as part of the health, safety and environment inspections.

Throughout this document reference will be made to VF’s company procedures and guidance notes, in particular those concerned with waste minimisation, waste management and pollution control.

The following actions need to be completed in order to make the EMP a project specific document. These actions can be ticked off below as they are completed. This section has been provided as a guide and the list is not exhaustive, all sections of the EMP must be amended according to the nature of project requirements or controls.

<table>
<thead>
<tr>
<th>Tick</th>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>1.0</td>
<td>Description of the works</td>
</tr>
<tr>
<td>☒</td>
<td>1.3</td>
<td>Contract objectives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Complete Table 5</td>
</tr>
</tbody>
</table>

Environmental Management Plan

| ALL  | Project environmental management register |
|      | - Summarise risks in Table 3 |
|      | - Detail site specific controls in register |
|      | - Complete Project Specific Compliance Action throughout EMP |
|      | - Register site as a hazardous waste producer |

| 1.6  | Dissemination of environmental plans and training |
|      | - Detail environmental tool box talks in Table 7 |

| 2.0  | Discharge of Condition 16 – Construction Environmental Management Plan |
| 2.0  | Discharge of Condition 21 – Noise Management Plan |

1.1 RISK AND OPPORTUNITIES

At the environmental planning meeting (Appendix E1) an Environmental Risk Assessment EMS-02-VF (Appendix E2) has been implemented to identify the significant project environmental impacts and aspects.
Project significant environmental risks are to be entered into Table 3 below to reflect the environmental risk assessment for the project. If planned activities change the risk assessment must be reviewed and additional risks incorporated into Table 3.0.

Additional mitigation must be included in the accompanying management plans.

VF recognises that waste management and storage / handling of fuels are high risk activities and therefore will be managed with the utmost importance.

Topics within Table 2 are to be used as tool-box talk and training topics.

### Table 2: Project significant environmental risks

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Potential Impact</th>
<th>Risk Rating (H/M/L)</th>
<th>Controls detailed in Specific Management Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piling</td>
<td>Noise, Vibration, Dust, Groundwater</td>
<td>M</td>
<td>✓</td>
</tr>
<tr>
<td>Earthworks</td>
<td>Ground Water, Noise, Dust, Waste, Ecology</td>
<td>M</td>
<td>✓</td>
</tr>
<tr>
<td>Construction of main building and platforms</td>
<td>Waste, Noise, Ecology</td>
<td>M</td>
<td>✓</td>
</tr>
<tr>
<td>Installation of Track and Sleepers, Ballast and overhead line equipment</td>
<td>Noise</td>
<td>M</td>
<td>✓</td>
</tr>
<tr>
<td>Carpark works</td>
<td>Noise, Ecology</td>
<td>L</td>
<td>✓</td>
</tr>
<tr>
<td>Construction of drainage systems</td>
<td>Ground and surface waters, ecology</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>

### 1.2 REQUIREMENTS AND CONSENTS

VF will maintain a record of consents held and required including the discharging of any consent requirements throughout the design.

Consents will be programmed with sufficient timescales to allow for dialogue with the consent granting authority. For example, Section 61 consents require at least 28 days for approval by the local authority. Further information on Noise Management can be found in Section 8.3. Flood Defence Consents can take up to 56 days for approval by the Environment Agency.

Copies of consents will be provided to Network Rail within 7 days of receiving them.

Details of consents will be updated in Table 4 below.

### Table 3: Consents Register

<table>
<thead>
<tr>
<th>Consent / Permit</th>
<th>CGB</th>
<th>Reason</th>
<th>Receptor</th>
<th>Required</th>
<th>Reference no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement for Section 61 to be determined with EHO</td>
<td>Cambridge County Council</td>
<td>Works affecting local residents</td>
<td>Residential properties</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>
1.3 OBJECTIVES AND TARGETS

Sustainability incorporates environmental, economic and social requirements, the so-called ‘triple bottom line’. Sustainability has been brought into focus over recent years with new legislation and a number of key reports. VolkerFitzpatrick-Rail have produced a Sustainability Charter which sets out how the Organisation will manage and drive sustainability within the Rail business. The Chesterton Interchange Project will set sustainability objectives and targets and create a Sustainability Action Plan following a workshop.

1.4 ROLES AND RESPONSIBILITIES

The Organisation chart is located in the Construction Phase Plan. VF identify individuals to fulfil key environmental roles for the project through the allocation of environmental responsibilities.

a) Allocation of environmental responsibilities and a record of signatures shall be maintained on the pro forma HSE-33-VF Allocation of responsibilities and inserted in to the Construction Phase Plan.

b) These responsibilities address the Environmental aspects of the project in addition to the administrative aspects of the project.

c) All those responsible persons, named in sections 2, must sign section 15 of HSE-33-VF as a record of their signature and acceptance of responsibilities.

d) Section 16 of HSE-33-VF allows ‘additional designated scope of authority’ to be recorded. This is to be used where additional names must be recorded e.g. multiple staff signing for waste transfer and/or where additional responsibilities have been identified.

Table 4: Project Environmental Responsibilities

<table>
<thead>
<tr>
<th>Identified Environmental Responsibilities:</th>
<th>Project Team Member with environmental responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition Coordinator</td>
<td>Works Manager</td>
</tr>
<tr>
<td>Emergency Coordinator</td>
<td>Works Manager</td>
</tr>
<tr>
<td>Environmental Coordinator</td>
<td>Civils Project Manager</td>
</tr>
<tr>
<td>Waste Coordinator</td>
<td>Civils Project Manager / Civils Agent</td>
</tr>
<tr>
<td>Fuel Storage Coordinator</td>
<td>Works Manager</td>
</tr>
<tr>
<td>Community Liaison Representative</td>
<td>Senior Project Manager</td>
</tr>
<tr>
<td>Noise Monitoring</td>
<td>Civils Agent / Engineers</td>
</tr>
<tr>
<td>Energy &amp; Utility Warden</td>
<td>Office Manager</td>
</tr>
</tbody>
</table>
1.5 COMPETENCE, TRAINING AND AWARENESS

The Project Manager will ensure that all individuals employed on the contract have the appropriate training and experience required for the implementation of this EMP.

In particular those members of staff identified as having an environmental role in HSE-33 - Allocation of Responsibilities must be suitably experienced and competent to undertake the role.

A VF programme of Environmental Awareness training is available to staff members and where appropriate members of the team will be allocated attendance.

1.6 INTERNAL COMMUNICATION

The environmental management plan and its subsequent revision are briefed to all VF project based staff, as part of the CPP briefing. This includes agency personnel employed by VF to execute its project responsibilities & obligations. It is the responsibility of the senior manager on site to ensure updates are communicated and recorded.

Minor changes to the EMP (e.g. changing a name on the organisation chart) do not require a re-brief of the EMP to the project team.

Major changes, or six subsequent minor changes, do require a full briefing to the project team (see section version history).

The Project / Site Manager are to ensure that the existence of this Plan and its provisions are made well known to all personnel on site and any other interested parties. Induction shall address environmental issues, plus other training sessions as needed, including toolbox talks to raise awareness of the environmental issues affecting the site and how they are to be tackled.

Specific Environmental Risks and Mitigation shall also be included in Work Package Plans.

The programme of Environmental toolbox talks for this project shall address the following topics:

Table 8: Project environmental toolbox talks / training

<table>
<thead>
<tr>
<th>Toolbox talk topic</th>
<th>Target audience</th>
<th>Frequency of talk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Tool Box Talk to be undertaken on a monthly basis</td>
<td>Site personnel</td>
<td>1 per site / subcontractor a month</td>
</tr>
</tbody>
</table>

1.7 EXTERNAL COMMUNICATION AND MANAGING LINESIDE NEIGHBOURS

1.7.1.1 COMMUNICATION WITH NETWORK RAIL

Regular progress meeting will be organised with the employer every 28 days or as otherwise agreed. Updates may include but not be limited to risk mitigation, environmental performance indicators, progress against targets and a review of inspections and audit findings.

1.7.1.2 STATUTORY AUTHORITIES AND NON GOVERNMENTAL ORGANISATIONS

All communications with statutory bodies including applications or agreements must be done in agreement with the employer's representative.

Records of discussions and meeting minutes will be held on file.

Where a statutory body makes an unplanned approach to site the Employer's representative will be informed as soon as practicable.
1.7.1.3 OTHER STAKEHOLDERS (neighbours, stakeholders, interest groups, CCS)

Likely affected stakeholders during construction and of the permanent scheme are detailed in Table 9. This is a live table to be updated as the project progresses.

1.7.1.4

The Project will liaise regularly with the stakeholders listed in Table 5 below.

Table 5: List of Project Stakeholders

<table>
<thead>
<tr>
<th>Cambridgeshire City Council</th>
<th>South Cambridgeshire District Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freightliner</td>
<td>DB Schenker</td>
</tr>
<tr>
<td>Brookgate</td>
<td>Environment Agency</td>
</tr>
</tbody>
</table>

Table 6: Project neighbours

<table>
<thead>
<tr>
<th>Neighbour</th>
<th>Type*</th>
<th>Considerations</th>
<th>Letter drop</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Discovery Way</td>
<td>Residential</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>40 Ribston Way</td>
<td>Residential</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>78 Long Reach Road</td>
<td>Residential</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>54 Long Reach Road</td>
<td>Residential</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>32 Moss Bank</td>
<td>Residential</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>Kerry’s Yard</td>
<td>Caravan Park</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
<tr>
<td>20 Sunningdale</td>
<td>Caravan Park</td>
<td>Noise, Lighting, Deliveries</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Type – e.g. School / College, Domestic, Industrial, Business / Office

1.7.1.5 SITE WORK

As part of HSE-33 a member of the project team is nominated with responsibility for briefing all staff on acceptable conduct and delivery of notification letters approved by the Network Rail Community Relations representatives.

