



A6 to Manchester Airport Relief Road

Code of Construction Practice

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Relief Road

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Preface

As the design of the scheme progresses it is envisaged that this Code of Construction Practice (the Code) will be revised as appropriate. The Code will remain as Draft until such a time that the design and construction of the scheme are offered for tender. In this way any subsequent issues, such as design alterations and planning conditions can be addressed in the Code.

Glossary of Terms

<i>Contractor</i>	Contractors include all employees of the principal contractor and sub-contractors, in a broader sense a contractor is anyone who carries out or assists in carrying out the construction works. The contractor has health and safety responsibility for their own employees and others.
<i>Street Furniture</i>	Equipment that is used in street e.g. signs, litter bins, benches.
<i>Work Site</i>	Anywhere in which the contractor is carrying out construction works, including temporary works and site compounds, within the limits of land to be acquired either permanently or temporarily.

1.0 Introduction

1.1 OBJECTIVES OF THE CODE OF PRACTICE

- 1.1.1 The A6 to Manchester Airport Relief Road will improve surface access to Manchester Airport and provide better connectivity along the south Manchester corridor, to assist Greater Manchester and Cheshire East in meeting their aspirations for economic growth. It directly supports the Government's objective to provide major transport infrastructure that will deliver economic growth.
- 1.1.2 The A6 to Manchester Airport Relief Road Scheme will provide 10 kilometres of new 2-lane dual carriageway on an east-west route from the A6 near Hazel Grove (south east Stockport), via the 4 kilometres of existing A555 to Manchester Airport and the link road to the M56. The scheme bypasses heavily-congested district and local centres, including Bramhall, Cheadle Hulme, Hazel Grove, Handforth, Poynton, Wythenshawe, Gatley and Heald Green. It will provide much-needed connectivity for key strategic routes into the North West and to Manchester Airport, including traffic from the A6, A523 and A34 – all of which are key routes for business, leisure travel and freight from Cheshire, Derbyshire, Staffordshire, Yorkshire and beyond.
- 1.1.3 The A6 to Manchester Airport Relief Road is supported by all three major political parties in each of the Local Authorities (Stockport Metropolitan Borough, Cheshire East and Manchester City councils) through which the road passes. It is also supported by the Greater Manchester Combined Authority (GMCA) and Transport for Greater Manchester (TfGM).
- 1.1.4 The Project Delivery Team (PDT), based in Stockport Council offices, is responsible for resolving all project issues that require cross sponsor agreement but do not have a strategic impact on the scheme. The PDT is led by the Project Director. The Project Development and Design Team consists of a significant number of specialist skilled staff, which includes full-time staff employed by the partners and specialist consultants providing advice on transport, environmental, design and engineering issues relating to the scheme proposals.
- 1.1.5 This Code of Construction Practice (hereinafter referred to as the Code) has been prepared alongside the Environmental Statement for the project. The Code will form part of the contract documentation and it is the Contractors responsibility to comply fully with this code.
- 1.1.6 The Code addresses specific legislative requirements in addition to compliance with the British Standards, Health and Safety Executive Guidance and planning conditions. In this respect it is in place to protect the interests of local residents, businesses, the general public and the surroundings in the immediate vicinity of the construction works. It will apply throughout the entire period of the construction works.
- 1.1.7 The Contractor, his agents and employees are expected to comply fully with the terms of the Code otherwise the contract may be liable to termination. The Contractor will be given a reasonable period of time to rectify any breaches of the Code during the construction process, however should these not be rectified within that time the Employer under the contract will make arrangements for a third party to carry out the necessary works to rectify the breaches at the expense of the Contractor.

1.1.8 In addition to the requirements as set out by the Code, the contractor is to also adopt the recommendations of the Local Government Associations *Considerate Constructor Scheme* which aims to improve the "image" of the construction industry through good practice. The Contractor shall adopt the requirements of this Code of Practice where they are more onerous than those set out in the *Considerate Constructor Scheme*. Where necessary it is expected that the Contractor, with no prior intervention, shall adopt stricter controls than may be included in this Code or the *Considerate Constructor Scheme* to reduce annoyance or nuisance.

1.2 STRUCTURE OF THE CODE

1.2.1 This report is structured as follows:-

Glossary A glossary of terms follows the table of contents at the front of the report.

Chapter 1 Introduction – sets the context of the code including the background of the scheme, the purpose of the code and other applicable guidelines.

Chapter 2 General Matters Applicable Under the Code – covers all general aspects of construction works possible impacting on local communities and the environment, these are identified under the topic headings below:

- Public and private highways
- Noise and hours of working
- Vibration
- Dust and pollution
- Handling and disposal of contaminated materials
- Protection of surface and groundwater resources
- Ecology
- Site boundaries/hoardings/temporary structures on the public highway
- Archaeological remains
- Built heritage
- Other site activities
- Liaison
- Training and monitoring the implementation of the code

The measures identified in this chapter are applicable to all areas of the construction works for the duration of the project.