Notification letters will be delivered not less than 14 days prior to works starting on site and will include details of a project contact and a dedicated 24 hour project out of hour’s phone.

Complaints will be recorded using VF form QMF-05 Complaints Log.

Details of the complaint will be provided to the employer’s representative within 12 hours of the complaint receipt.

1.8 RECORDS AND DOCUMENTS

All documents will be stored on our document management system – Workspace. Hard copies will be available on site of key environmental documentation including:

- Environmental Management Plan
- Site Waste Management Plan
- Specific Consent Approvals (i.e., Section 61 consent)
- Waste Transfer Notes / Hazardous Waste Consignment Notes
Copies of all licences, consents, permits and permissions will be provided to the Employer’s Representative within 7 days of receipt.

At the end of the project final versions of key project environmental documentation will be provided either as standalone documentation or for inclusion in the H&S file / O&M manuals. This will include but is not limited to:

- The Environmental Risk Assessment
- The Environmental Management Plan
- The Site Waste Management Plan
- Operational control measures and best practice examples
- Mitigation and commitment measures
- Details of environmental incidents

1.9 MONITORING AND MEASUREMENT

Reporting will be undertaken on a four weekly basis using the VF Rail KPI template. The KPIs will be completed on a 4 weekly basis detailing the information below:

- Number and Type of Incidents
- Number and Type of Close Calls
- Number and Type of complaints
- Waste Produced – Landfill, Recycled or reused (tonnes)
- Energy and Carbon – units of energy and converted to CO2 (kWh)
- Water Used – site water use for cabins and work activities (litres)

Waste, Energy and Water usage will all be captured in the Site Waste Management Plan. The Waste coordinator and energy and utilities coordinator are responsible for ensuring this is kept up-to-date.

Complaints are to be logged and held on the site file Workspace in folder 10.5. Complaints are to be responded within 5 working days and any noise complaints notified to the Local Authority EHO.

1.10 INSPECTIONS, AUDITS AND CORRECTIVE ACTION

Environmental Inspections will be undertaken on a monthly basis. Any actions raised as a result of the inspection will be issued to specific action owners, the Project Manager and the Contracts Manager. Actions will have defined timescales for completion and actions from the previous inspection will be reviewed for close out.

An audit will be conducted within the first 6 weeks of project start and on a regular basis thereafter. The audit encompasses the whole suite of environmental management requirements. Issues identified will be categorised as either a Major (breach of legislation; mitigation), Minor Non-Conformance (breach of VF policy or procedure) or Action (observation).

- Where a non-conformance is identified the close out for compliance should be no more than 14 days unless otherwise agreed.
- Where an action is identified this should be completed within a 1 month period

Close out of audits will require evidence and this will be kept in workspace identifying close out and the close out timescales. The Project Manager will have ultimate responsibility for closing out any issues identified but they may choose to delegate to appropriate individuals of the project team.

1.11 SITE ACCOMMODATION

When locating site accommodation, consideration shall be given to minimising visual impact and to providing wastewater discharge to a suitable approved sewer. Where this is not possible, alternative arrangements shall be made for disposal of sewage via specialist contractor. This will include an appropriate waste duty of care trail.

Consideration shall also be given to the type of foundation to be used for temporary accommodation, to avoid disruption of the existing environment, where it is not located on an area of proposed hard-standing for incorporation into the contract works.
On project completion the area will be returned to pre-existing conditions or according to Landscape Management Plan requirements.

Table 7: Requirements for site connections/arrangements

<table>
<thead>
<tr>
<th>Connection / Arrangements</th>
<th>Applicable</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Y</td>
<td>Mains Connection</td>
</tr>
<tr>
<td>Mains electricity</td>
<td>Y</td>
<td>Mains Connection</td>
</tr>
<tr>
<td>Generator</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>Gas</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Foul – Mains</td>
<td>Y</td>
<td>Mains Connection</td>
</tr>
<tr>
<td>Foul – Septic tank (initially)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Other (Telecoms)</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
2.0 Traffic Management

2.1 Construction Traffic Management

The following requirements will at all times apply to the construction works:

2.1.1 Any temporary footways and ramps on the highway must be surfaced in materials to the satisfaction of the local authority in consultation with the Highway Authority.

2.1.2 All openings or obstructions on the carriageway or footway will be separated from the works with a suitable barrier (lit at night) strong enough to offer necessary resistance should a blind person walk into it; a tapping rail will be provided.

2.1.3 All pedestrian routes diverted onto the carriageway will be clearly defined by continuous barriers, constructed in compliance with the New Roads and Street Works Act 1991.

2.1.4 So far as reasonably practicable, all parts of the public highway including drainage systems will at all times be kept free from mud and other loose materials arising from the works. To comply with this VolkerFitzpatrick shall confirm that they have complied with the requirements of amongst others the relevant Local Authority, Environment Agency and Inland Drainage Boards in respect of the following:

- Provision of vehicle wheel cleaning facilities, adequate provision for drainage via settlement tanks and regular maintenance of settlement tanks, during the working hours specified in this Code.
- Provision of a mechanical road sweeper, as required, to clean the work sites hoardings and any mud or debris deposited by site vehicles on roads or near work sites, during the working hours specified in this Code.
- Provide facilities and working arrangements ensure the adequate sheeting and boarding of all materials including spoil either brought onto or taken off the site to prevent material falling off during its journey.

2.1.5 Vehicles entering and leaving the Site will only be allowed to cross footways via a properly constructed crossing the design of which shall be submitted to and agreed with the Employer in consultation with the Highway Authority prior to construction. Footways must be kept free of mud.

2.1.6 Access, which is deemed to include both the route and entrance to the Site by road vehicles, shall be in accordance with the accompanying Plan from Cowley Road or as otherwise agreed with the Employer in consultation with the Highway Authority.
2.1.7 All street furniture, trees (unless they are to be removed/lopped) and other features near the construction works shall be carefully protected in accordance with the requirements of the local authority, where applicable. Any damage caused by VolkerFitzpatrick shall be made good within an agreed timetable to the complete satisfaction of the Employer.

2.1.8 VolkerFitzpatrick shall ascertain and comply with any restrictions in respect of abnormal load routes as they may affect access to the Site.

2.1.9 VolkerFitzpatrick will work in a way to minimise, so far as reasonably practicable, disruption of existing road traffic.

2.1.10 VolkerFitzpatrick will erect information signs at appropriate points along the site which will inform the public of VolkerFitzpatrick’s presence, along with 24 hour contact details, for the project.

2.1.11 VolkerFitzpatrick will carry out letter drops to local residents who are directly affected by current and future work activities, or to where changes to access routes have been/will be altered. Local residents will be kept informed of the progress of the works. Information will include when and where the major construction activities will be taking place and how long they are expected to last e.g. possessions. VolkerFitzpatrick or company carrying out work on site should appoint a responsible person to liaise with the public. All noise complaints should be effectively recorded, investigated and addressed.

2.1.12 VolkerFitzpatrick shall ensure HGV trips to and from the Site will, where possible, be evenly spread during the day. The spreading of trips will minimise the impact of HGV traffic during the peak hours and reduce any impacts on driver delay.

2.1.13 VolkerFitzpatrick shall ensure that existing footpaths and cycle routes will be rerouted as appropriate where construction traffic is likely to impact on pedestrian or cyclists along Cowley Road and Milton Road.

2.1.14 VolkerFitzpatrick shall ensure that a suitable management system for vehicles of 10T and over is in operation, which will allow drivers to book pre-determined time slots for deliveries. This will ensure that arrivals and departures are spread evenly during the course of the working day. It is acknowledged that road conditions and delays that are not foreseen may cause drivers to miss their allotted time slot on occasion; however an effective management system will ensure that significant peaks in the day do not occur.

2.1.15 VolkerFitzpatrick shall ensure that remedial work will be undertaken as necessary to maintain the access roads to ensure they are fit for purpose. On completion of the contract, the roads will be reinstated to a condition similar to that before work commenced.
2.1.16 A map detailing the location of construction traffic routes is located below:

2.2 Site Boundaries /Hoardings/ Temp. Structures on the Public Highway

2.2.1 VolkerFitzpatrick shall ensure that the Site is adequately fenced off from members of the public to prevent people entering. Fencing shall be constructed with solid boarding used near houses,
where appropriate, to reduce noise. If hoardings are provided bulkhead lights shall be fitted where appropriate.

2.2.2 The provision of gates in the fencing or hoarding shall, as far as practicable, be positioned, constructed and kept shut to minimise noise to nearby properties from the Site direct or from plant entering or leaving the Site. These gates shall provide details of any diversions ahead to the access route, along with 24 hour contact details for VolkerFitzpatrick and the Employer. Notice of any diversions by VolkerFitzpatrick shall also be placed at a suitable enough distance prior its commencement.

2.2.3 VolkerFitzpatrick shall ensure that if hoardings are provided they are painted on the external face in a plain uniform manner and include a project logo.

2.2.4 VolkerFitzpatrick is expressly prohibited from displaying or allowing to be displayed any advertisement, notice etc [including illicit bill or fly posting] on the hoardings without the prior permission of both the Employer and the relevant local authority. VolkerFitzpatrick shall also ensure that all graffiti or defacements to the hoardings are removed and made good as soon as reasonably possible.

2.2.5 VolkerFitzpatrick shall have Site information board detailing information on the Site programme, together with telephone contacts including an emergency telephone number for use by members of the public who wish to lodge complaints with or compliment VolkerFitzpatrick.

2.2.6 VolkerFitzpatrick shall ensure that construction buildings and equipment are sited so as to minimise visual intrusion, consistent with the efficient operation of the Site.
Environmental Management Plan

3.0 Air Quality and Mud

The Air Quality Chapter of the Environmental Statement includes mitigation measures for potential temporary impacts of air pollution during the construction of the works VolkerFitzpatrick will take all reasonable measures to avoid creating a dust nuisance.

3.1 Key Issues

The construction activities that are the most significant sources of fugitive dust emissions are listed below in table 8:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Causes of dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth moving,</td>
<td>due to the handling, storage and disposal of soil and subsoil materials;</td>
</tr>
<tr>
<td>Construction aggregate usage,</td>
<td>due to the transport, unloading, storage and use of dry and dusty materials (such as cement powder and sand);</td>
</tr>
<tr>
<td>Movement of heavy site vehicles</td>
<td>on dry untreated or hard surfaced surfaces;</td>
</tr>
<tr>
<td>Fabrication processes</td>
<td>such as cutting up materials;</td>
</tr>
<tr>
<td>Movement of vehicles over surfaces</td>
<td>Materials brought off the site - for example, over public roads.</td>
</tr>
<tr>
<td>contaminated by muddy materials</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Significant Sources of Dust

The dust sensitive properties within the vicinity of the proposed station scheme include medium sensitivity facilities comprising:

- Residential properties residential properties and a school within 350 m of the site predominantly located to the south and west.
- Residential properties within 40m to the East of the site – Kerrys Yard site

3.2 Management & Mitigation Measures:

**General:**

- ensure site toilets are located well away from sensitive receptors;
- arrange stockpiles such that surface areas are minimised;
- carry out on-site aggregate handling in enclosed area, where reasonably practicable;
- hard surface site and haul routes, where practical will be adopted;
- Undertake regular visual inspection of areas contiguous to the work site, with particular reference to sensitive locations;

**Construction Traffic**

- all vehicles to switch off engines when not required – no idling vehicles;
- provision of security to manage traffic off on site and monitor any on site excess running of vehicles;
- effective vehicle cleaning and specific fixed wheel washing on leaving site and damping down of haul routes, with particular vigilance in periods of dry weather;
- all loads entering and leaving site to be covered;
- on-road vehicles to comply with set emission standards;
all non-road mobile machinery (NRMM) to use ultra-low sulphur tax-exempt diesel (ULSD) where available and be fitted with appropriate exhaust after-treatment from the approved list;

all vehicles to comply with European I or II emission standards;

minimise movement of construction traffic around site;

set and enforce speed limits on all site roadways;

hard surfacing and effective cleaning of haul routes and appropriate speed limit around site;

Demolition Works

- water will be used as dust suppressant;
- cutting equipment to use water as suppressant or suitable local extract ventilation systems;
- enclosed chutes and covered skips will be used throughout the site
- any buildings to be demolished will be covered

Site Activities

- minimise dust generating activities and avoid accidental spillages of dusty material;
- avoid tipping or drops from heights greater than necessary;
- avoid using breakers where possible and use hydraulic munchers or alternative non-dust generating means where practicable;
- turn off dust generating equipment when not in use;
- check equipment is in good order and repair prior to use;
- plant to be fitted with particulate traps where necessary;
- use water as dust suppressant where applicable;
- screen or enclose stockpiles of keep them securely sheeted;
- re-vegetate earthworks and exposed areas as early as practicable;
- if applicable, ensure concrete crusher or concrete batcher has permit to operate;
- ensure concrete batching or mixing operations are carried out in enclosed areas where possible;
- arrange for dirt inside formwork to be vacuumed out;
- no burning of any materials on site
4.0 Archaeology and Cultural Heritage

On discovery of any archaeological remains the unexpected finds procedure detailed in section 10 will be followed.

4.1 Key Issues

4.1.1 Archaeology

- The Site is considered unlikely to have any surviving archaeological resource and therefore Development is unlikely to result in an adverse impact upon below ground remains.

4.1.2 Heritage Assets

- No mitigation measures are proposed for heritage assets, on the basis that the Development is considered unlikely to have a significant adverse impact.

4.2 Archaeology Mitigation

4.2.1 Development and implementation of a programme of archaeological investigation is based on the known or suspected archaeological resource, defined in PPS5 as the ‘archaeological interest’, including:

- General Archaeological Watching Brief: TBC as part of PC 30.
- A programme of monitoring and recording will be undertaken in conjunction with the construction phase groundwork for the Development, to identify and record any archaeological assets surviving within the Site. This will be carried out in accordance with a written scheme of investigation and shall include provision for publication to a level commensurate with the results of the surveys
5.0 Lighting and Glare

5.1 Key Issues

5.1.1 The closest residential receptors who shall be most affected by the installation are located to the west of the station in the housed streets between Bourne Road Long Reach Road and Moss Bank.

5.1.2 There are also traveller’s residential sites at Kerry’s Yard and Sunningdale to the east of the proposed station. These are moveable static caravans so the locations may change at any time in the future.

5.2 Mitigation

5.2.1 Restrict high-level floodlighting installations to areas of major construction and possibly the main site compounds. Sky glow will be minimized through the use of low spill lights.

5.2.2 Working hours will be specified, to include lighting. Lighting will be switched off when not specifically required for construction, security or health and safety.

5.2.3 Construction lighting will be directed away from roads and residential areas, to reduce light pollution.

5.2.4 All lighting of the Site will follow the Institute of Lighting Engineers’ Guidance for the Reduction of Light Pollution.
6.0 Contaminated Land and Groundwater

6.1 Key Issues

6.1.1 The construction phase of the proposed works will potentially introduce new sources of contamination, such as fuels, used during this phase and construction workers become a new receptor. Construction activities may also introduce new pathways for migration of potential existing contamination such as excavation into existing contaminated material and introduction of new foundations and service routes. Potential changes include:

- potential for mobilising contaminants by excavation and stockpiling material. This would increase the risk to controlled water receptors through leaching and run-off. Earthworks could provide opportunity for run-off to contain suspended solids if not managed properly;
- potential for newly constructed below ground structures to create preferential pathways for the migration of existing contamination;
- potential for exposure of human receptors by generation of potentially contaminated dust released by the construction works;
- potential for exposure of construction workers to existing potential contamination because of direct contact (dermal contact/ingestion) with these materials;
- potential for release of potentially polluting substances used during the construction phase, for example, spillages of oil or fuel from equipment or vehicles, particularly in construction compounds; and
- potential that waste generated is classified as hazardous, requiring removal from the Site.

According to Schedule 3 of the EIA Regulations, the characteristics of development must be considered having regard, in particular, to the production of waste.

6.1.2 It is assumed that material excavated during the construction phase of works would be re-used on the Site if it can be demonstrated that the material is suitable for use, otherwise it would be disposed off-site at an appropriately licensed facility.

6.1.3 A piling Risk Assessment will be required to be issued and accepted by the Environment Agency prior to any piling on site to determine the risk of contamination to groundwater. Current proposal for augured piling has the lowest potential risk of contamination to groundwater.

6.2 Mitigation Actions

6.2.1 Specific development controls and remedial measures based on the findings of the risk assessments as described below:

- the provision of appropriate personal protective equipment (PPE) and health and safety briefings for construction staff and site visitors;
- procedures for handling unexpected potentially contaminated arising's (if identified) and groundwater and controlling airborne emissions;
- dust suppression, wheel washing for vehicles leaving the site and covering potentially contaminated stockpiled materials;
- contractors to produce a Works Package Plan and associated Task Briefing Statement for the decommissioning of above ground fuel / chemical storage tanks in line with EA document.
PPG2. The requirements of the Remediation Scheme prepared by Atkins will also be followed;

- measures for dealing with Asbestos Contaminated Material in rail infrastructure, including consultation with a specialist asbestos contractor;
- measures for dealing with the potential presence of low levels of asbestos fibres in Made Ground (such as proactive damping down),
- soils that will be used for fill material will be tested to confirm that they meet acceptability criteria for use on site such that they will not present an unacceptable risk to human health or controlled waters.

- Groundwater or perched water entries to excavations that indicate the presence of free-phase product will be pumped to a suitable tanker for disposal at a waste water facility.
- A sufficient thickness of imported growing media (topsoil and subsoil) shall be placed in the proposed
- If VolkerFitzpatrick wishes to arrange for any recycling of contaminated materials encountered during the construction works, then before undertaking any recycling measures he shall consult with and obtain the prior written approval of the relevant local authority and/or the Environment Agency.
- VolkerFitzpatrick shall use both external and internal resources to create and maintain appropriate Risk Assessments on all materials used and planned for use on site.
- VolkerFitzpatrick shall incorporate appropriate design measures to ensure minimal disturbance of areas of contaminated ground that are identified in the desk study and ground investigation to prevent or minimize exposure and creation of preferential pathways.
- VolkerFitzpatrick shall ensure that all plant and equipment is inspected for leaks prior to use to prevent accidental release of contaminants to soil.
- All vehicle and plant cleaning and refuelling is to be restricted to restricted suitably protected areas.
- VolkerFitzpatrick shall incorporate working methods during construction to ensure that cross contamination does not occur.
7.0 Ecology and Habitats

7.1 Key Issues

7.1.1 The majority of the habitats that will be affected by the Development are located within the Station/Interchange Area and comprise scrub, ephemeral short perennial and bare ground. Without mitigation, habitat (scrub, semi-improved grassland) and species (reptiles, breeding birds, invertebrates) within Bramblefields LNR will also be affected.

7.1.2 A construction Environmental Management Plan: Biodiversity will be produced to specifically identify control measures during construction.