Chapter 3 Site Specific Requirements – covers the particular requirements to individual site compounds along the proposed scheme. This chapter is available should any site specific requirement be identified throughout the works which should be included in this Code in the future.

Appendices Presents a list of relevant legislation, British Standards/Eurocodes and guidance.

1.3 APPLICABLE ACTS OF PARLIAMENT/REGULATIONS

1.3.1 There are currently in existence numerous relevant Acts of Parliament and statutory regulations covering environmental and safety matters. For information a list of relevant legislation and

guidance from statutory bodies is presented in Appendix A of this Code. It should be noted that this list is not exhaustive and may not be up to date at the time of construction. The Contractors involved in constructing the scheme are required to comply in full with all relevant legislation applicable that is current at the time of construction including those that are not listed in Appendix A.

2.0 General Matters Applicable Under the Code

2.1 INTRODUCTION

2.1.1 This section identifies the general aspects of construction works which could possibly impact on local communities and the environment. Activities specific to construction site compounds and particularly sensitive areas are addressed in section 3.0 of the Code.

2.2 PUBLIC AND PRIVATE HIGHWAYS

2.2.1 The Contractor shall submit to the Employer a statement for approval setting out the proposed measures to be taken with respect to traffic and safety, which shall be approved by the Employer prior to the commencement of work. Upon commencement of the construction work the approved statement shall be implemented and complied with throughout the construction period.

2.2.2 Measures to be taken with respect to traffic and safety may include:-

- i. So far as is reasonably practicable the proposed relief road will be used to carry construction traffic.
- ii. Use of temporary Traffic Regulation Orders (TRO's). The contractor will consult with the Employer and relevant statutory bodies on the arrangements for agreeing, making, implementing and enforcing TRO's along the scheme to facilitate road closures.
- iii. Use of temporary signing in accordance with Chapter 8 of the Traffic Signs Manual and the Code of Practice for Safety at Street Works and Road Works wherever works are in progress to ensure the safety of all road users.
- iv. Preparation of an agreed programme of road closures and temporary signal-controlled shuttle arrangements
- v. Use of temporary signing to restrict vehicle types/sizes and agreed haul routes. The requirement to access the site via these routes will be communicated to suppliers of the Contractor.
- vi. Use of adequate signing/lighting and safety fencing wherever works are in progress to ensure the safety of all groups of road users
- vii. Use of temporary signing to identify each active section of the system where construction is taking place, to help construction traffic locate appropriate delivery/collection points.
- viii. Use of adequate signing/lighting safety fencing wherever works are in progress to ensure the safety of all groups of users.

2.2.3 In addition, the following requirements apply to the construction works at all times:-

- i. Any temporary footways and ramps on the public highway must be of an adequate width, gradient and crossfall, and surfaced in materials to the satisfaction of the Employer. The Contractor shall submit his proposals to the Employer for approval prior to commencement of the works.
- ii. All openings or obstructions on the carriageway or footway are correctly permitted in accordance with the Greater Manchester Permit Scheme and barricaded with a continuous rail, which is adequately lit at night and strong enough to offer the necessary resistance should someone walk into it.

- iii. All pedestrian routes diverted onto the carriageway shall be a minimum of 1.5m wide (1.0m absolute minimum on agreement), clearly defined by continuous barriers and shall be provided with ramps where necessary to allow wheelchair/scooter users, in accordance with Chapter 8 of the Traffic Signs Manual and the Code of Practice for Safety at Street Works and Road Works.
- iv. So far as is reasonably practicable, all parts of the public highway including drainage systems will be kept free from mud and loose materials arising from the works at all times. A representative from the Employer will closely monitor mud and dust suppression on the site. To comply with these requirements the Contractor shall take the following measures:
 - a. Provide easily cleaned horizontal surfaces for vehicles entering, parking and leaving any work site. Haul roads will be surfaced in areas close to highway accesses.
 - b. Provide wheel washing facilities at the exits from site compounds and work sites where appropriate, including where practicable, mechanical wheel spinners, adequate provision for drainage via settlement tanks and regular maintenance of settlement tanks, during the working hours specified in section 2.3 of this Code.
 - c. Provide an approved mechanical road sweeper to clean the work site and any mud or debris deposited by site vehicles on roads or footpaths in the vicinity of each work site, during the working hours specified in section 2.3 of this Code.
 - d. Ensure the adequate sheeting of each lorry carrying materials which may give rise to dust generation and to prevent spoil falling during its journey to its final destination.
- v. Vehicles entering and leaving each work site will only be allowed to cross footways via a properly constructed crossing.
- vi. Access which is deemed to include both the route and entrance to any work site by lorries shall be as agreed with the Employer, the Traffic Management Liaison Group (TMLG) and appropriate statutory body.
- vii. No daytime or overnight parking of vehicles in the vicinity of any work sites or area of construction are allowed except where delivery or removal of materials is taking place at that location or with prior agreement with the Employer.
- viii. All parked vehicles or vehicles waiting to enter any work site or area of construction must switch off their engines within two minutes of arrival.
- ix. All street furniture and other features such as trees in the vicinity of the works that are to remain in situ throughout the construction period as specified in the contract documents shall be carefully protected in accordance with the reasonable requirements of the owners thereof and agreement with the Employer. Any damage caused by the Contractor shall be made good as soon as practicably possible to the complete satisfaction of the owner of the street furniture or other features at the Contractors expense. Suitable measures shall be implemented by the Contractor to protect trees as specified in section 2.8 of this code.
- x. Any street furniture or other obstructions outside the area to be occupied by the Contractor which the Contractor requires to be removed in order to gain access for temporary works shall, subject to prior consent from the owner thereof, be removed and reinstated/replaced if appropriate on completion of the works by the Contractor and any