7.2 Basic Mitigation

7.2.1 The Ecology and Landscape Chapters of the environmental statement includes a number of mitigation measures for potential temporary impacts including:

- The appointment of an Ecological Clerk of Works (ECoW) to monitor construction and ensure compliance with all relevant requirements, Method Statements and plans. VolkerFitzpatrick have appointed the Ecology Consultancy to act as the ECoW.
- Erection of effective fencing of construction areas to prevent loss or damage to ecological resources and to prevent animals falling into excavations.
- Vegetation removal, in particular trees and scrub, outside of the breeding bird season (March to August inclusive). Where this is not possible, all potential nesting habitat that will be disturbed will be checked before removal to ensure that no nesting birds will be affected. If any nesting species are identified appropriate measures will be agreed and implemented in accordance with good practice and guidance from Natural England.
- Removal of existing vegetation will be limited to the minimum needed for safe implementation of the works.
- All invasive species recorded within the Station/Interchange Area or within its close proximity will be removed by qualified specialists following Environment Agency guidelines.
- Restoration of all temporary working areas on completion of construction works to replace existing habitat.
- Control of contractors with clear definition of duties and responsibilities, including restriction and control of working hours.
- Compliance of construction workers with Environment Agency good practice in respect of implementation of pollution prevention measures, including regular checking of construction vehicles for oil/fuel/hydraulic oil leaks and will be fitted with spillage contingency kits.
- Strict control of dust and other emissions from construction vehicles.
- Protection of hedgerow and trees to be retained to BS5837 (2005), for the duration of clearance, grading and construction works.
- Screen on-site activity where practical whilst at the same time not being a highly negative visual distraction in itself.
- Consideration of advance planting of perimeter to screen later phased work and to ensure establishment and increase maturity of planting on completion of building works.
- Management of site traffic to and from the Site, minimising excessive traffic movement on the surrounding road network.
- Careful siting of the compound to minimise visual effects on receptors.
- Management of working times to minimise visual effects of construction in evenings and at weekends.

7.2.2 A Construction Ecological Management Plan will be prepared and submitted to the Local Planning Authority for their approval. This will identify the existing ecological constraints and confirm how they are to be managed and protected during the works. The CEMP will be included within the site start up induction to all workforces.
8.0 Noise and Vibration

8.1.1 The purpose of the noise and vibration management plan is to minimise the impact of noise and vibration due to construction work on residents and other sensitive receptors.

8.1.2 This construction phase of the development is prolonged (finishing approximately December 2016) and some aspects of it may have significant effects on local residents, some of whom are in close proximity. Sensitive receptors have been identified and a map highlighting the location of sensitive receptors is contained within this management plan (see below).

8.2 General principles

8.2.1 Best practicable means will be used at all times to minimise the effects of noise and vibration on residents and other sensitive receptors. Construction methodology and techniques will be assessed and modified to minimise impact.

8.2.2 Wherever possible work will take place within normal working hours.

8.2.3 Temporary possession of the railway may be required out of the stated normal hours due to safety and operational reasons; this will be consented by the Local Authority and may include noise/vibration monitoring.

8.2.4 Where work must take place outside of normal working hours its extent and duration will be minimised.

8.2.5 Those likely to be significantly disturbed by noisy works shall be informed in advance as early and as accurately as possible of the duration of the works, the likely impact and when the works will finish.

8.2.6 The potential impact of noise and vibration upon sensitive receptors shall be assessed in advance and the most effective mitigation identified. Where required, noise impact shall be measured to check compliance with predictions and to monitor the effectiveness of mitigation techniques.

8.2.7 In the event that prolonged and very significant impacts are unavoidable, those impacts shall be compared to the standards for the provision of noise insulation and temporary re-housing (see below). Noise insulation and/or temporary re-housing shall be provided where required.

8.3 Section 61 applications

8.3.1 If required by Cambridge County Council, consent under Section 61 of the Control of Pollution Act 1974 shall be obtained for construction work that takes place within normal working hours.

8.3.2 Except if agreed in advance by Cambridge County Council, consent under Section 61 of the Control of Pollution Act 1974 shall be obtained for all construction work that takes place...
outside normal working hours. Section 61 applications shall be made at least 6 weeks prior to the planned commencement of work.

8.3.3 Where applied for, Section 61 consent applications will be issued to the Local Authority at least 8 weeks prior to the commencement of work. A draft will be provided and discussions held with Cambridge County Council prior to the formal submission of the application.

If the Council prefer a Best Practice Measures document, this will be submitted; there is no formal time period for approval of BPM.

8.3.4 A list of the section 61 consents, variations and dispensations will be detailed in table 9 below:

<table>
<thead>
<tr>
<th>Consent / Variation / Dispensation number</th>
<th>Outline detail of works</th>
<th>Consent expiry date</th>
<th>Date of Notification to residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBC</td>
<td>TBC</td>
<td>TBC</td>
<td>TBC</td>
</tr>
</tbody>
</table>

Table 9: List of Section 61 Consents, Variations and Dispensations

8.4 Control of noise and vibration

8.4.1 Best Practical Means including those defined in section 72 of the Control of Pollution Act 1974 will be employed at all times to minimise noise and vibration from the proposed works.

8.4.2 The approved codes of practice (BS 5228) shall be used as guidance on appropriate methods for minimising noise and vibration.

8.4.3 Construction techniques and methodology will be assessed and where appropriate modified to minimise impact on sensitive receptors.

8.4.4 Where required, advice on noise mitigation will be taken from a suitably qualified and experienced acoustician.

8.5 Best practicable means to minimise noise and vibration shall include:

8.5.1 Management of working hours

- The management of working hours shall be used to mitigate the impact of noise and vibration on sensitive receptors
- Normal working hours shall be:
  - 0800 to 1800 Monday to Friday and
  - 0800 to 1300 on Saturday
There shall be no working on Sundays and Public Holidays unless work on the operational railway is required under temporary possession and consented by the Local Authority.

The site may operate from 0700 Monday to Saturday but no powered plant, machinery or power tools shall be used or operated externally before 0800 and no deliveries shall be made unless agreed in advance with the local authority.

8.5.2 Work outside of normal working hours (excluding emergency works)

- Where possible all works shall take place during normal working hours. The duration and extent of any work that must be carried out outside of normal working hours shall be minimised.
- Works shall only take place outside normal working hours for justified health and safety reasons.
- Work shall only take place outside normal working hours if any resident (or other sensitive receptor) who may be significantly affected have been notified of the dates and times of all such work at least 4 weeks prior to commencement, or as required by the local authority.
- Work outside of normal working hours shall only take place if Cambridge County Council has received prior notification of it. Prior notification shall be given to the local authority as far in advance as is reasonably practicable.
- Prior notification to the local authority shall include:
  1. The reasons that the work cannot be carried out during normal working hours.
  2. The proposed dates and times of the work.
  3. The proposed location of the work
  4. Details of how the duration and extent of the work is to be minimised.
  5. Details of the mitigation proposed to minimise impact on noise sensitive receptors.
  6. Where required by Cambridge County Council, an assessment of the impact of noise and vibration on sensitive receptors performed by a qualified acoustician (QA), an acoustician qualified to the satisfaction of the Cambridge County Council.
  7. Where required by Cambridge County Council, a programme of noise and vibration monitoring, designed by a QA, shall be carried out.

- Emergency works are unforeseeable works which are urgently and unavoidably required in the interests of Health and Safety or the preservation of a building structure. Where emergency works are carried out which may have a significant effect on residences Cambridge County Council shall be notified as soon as reasonably practicable of the extent, duration and likely impact of the emergency works.
8.5.3 Siting and orientation Worksites, compounds and plant – use of barriers and enclosures

- Worksites, compounds, semi-static and static equipment (e.g. generators, compressors and pumps etc) will be sited and orientated so as to minimise the impact of noise on sensitive receptors (e.g. use of existing structures as acoustic barriers). Acoustic barriers and enclosures shall be used to minimise the impact of noise on sensitive receptors, where this will make a significant difference to noise exposure.
- Acoustic barriers are most effective when placed as close as possible to the source of the noise or to the receptor.
- Work areas may also be screened to mitigate visual nuisance.

8.5.4 Plant & Equipment

- Modern, silenced and well maintained plant will be used at all times. Where practicable, plant will be fitted with efficient attenuators, mufflers or acoustic covers. All plant and equipment will be expected to meet noise limit and noise marking requirements prescribed by the Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001.

8.5.5 No Idling Policy

- All equipment will be shut down when not in use, vehicles will be required to switch off engines if waiting unless required for operational reasons. This requirement will be briefed out to all associated project staff and contractors as part of the induction process.

8.5.6 Power Supply

- Wherever practicable, mains electricity will be used instead of generators. If generators are required for use, low noise ("super silenced") models shall be used as well as acoustic enclosure to ensure noise is minimised.

8.5.7 Materials handling

- All materials will be delivered, handled, stored and used in a manner that minimises noise.

8.5.8 Vehicle audible warning systems (reversing alarms)

- Except for on-track plant, all vehicle audible warning systems (including reversing alarms) shall be of broad spectrum ("white noise") type.
- Reversing alarms shall be disconnected in certain circumstances (e.g. work outside of normal working hours or when in close proximity to sensitive receptors) and a banksman allocated to ensure noise nuisance is reduced to a minimum while maintaining safe working practices.
8.5.9 **Piling**

- Piling methods shall be chosen so as to minimise the impact of noise and vibration on sensitive receptors. Where percussive piling is required due to ground conditions detailed justification shall be given to the satisfaction of Cambridge County Council.

8.5.10 **Site Rules and Behaviour**

- All VF staff and associated contractors shall be subject to the generic site rules governing shouting and the use of inappropriate language.
- Shouting and raised voices shall be kept to a minimum except in cases where warnings of danger must be given. Anti-social behaviour by staff will not be tolerated and disciplinary action will be taken where warranted, by VF Site Management.

8.5.11 **Automatic track warning system (ATWS)**

- If the use of an automatic track warning system (ATWS) is required, sirens shall not be used. Audible warning shall be given to personnel by in-ear personal warning devices (as specified in the Network rail guide to personal track safety).

8.5.12 **Regular Inspection Checks**

- Periodically during normal working hours (and at least once per month) the site shall be checked by a suitably qualified person to ensure the use and correct implementation of the best practicable means to minimise noise and vibration.
- A record of all such checks, including the person carrying them out and any action taken shall be kept and be made available on demand to an authorised officer of Cambridge County Council.
- Prior to any work taking place outside of normal working hours a suitably qualified person shall check to ensure that the best practicable means to minimise noise and vibration are in place and that they are implemented at all times. A record that such a check has taken place including the person who carried it out shall be kept and be made available on demand to an authorised officer of Cambridge County Council.
8.6  Community relations, public notification, complaints and inquiries

8.6.1  Active community consultation and the maintenance of positive relations with local residents will assist in alleviating concern, reducing impact and minimising complaints. This will be achieved through the requirements of the considerate constructor’s scheme, liaison with the nominated Network Rail Communications Manager and with Cambridge County Council’s environmental health and community liaison teams.

8.6.2  Due to the size, longevity and potential impact of the works those likely to be significantly affected shall be kept regularly updated on the project and any likely significant impacts by means of a regular newsletter (or by other means agreed with Cambridge County Council). A web based system for disseminating information; updates and notifications will be investigated as a means to update the local community.

8.6.3  Written notification of all works that may have significant impact shall be given as far in advance as practicable (at least four weeks) to those likely to be significantly affected, enabling residents and others to plan ahead.

8.6.4  Notification shall contain the nature, dates and times of the work, the likely impact and when they will finish. It is essential that this information is accurate. Any unavoidable unforeseen changes work programmes shall be notified to those affected as soon as possible. A copy of all communications with residents shall be sent to Cambridge County Council Environmental Health (by email to: complaints@cambridge.gov.uk).

8.6.5  A telephone helpline, staffed at all times, shall be provided so that the public can make complaints and enquiries about the works. Information and signage shall be provided to ensure members of the public are aware of the helpline.

8.6.6  Incoming complaints and inquiries will be handled by the VF Project Manager. Where possible, actions will be taken to rectify problems at the time of complaint. All complaints shall be logged on the VF complaints and communications form which shall be maintained as part of the site project file records. Cambridge County Council Environmental health shall be notified of all complaints, as soon as reasonably practicable, by means of email (pollution@crawley.gov.uk) and/or telephone.

8.7  Sensitive Receptors

8.7.1  A list of sensitive receptors is included as Table 9.0 (project neighbours). Sensitive receptors likely to be affected by construction noise are located within the shaded area on the below map: The list shall be amended where required by Cambridge County Council.

8.8  Noise and vibration – significance and limit criteria

8.8.1  Noise Significance criteria.

- The criteria for significant effect shall be as described in BS 5228-1:2009 E.3.2 Criteria for noise insulation and temporary re-housing (Drawn from BS5228-1:2009 E.4)
8.8.2 Noise Insulation

- Where during a period of 10 or more days of working in any 15 consecutive days or for a total of days exceeding 40 in any six consecutive months;
- the total noise level due to construction (pre-existing ambient plus airborne construction noise), as measured or predicted at a point one metre in front of the most exposed of any windows and doors in any façade of a residence exceeds whichever is the higher of either:
  - (a) any of the criteria in Table 10:

<table>
<thead>
<tr>
<th>Day</th>
<th>Relevent Time Period</th>
<th>Averaging Time T</th>
<th>Noise Insulation Trigger Level (dB LAeq, T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday to Friday</td>
<td>07:00 – 08:00</td>
<td>1 hr</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>08:00 – 18:00</td>
<td>10 hr</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>18:00 – 19:00</td>
<td>1 hr</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>19:00 – 22:00</td>
<td>3 hr</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>22:00 – 07:00</td>
<td>1 hr</td>
<td>55</td>
</tr>
<tr>
<td>Saturday</td>
<td>07:00 – 08:00</td>
<td>1 hr</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>08:00 – 13:00</td>
<td>5 hr</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>13:00 – 14:00</td>
<td>1 hr</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>14:00 – 22:00</td>
<td>3 hr</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>22:00 – 07:00</td>
<td>1 hr</td>
<td>55</td>
</tr>
<tr>
<td>Sunday and Public Holidays</td>
<td>07:00 – 21:00</td>
<td>1 hr</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>21:00 – 07:00</td>
<td>1 hr</td>
<td>55</td>
</tr>
</tbody>
</table>

Or

(b) 5 dB above the pre-existing airborne noise level for the corresponding times of day (i.e. the Relevant Time Periods presented in column 2 of Table 1)

8.8.3 Temporary re-housing

- Entitlement to temporary rehousing is calculated in line with BS 5228-1:2009. Where, for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any six consecutive months;
- the total noise level due to construction noise (pre-existing ambient plus airborne construction noise), measured or predicted at a point one metre in front of the most exposed of any windows and doors in any façade of a residence, exceeds whichever is the higher of either:
  - (a) 10 dB above any of the noise level criteria in table 1 above or
  - (b) 10 dB above the pre-existing airborne noise level for the corresponding time of day (i.e. the Relevant Time Periods presented in column 2 of Table 1);
8.8.4 **Vibration**

- VF will use best practicable means to avoid vibration levels exceeding the following:
  - On structural damage grounds, peak particle velocities at the base of existing local residential properties shall not exceed the limit of 5 mms-1 ppv (as set in British Standard BS5228: 1992 part 4).
  - On nuisance grounds, a predicted VDV of 0.4 ms-1.75 shall not be exceeded during the daytime and 0.13 ms-1.75 shall not be exceeded at night.
  - (These Vibration Dose Values are drawn from the values in BS6472:1992 that result in a "low probability of adverse comment")

8.9 **Monitoring**

8.9.1 To ensure that the requirements to minimise noise and vibration levels are being achieved and that noise and vibration limit criteria are not exceeded, where required, noise and vibration monitoring shall be undertaken by a suitably qualified practitioner. (N.B. Noise monitoring shall be carried out by persons qualified to the satisfaction of the local authority. The minimum satisfactory level of competence for persons carrying out noise monitoring shall be the Institute of Acoustics certificate of competence in environmental Noise measurement or equivalent.)

8.9.2 The monitoring undertaken shall be representative of the activities undertaken and the mitigation techniques employed. Particular attention will be paid to activities where very significant impact is expected (including working outside of normal working hours) and to those properties likely to be most affected. Monitoring data shall be examined and occasions when target noise levels have been exceeded identified. Construction and noise mitigation techniques shall be modified accordingly.

8.9.3 The results of all monitoring undertaken (including raw data) shall be made available to Cambridge County Council in a format of its choosing as soon as reasonably practicable.

8.10 **Local Authority Contact details** are listed in table 11 below

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Address Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridgeshire County Council</td>
<td>Castle Park, Castle Hill, Cambridge, CB3 0AT</td>
</tr>
<tr>
<td>Cambridge City Council</td>
<td>Mandela House, 4 Regent Street, Cambridge CB2 1BY</td>
</tr>
<tr>
<td>South Cambridge District Council</td>
<td>South Cambridgeshire Hall Cambourne Business Park, Cambourne, Cambridge, CB23 6EA</td>
</tr>
</tbody>
</table>

Table 11 : Local Authority Contact Details

Key officer contacts :
- TBC
9.0 Waste Management Plan

9.1.1 The project has a specific SWMP for the works containing the following information:

- The location of the site and the estimated cost of the project;
- Details of the client, the principal contractor and the person who drafted the plan;
- Any decision taken before the SWMP was drafted to minimise the quantity of waste produced on site;
- A description of each waste type expected to be produced during the project;
- An estimate of the quantity of waste that will be produced for each waste type; The proposed waste management action for each waste type;
- A declaration that all waste produced on the site is dealt with in accordance with the waste duty of care; and
- A declaration that materials will be handled efficiently and waste managed appropriately.

9.1.2 The SWMP will be updated at least every six months and is to be stored in appendix E3 of the plan kept on-site.

9.1.3 The SWMP will record the decisions taken to reduce the amount of waste. This will include the steps taken to minimise waste from the construction sites and steps taken to reuse excavated materials or demolition waste on or near to sites.

9.2 Managing Demolition and Construction Waste

9.2.1 Development of the proposed Chesterton Interchange Station will generate construction and demolition (C&D) waste.

9.2.2 C&D waste materials from the site will consist of concrete, masonry, steel, non-ferrous metal, wood, plastic, glass, plasterboard, hazardous waste (soil arising’s and canteen waste from site workers, together with a modest volume of excavated material). The following list sets out the processes in place to ensure sustainable site management and to minimise waste during the construction process, thus helping to deliver the project objective to ‘minimise waste production’.

- Existing railway infrastructure will be reused on site where possible depending upon its condition. Waste materials (track, sleepers, ballast) will be reused or removed from site and used elsewhere on the railway network depending upon their condition and level of contamination.
- Demolition works will be carried out in accordance with an approved Demolition Protocol (for example, the ICE Demolition Protocol).
- 80% (with a stretch target of 90%) of demolition and excavation waste by weight will be recycled, with contractors required to implement pre-demolition audits (using the ICE Demolition Protocol or similar) in order to identify and target key demolition products.
- Reuse of ballast materials for habitat creation where possible.
• The project aims to achieve Good Practice with regard to waste recovery as set out by WRAP.
• 100% of site timber and timber products will be supplied from sustainable sources (FSC) and 100% will be legally sourced.
• All existing electrical equipment on site to be removed (i.e. existing lighting columns) will be compliant with the Waste Electrical and Electronic Equipment Directive (WEEE Directive).

9.3 Waste Storage

9.3.1 Waste shall be stored appropriately depending on type and classification, i.e. inert, non-hazardous or hazardous waste. In any event, waste storage shall be kept to a minimum and in containers fit for purpose or locations for disposal. Where containers skips or bins are used, these will be marked up to clearly identify the contents, and covers and lids used to prevent the escape of the waste.

9.3.2 On-site segregation shall be applied to allow for recycling.

9.4 Duty of Care

9.4.1 Duty of Care shall be applied and it shall be ensured that all waste disposal is carried out by registered contractors and records of disposal controlled by waste transfer notes. Waste disposal containers / vehicles shall be covered during transport to prevent contents escaping. All waste will be kept securely stored in suitable containers.

9.4.2 All waste that leaves site is accompanied by a waste transfer note containing
• Description of the waste
• European Waste Catalogue (EWC) six digit code
• SIC code
• Type of container
• Quantity of waste
• Names, signatures, addresses and licence numbers of transferor and transferee
• Time and place of transfer
• Type of transport and vehicle registration number
• Location the waste is being transported to (not mandatory)

9.4.3 All Waste Transfer notes for inert / non-hazardous waste must be kept for two years

9.4.4 A copy of the transferee’s Waste Carrier Licence and a copy of the disposal point’s Environmental Permit or relevant exemption will be kept on site. It is essential that the full permit is sought, including the conditions attached to the permit.
• A waste collection authority
• The holder of an Environmental Permit or someone who is exempt from holding a permit
• A registered carrier of controlled waste
9.5 **Permits and Exemptions**

9.5.1 Environmental Permits or exemptions for all waste contractors employed by VF are to be checked for validity and that the permit covers the type and quantity of waste they are disposing of.

9.6 **Hazardous waste**

9.6.1 The Hazardous Waste (England and Wales) Regulations 2005 were amended on 6 April 2009. This principally widened the scope of the exemption from hazardous waste producer registration. All types of premises that produce hazardous waste are now exempt from registration if no more than 500kg of hazardous waste is produced in a year.

9.6.2 The site will be registered as producing more than 500kg of hazardous waste with the Environment Agency.

9.6.3 Where hazardous waste is identified, it shall only be stored following approved methods from the Environment Agency. Do not mix hazardous wastes or with inert or non-hazardous wastes.

9.6.4 Hazardous waste shall be controlled and disposed of following the Environment Agency approved procedures, and must be accompanied by a consignment note detailing the following:

- Premises code
- Description of the waste
- European Waste Catalogue (EWC) six digit code
- Quantity of waste (kg)
- Container type, number and size
- Physical form
- Hazard codes (H1 to H14)
- Chemical / biological components of the waste and their concentrations

9.6.5 Hazardous waste consignment notes must be retained for three years.

9.7 **Implementing the Waste Hierarchy**

9.7.1 All projects will implement the waste hierarchy:

```
Eliminate > Reduce > Reuse > Recycle > Recover > Dispose
```
9.7.2 Where waste is produced it will be reused or recycled unless this is not technically and economically feasible.

9.7.3 If disposal is the only option then the project must select the disposal option that avoids or reduces impact on the environment. VF will consider ways of reducing and managing waste as part of the site management process that includes:

- Minimising the amount of office paper produced.
- Recycling material where appropriate
- Identifying situations when packaging can be sent back to the supplier
10.0    Surface Water and Sediment Control

10.1.1    Works will be undertaken in accordance with approvals from the Environment Agency and the British Waterways Board where appropriate.

10.1.2    Site drainage, including surface runoff and dewatering effluents, will be discharged to sewers where reasonably practicable and relevant permissions will be obtained from the sewerage undertaker (Thames Water Utilities Ltd) or statutory undertakers as required.

10.2    Key Issues

10.2.1    During construction there will be a risk to water quality resulting from the potential spillage or run-off of contaminants into local watercourses.

10.2.2    The Site lies within Flood Zone 1 (low risk of flooding as defined by the Environment Agency) and is shown on the CCIC Strategic Flood Risk Assessment (SFRA) as an area that has not experienced flooding. There is no tidal flood risk. Pluvial and groundwater flooding risk is considered to be medium based on the SFRA.

10.2.3    The most significant pollution sources in terms of the construction phase and their receptors are identified in table 12 below:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Source</th>
<th>Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silt</td>
<td>Surface water runoff following site clearance</td>
<td>Drainage, overland flow</td>
</tr>
<tr>
<td></td>
<td>Surface water runoff during demolition and excavations</td>
<td>Drainage, Overland flow</td>
</tr>
<tr>
<td>Contaminated Silt</td>
<td>Surface water runoff during excavations</td>
<td>Overland Flow</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>Accidental spillages of oils and fuel from machinery during construction phase</td>
<td>Drainage, Track Drainage</td>
</tr>
<tr>
<td>Cement and concrete wash water</td>
<td>Throughout construction phase</td>
<td>Overland Flow</td>
</tr>
</tbody>
</table>

Table 12 : Construction Phase Sources of Pollution
10.3 **Minimum Compliance Actions**

10.3.1 Discharge consents will be obtained from the Environment Agency before discharge into a watercourse takes place, and provisions made to ensure such discharge is safe.

10.3.2 Where there is a risk of contamination to a watercourse, control measures shall be identified and where necessary agreed with the Environment Agency.

10.3.3 Settlement tanks or lagoons shall be used where there is a risk of silt contamination.

10.3.4 Where work is being carried out near a foul tank or trunk sewer, we will give the required notice to the Water Authority prior to commencement of any works.

10.3.5 Cleaning of concrete and mortar batching/delivery plant and equipment shall only be carried out at agreed locations where resulting effluent cannot flow into watercourses and drains. Wherever possible we will minimise the use of concrete.

10.4 **Project Specific Compliance Actions**

10.4.1 Materials handling protocols during construction will be in line with CIRIA C650, relevant COSHH datasheets and the Environment Agency Pollution Prevention Guidelines (e.g. PPG1: Pollution Prevention, PPG2: Above Ground Oil Storage, PPG5: Works and Maintenance in or Near Water, PPG6: Working at Construction and Demolition sites).

10.4.2 Specific actions include:

- storage of potentially contaminating materials away from sensitive receptors, and surface drains;
- storage of materials in bunded, covered areas able to contain 110% of the containers contents;
- filtration and sedimentation of silt laden runoff through utilising drain mats and covers over surface water drainage or where possible a siltbuster for excavations.
- keeping appropriate spill kits on-site and in proximity to the stores;
- utilising the Emergency Pollution Incident and Control Management Plan;
- training key members of the project team in spill management;
- vehicle wheel wash facilities;
- use designated concrete washout facilities;
- mitigation for soil erosion will be in the form of silt containment systems during construction and in the long term vegetation growth;
- discharges to the local watercourses Brook including from dewatering activities will require consent from the Environment Agency, or drainage board if discharging to a sewer.
10.4.3 With the above measures in place, sediment will be prevented from entering surface water receptors. Where excavations are dewatered a settlement tank will be used and the water discharged to the foul sewer under consent from the local drainage board.

10.4.4 Vegetation filter strips are to be installed where practicable to filter overland runoff containing contaminated sediment.
11.0 Pollution Incident Control and Response Management Plan

11.1.1 The purpose of this section is to ensure the effective management and co-ordination of resources in the event of a leakage or spill or any other environmental emergency occurring on or at locations where works by VF are being undertaken.

11.1.2 It also defines the criteria for the reporting and the investigation of leakages and spills occurring on or at VF locations.

11.2 Estimated number of personnel on site

11.2.1 Approximately 250 persons at any one time.

11.3 Plan Objectives

11.3.1 To carry out the works in such a way as to avoid pollution incidents; however should any occur, procedures and measures will be implemented to contain, limit and mitigate the effects as far as reasonably practicable.

11.3.2 The Pollution Incident Response Plan has been prepared in accordance with PPG 21 Pollution Incident Response Planning.

11.3.3 VolkerFitzpatrick will consult with relevant organisations including emergency services, statutory bodies, environmental regulatory authorities, local authorities, local water and sewer providers and the Health and Safety Executive regarding development of the Pollution Incident Response Plan.

11.4 Pollution Prevention Measures

11.4.1 VF will implement appropriate measures to limit, as far as reasonably practicable, the risk of pollution due to construction works and materials. Such measures will be set out in the subsidiary sections required by this EMP for other construction activities, included in the:

- Noise and Vibration
- Air and Dust Pollution
- Contaminated Land and Groundwater
- Waste Management Plan
- Surface Water and Silt Control

11.4.2 Pollution Prevention Guidelines are referred to in other sections of this EMP. In particular, VF will note and comply with the guidelines contained in:

- PPG 18: Managing fire water and major spillages;
- PPG 26: Storage and handling of drums and intermediate bulk containers.
STOP WORK immediately and RAISE THE ALARM

- Fast, immediate response is vital
- Raise the alarm if necessary
- At the very least make sure everyone in the vicinity is aware of the incident

BE AWARE - IDENTIFY THE SPILL

- Identify the source and substance spilling, don’t try to identify the substance by touch or smell
- If you are not sure what the substance is, don’t take any risks
- If the spillage is flammable, extinguish all sources of ignition
- Safety for you and others is the number one priority

PROTECT YOURSELF

- PPE – safety boots, gloves, non-absorbent overalls, must be suitable for the liquids spilled and goggles if there is risk of splashing

HELP THE INJURED

- If anyone is injured help them first, but only if it is safe to do so. Rushing in could make you a victim too. Do you need the emergency services?

STOP THE SOURCE

- For example: patch holes in drums with leak sealing putty; turn off valves, pumps or engines; or upright drums or containers
- If the spillage is flammable, extinguish all sources of ignition

SCALE OF THE SPILL - DO YOU NEED AN EMERGENCY SPILL CONTRACTOR?

- Is it a small spill or heavy flow?
- Can you and your colleagues tackle it or do you need the one of our emergency spill contractors?

Contact the emergency spill contractor if for example:

- it is a large chemical / hydrocarbon spillage (e.g. oil, biodegradable oil, paraffin, diesel, petrol) even if have been able to prevent the spillage from spreading / entering a watercourse or if it has already entered a watercourse / seeped into the ground
- it is a large chemical / hydrocarbon spillage near an identified “sensitive” area e.g. SSSI

- If you do not have a pre-determined emergency spill contractor for your project, contact:

  Adler and Allan 0800 592 827
  or
  CSG Lloyds on 0800 5873 133
CONTAIN THE SPILL

- Stop the spill from spreading and from reaching drains, open ground or sensitive areas
- Use spill granules, sand, bunds or socks and booms to contain the spill
- Cover or protect drains (even if some of the spill has entered the drain)

NOTIFY

- Notify a VF representative on site
- Notify your project’s Environmental Manager James McMorrow (07824 599 353)
- If your Environmental Manager is not immediately available contact your HSEQ Manager – Jeremy Williams (07879 800 339).
- If the spill has reached a surface water drain, stream or ditch or soaked away in open ground, the EA should be contacted immediately on the 24hr helpline 0800 80 70 60 (see next page for further guidance)
- The Environmental Manager will liaise with the Environment Agency.
- If it has reached a foul drain, the sewer provider should also be notified as soon as possible
- At times there might be incidents that do not fall into any precise category, and if there is any doubt, the Environment Agency should always be contacted.

CLEAN-UP

- Cordon off the area to make sure no-one walks or drives through the spill
- Use absorbents (granules, pads and/or pillows) to soak up the spill,
- Work from the outside of the spill inwards

WASTE DISPOSAL

- Used spill kit materials, rags and anything else that’s become contaminated including PPE will need to be disposed of correctly
- Take the disposal bags to the waste to avoid trailing spent or leaking absorbents around the site
- Tag each bag with a clear description of its contents
- If the waste resulted from an oil or chemical spill it will be classified as hazardous and must be disposed of as hazardous waste
- If you are unsure of how to dispose of the waste ask an VF representative, your Environmental Adviser or the Environment Agency

RESTOCK

- Make sure the site manager is aware of the situation and that the spill kit is restocked
- An empty spill kit is as bad as no spill kit
- Don’t use spill kits for any other purposes

REPORT

- The incident should be reported according to the requirements of HSE-31-VF Accident and Incident Report Form
- Report to Network Rail Project Manager
11.5 Reporting of Incidents

11.5.1 Incidents are captured via the VF incident reporting form. Where an incident occurs on site the VF Project Manager and the Network Rail Project Manager should be informed. Following any incidents which impact or have the potential to impact on the live railway should be reported to the NR Asset Management Control Centre. A list of contacts below and updated as the plan and personnel progress:

- Network Rail AMCC: 01908 723 500
- VF Environment Manager: 07824 599 353 (Catherine Morby)
- Environment Agency: 0800 80 70 60
- Network Rail Project Manager: TBC
- Local Authority EHO: TBC

11.5.2 Close calls will be completed via the VF Hazard Observation Forms. This information is uploaded onto the RSSB Close Call system.

11.6 Guidance on when the Environment Agency should be informed

- Spillages of Hazchem listed chemicals
- Spillages of low hazard products with polluting potential (refer to Table 20 below)
- Hydrocarbon spillages (e.g. oil, biodegradable oil, paraffin, diesel, petrol) greater than 20 litres
- Incidents by / near a watercourse
- Incidents at Environment Agency identified “sensitive” areas
- Major incidents in combined drainage areas e.g. in stations

11.6.1 At times there may be incidents that do not fall into any precise category, and if there is any doubt, the Agency will always be contacted.

Table 13: Low Hazard Products with Polluting Potential – Circumstances requiring EA notification

<table>
<thead>
<tr>
<th>Substance</th>
<th>Threshold</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detergents</td>
<td>25 litres</td>
<td>Washing powder, washing up liquid, Shampoo, Soap and car cleaning products</td>
</tr>
<tr>
<td>Disinfectants</td>
<td>25 litres</td>
<td>Household bleach, Dettol</td>
</tr>
<tr>
<td>Food stuffs</td>
<td>250 litres</td>
<td>Most have the potential to cause problems, especially sauces, sugars, salt, syrups, milk, yoghurt and vinegar</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>250 litres</td>
<td>All</td>
</tr>
<tr>
<td>Paints and dyes</td>
<td>25 litres</td>
<td>All</td>
</tr>
<tr>
<td>Inorganic powders</td>
<td>250 litres</td>
<td>Silt, Sand, Cement, Chalk, Gypsum/ Plaster</td>
</tr>
<tr>
<td>Organic liquids/ slurries</td>
<td>Varies</td>
<td>Blood, Offal, Sewage Sludge, Anti-freeze, Cutting lube, Cooking oils, Glycerine, Alcohols, Latex and Soluble polymers</td>
</tr>
</tbody>
</table>
11.6.2 The effects of these products vary; some such as detergents are directly toxic to aquatic life. Silt and sand can cause the smothering and choking of aquatic life while others such as foodstuffs, drinks and blood can lead to deoxygenating of the watercourse. Others still may produce a combination of these effects. Every effort will be made to contain these products. The threshold values listed above are only a rough guide and in the event of any spillage advice is freely available from the EA.

11.6.3 At times there might be incidents that do not fall into any precise category, and if there is any doubt, the EA will always be contacted.

11.7 Emergency Procedures – Unexpected Finds

11.7.1 The purpose of this section is to ensure the effective management and co-ordination of resources in the event of a leakage or spill or any other environmental emergency occurring on or at locations where works by VF are being undertaken.

11.7.2 It also defines the criteria for the reporting and the investigation of leakages and spills occurring on or at VF locations.

11.7.3 Where there is an unexpected find (ecology / archaeology / contamination) the following procedure- similar to the spill procedure - will be followed:

1. Works in the area are stopped.
2. Suspected issues are reported to the VF Project Manager, Environmental Manager and Health and Safety Manager.
3. Notification of occurrence is reported to the Network Rail Project Manager.
4. Completion of incident and accident form / hazard card.
5. If specialist input is required i.e., ecologist or archaeologist (watching brief, mitigation) this will be sought
6. Potential involvement with the regulator – Local Authority, Natural England or English Nature - in conjunction with the Network Rail Project Manager.
7. Mitigation and/or remedial actions implemented.
8. On-site procedures (EMP, WPP and Task Briefs) updated to reflect change in working conditions.

11.8 Storage and Handling of Fuels, Oils and Chemicals

11.8.1 The storage of fuels and oils is to be strictly in compliance with the Control of Pollution (Oil Storage) (England) Regulations 2001. This applies to VF controlled storage, and that of our subcontractors.

11.8.2 A project specific register of fuels, oils and chemicals must be detailed in Table 13:

Table 14: Fuel, Oil and Chemical storage arrangements
11.9 Project Refuelling Arrangements

11.9.1 The site must nominate a Fuel Storage Coordinator and all storage locations / mechanisms must be inspected weekly and recorded in the management system.

11.9.2 The key criteria for storage are:
   a) Petrol
      - The Maximum size of the container will be 10 litres.
      - The containers are be suitably constructed and adequately labelled.
      - Containers will only be stored in the fuel store within the site compound.
      - The storage place will be more than 6m from the nearest building, highway or footpath.
      - Any storage area will be bunded or the fuel store must be leak-proof.
      - When used remotely on site, to fuel pumps or generators, containers will be placed on a drip tray and a spill kit must be on hand in case of spillage.
      - Drip trays must be emptied and cleaned on a regular basis.
   b) Diesel
      - Diesel stored in a tanker / bowser shall be clearly labelled and locked when not in use.
      - All tanks and bowsers must be fully bunded.
      - When a diesel bowser is used on site there will be a spill kit on hand in case a spillage occurs.
      - When diesel is stored on site in small containers they are to be adequately constructed, correctly labelled, and placed on a drip tray to contain any spillage that may occur and protected from impact damage.

11.10 Refuelling procedure

11.10.1 This procedure outlines the steps to be taken when refuelling on site.
   - All local watercourses must be identified and site drainage determined. This information is to be recorded / available on site maps.
   - No plant or machinery is to be refuelled within 10m of any watercourse without a specific Risk Assessment and Work Package Plan being in place.
Where possible, all plant must be taken to the main fuel tank for refuelling. For large or stationary plant and equipment a bunded fuel bowser shall be filled from the main tank in order to distribute the fuel.

A spill kit or absorbent granules must be kept adjacent to the main tank, carried with any mobile bowser and kept in the machines to be refuelled. The operative carrying out the refuelling operations shall check this prior to transferring any fuel.

Prior to transferring any fuel the person carrying out the operation must dip the tank to be filled to assess the quantity required.

All ancillary equipment (hoses / pistols / valves etc) must be kept within secondary containment.

When not in use, nozzles on fuel tanks / bowsers must be securely padlocked to prevent accidental / deliberate discharge.

In the event of a spillage, refer to the procedures for minor and major environmental spillages.

VF will control refuelling of all subcontractors on-site to prevent misuse and improper refuelling.

11.10.2 Site Specific drainage plan will be produced upon the completion of the topographical survey
12.0 APPENDICES TO THE ENVIRONMENTAL MANAGEMENT PLAN

SAFETY

S8 Site Rules

ENVIRONMENT

E1 Environmental Planning Meeting Agenda EMS-01-VF
E2 Environmental Planning and Risk Assessment EMS-02-VF
E5 Site Waste Management Plan EMS-03-VF

AUDITS

A1 Audit reports

MISCELLANEOUS

M1 Relevant Legislation

M2 Environmental Policy Statement
12.1 **Appendix S8 Site Rules**

Rules are issued / discussed with all personnel at induction and evidence of this is recorded on HSE-16-VF Fitness for Work and HSE-18-VF Safety Induction Register.

The rules outlined below are the absolute minimum; they should be supplemented by any site-specific additions.

1) Diesel, Fuel, Oil and Chemicals to be stored only in proper designated storage areas. All containers must be returned to designated areas.

2) All diesel deliveries and refuelling is to be carried out with great care to ensure spillages do not occur. Always use drip trays.

3) No water whether surface water or other is to be discharged into any drains or manholes unless authorised by the local Water Authority or Sewerage Undertaker.

4) Any works which are likely to emit excessive noise are to be advised to the Site Manager for instruction prior to proceeding.

5) Waste must not be allowed to accumulate, and must be disposed of in the skips provided.

6) No waste is to be placed outside of site boundary.

7) All hazardous waste, e.g. glue pots, paint tins etc are to be disposed of in suitable waste bins or removed from site by the sub-contractor on site.

8) Where dedicated skips are provided for materials such as metal only, masonry only, timber only etc, these are only to be used for disposal of the respective material, NO mixing of material.

9) For all waste leaving site, copies of waste carrier licences, disposal facility licences and waste transfer notes must be made available to VF.

10) Bonfires are not permitted.

11) All plant, i.e. disc cutters, chasers, skill saws etc must have dust bags fitted wherever possible or dust extraction equipment to prevent dust pollution of the atmosphere.

12) In the event of any spillage, i.e. diesel, petrol, paint, glue etc please advise the Site Manager immediately for instruction on the respective cleaning up / emergency procedure.

13) Toolbox talks on Environmental issues and how they affect their present work are to be held on a monthly basis.

14) Adhere to the Site working hours of the Section 61.

15) Smoking areas will be provided, at suitable locations at ground level. Smoking must not be allowed at any location below ground level. These areas are to be outside and, where possible, covered.

16) All temporary Site lighting must be designed, positioned and directed so as not to unnecessarily intrude on the local environment, and having due regard to residential premises neighbouring the Site.

17) On completion of the construction works VolkerFitzpatrick will clear away and remove from Site all plant, surplus materials, rubbish and temporary works of every kind and leave the whole of each Site and works in a clean and tidy condition.
18) VolkerFitzpatrick shall provide an appropriate level of security to monitor the Site.

12.2 **Appendix E1 Environmental Planning Meeting Agenda (EMS-01)**

This section contains a copy of the completed Environmental Planning Meeting Agenda; a copy must be inserted behind this cover sheet.
12.3 **Appendix E2 Environmental Risk Assessment (EMS-02)**

This section contains a copy of the Environmental Planning & Risk Assessment form; a copy must be inserted behind this cover sheet.
12.4 **Appendix E3 Site Waste Management Plan (EMS-03)**

This section contains a copy of the Site Waste Management Plan for the Chesterton Interchange Station project; a copy must be inserted behind this cover sheet.
13.0 MISCELLANEOUS APPENDICES

Miscellaneous documents which are relevant to the EMP, but do not have a specified location, will have their details entered in the table below and then be inserted in to the EMP behind this page.

Table 15: Miscellaneous documents added to the EMP

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<td>VolkerFitzpatrick Environmental Policy</td>
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13.1 **Appendix M1 Applicable Legislation and Codes of Practice**

13.2 **Relevant Legislation**

- Control of Pollution Act 1974
- Salmon and Freshwater Fisheries Act 1975
- Wildlife and Countryside Act 1981, as amended
- Environmental Protection Act 1990
- Water Resources Act 1991
- Protection of Badgers Act 1992
- Land Drainage Act 1991
- Clean Air Act 1993
- Conservation (Natural Habitats &c) Regulations 1994, as amended
- Wild Mammals (Protection) Act 1996
- Pollution, Prevention and Control Act 1999
- Pollution Prevention and Control (England and Wales) Regulations 2000
- Countryside and Rights of Way (CRoW) Act 2000
- Water Act 2003
- SI 1991/2839: Environmental Protection (Duty of Care) Regulations 1991
- SI 2001/2954: Control of Substances Hazardous to Health Regulations 2000
- Planning Policy Statement 23: Planning and Pollution Control
- Contractors and Clients -Voluntary Code of Practice (Department of Trade & Industry - July 2004)
- The London Plan, 2008, published by the Mayor of London
- The Environmental Permitting Regulations (as amended) 2010
- Waste (England and Wales) Regulations 2011
- Department of Communities and Local Government - Planning Policy Statement 5: Planning for the Historic Environment PPS5
- Department of Communities and Local Government - Planning Policy Statement 23: Planning and Pollution Control PPS23
- Department of Communities and Local Government - Planning Policy Statement 25: Development and Flood Risk PPS25
13.3 **Best Practice Guidance**

- BS 5837: 2005 Guide for Trees in Relation to Construction
- BS 5228: Noise control on construction and open sites:
  - Part 1 (1997) Code of Practice for basic information and procedures for noise control
  - Part 2 (1997) Guide to legislation for noise control applicable to construction and demolition, including road construction and maintenance
  - Part 4 (1992) Code of Practice for noise and vibration control applicable to piling operations
- BS 6031: Code of Practice for Earthworks
- BS 6472: 1992 Evaluation of human exposure of vibration in buildings (1Hz to 80 Hz)
- BS 7385 Evaluation and measurement for vibration in buildings:
  - Part 1: 1990 Guide for measurements of vibrations and evaluation of their effects on buildings
  - Part 2: 1993 Guide to damage levels from groundborne vibration
- CIRIA, Control of water pollution from construction sites: Guidance for consultants and contractors (C532)
- CIRIA/Environment Agency Joint Guidelines: Concrete Bunds for Oil Storage Tanks
- CIRIA/Environment Agency Joint Guidelines: Masonry Bunds for Oil Storage Tanks
- Guidance Notes for the reduction of obtrusive lighting, 2005 The Institute of Lighting Engineers
- Lighting in the Countryside: Towards Good Practice (1997) HMSO
- The control of dust and emissions from construction and demolition" (Mayor of London 2005)
- Environment Agency Pollution Prevention Guidance PPG01 General guide to the prevention of water pollution
- Environment Agency Pollution Prevention Guidance PPG02 Above ground oil storage tanks
- Crossrail Act Schedule 7 Construction Arrangements
- Environment Agency Pollution Prevention Guidance PPG05 Works near or liable to affect watercourses
- Environment Agency Pollution Prevention Guidance PPG06 Working at construction or demolition sites
- Environment Agency Pollution Prevention Guidance PPG21 Pollution incident response planning
- Environment Agency Pollution Prevention Guidance PPG23 Maintenance of structures over water
- Environment Agency Guidance Note: Piling into Contaminated Sites
- Environment Agency Technical Guidance WM2 Interpretation and Classification of Hazardous Waste provides assistance in classifying wastes.
- Waste Management - The Duty of Care, code of Practice (HMSO 1996).
- Buildings Research Establishment. Controlling particles, vapour and noise pollution from construction sites, Parts 1 to 5, 2003
13.4 **Appendix M2 ENVIRONMENTAL POLICY STATEMENT**

VolkerFitzpatrick is a multi-disciplinary construction contractor operating in the United Kingdom. We are committed to maintaining high standards throughout our operations, with particular regard to minimising the adverse environmental impacts of all company operations.

VolkerFitzpatrick will strive to continually improve our environmental performance through the reduction and control of waste, reusing and recycling materials, prevention of pollution, protection of local environmentally sensitive locations, and conserving natural resources.

Specifically we are committed to:

- Establishing and maintaining an Environmental Management System (EMS) compliant with the requirements of BS EN ISO 14001:2004 and implementing this EMS throughout our project activities and fixed office locations;
- Complying with relevant environmental legislation, corporate and other requirements to which VolkerFitzpatrick subscribes, e.g. Network Rail environmental requirements, Considerate Constructors Scheme, construction codes of practice, or trade associations;
- Establishing and reviewing quantifiable environmental objectives and targets according to the nature of our activities, business and other legal requirements, including the reduction of waste, energy consumption and our carbon footprint, seeking year on year improvements;
- Developing site-specific environmental management plans to mitigate adverse environmental impacts such as noise, dust, odour, waste and emergency situations, and taking into consideration local community concerns and the control of hazardous substances;
- Wherever possible influencing project design by offering solutions to reduce environmental impact;
- Considering sustainable and / or recycled products during material selection and procurement for a project wherever we have an influence;
- Minimising the adverse impacts of our operations on local communities, wherever we have an influence;
- Working with our suppliers and sub-contractors to improve both parties’ environmental performance; and
- Providing appropriate Environmental information and guidance to employees and others working on behalf of VolkerFitzpatrick.

All employees and others working for VolkerFitzpatrick are required to comply with this policy. In particular, by cooperating and carrying out activities in such a manner that does not endanger the environment. It is the responsibility of VolkerFitzpatrick management and supervisory staff to ensure that this policy and its arrangements are implemented.

This policy will be reviewed annually and revised as often as may be deemed appropriate by VolkerFitzpatrick, and then brought to the attention of all employees. It is accessible to interested parties via the VolkerFitzpatrick website, reception areas or is available on request.

Richard Offord  
Managing Director  
November 2014

*This statement has been extracted from VF’s ENVIRONMENTAL POLICY AND PRACTICE Document*