costs associated therewith will be borne by the contractor including the costs of reinstatement or replacement.

- xi. The contractor shall ascertain and comply with any restrictions in respect of abnormal load routes as they may affect access to any work site.

2.2.4 Proposals for the closure or diversion of any public right of way, not identified as part of the contract documents, will be submitted and approved by the Employer and relevant department of the local authorities prior to commencement of any construction works.

2.3 NOISE AND HOURS OF WORKING

2.3.1 The Employer will seek agreements with the local authority on noise limits for work sites and other relevant issues no later than 3 months before the works are due to commence on site. Officers from the Environmental Health Department will be available to discuss proposed mitigation and noise limits before the agreement is finalised.. Noise limits and other limited parameters are to be agreed prior to tenders being invited for the construction works and listed in the tender documentation. For the purposes of this Code, work sites shall mean those locations utilised by the contractor for the purposes of construction works, storage of plant, machinery, material and the siting of cabins etc. in connection with the construction works

2.3.2 The Employer will as far as practicable prepare predictions of construction noise prior to tenders being invited for the construction works in order to establish achievable noise levels at each specific work site. These predictions will be carried out in accordance with BS 5228: Noise Control on Construction and Open Sites, Part 1 - Noise and be presented to the Employer for their comments. In particular regard must be given to noise criteria set out in Annex E of BS 5228: Part 1.

2.3.3 Following agreement with the Employer there shall be included within the proposed tender documents clearly defined noise criteria which must be complied with by the successful Contractor in relation to the proposed method of working, type of plant to be used, and noise mitigation measures for each work site. Prior to the commencement of any construction work, the Contractor is required to demonstrate to the Employer that it has complied with these criteria. The Contractor will allow access to work sites for an Employer appointed representative to monitor background noise, for the purpose of monitoring compliance with these criteria. If the Contractor fails during the period of the construction work to comply with these criteria he may be required to cease work by the Employer. In such circumstances work must cease immediately and any costs incurred by the Employer shall be met by the Contractor.

2.3.4 Examples of noise mitigation measures to be included are:

- i. Site compounds to be surrounded by fencing or other barriers, where appropriate, and continuous plant to be housed in acoustic enclosures.
- ii. Use of electrical items of plant instead of diesel or petrol plant in especially sensitive locations
- iii. Exhaust silencing and plant muffling equipment to be maintained in good working order
- iv. The hours of construction and associated works shall be restricted to the hours set out in paragraph 2.3.7 and at no time on Sundays or Bank Holidays. Any variation from these hours shall be notified to and approved by the authority prior to the variation taking place

except in the case of emergencies, in which case the authority should be notified by the quickest possible method.. Working outside normal day time hours and at weekend and/or bank holidays shall only be permitted in exceptional pre-planned circumstances where there are sufficient safety or engineering reasons – convenience on the part of the contractor or to make up for lost time due to weather condition or plant breakdown or other such reasons will not be sufficient for permitting working outside normal hours unless given prior consent by the Employer. All working hours for works in the vicinity of schools, network rail land or other sensitive area shall be as agreed with the Employer and the relevant authority, this is detailed further in section 3.0 of this code.

- v. Use of temporary screens at sensitive locations.
- vi. All plant, whether Stationary or Mobile, shall only have its engine running when actually in use or when being prepared for use, such as an air compressor building up pressure after being initially turned on. Covers on plant which reduce emitted noise levels shall be maintained in good condition and shall be kept closed at all times when the plant's engine is running.
- vii. A sign shall be erected at the entrance to all work areas outlining the measures which operatives must adopt to ensure minimisation of noise and vibration emissions and other nuisance from the site, such signs to be erected before any works commence from any particular sites, the sign wording and size to be agreed prior to the commencement of the works with the Environmental Protection section of Environmental & Consumer Services.

2.3.5 It should be noted that the measures listed above are not exhaustive. Further reasonable measures may be required from time to time which should be agreed between the Contractor and the Employer.

2.3.6 If the Contractor wishes to change his proposed method of working once the construction works commence then this can only be achieved following agreement with the Employer.

2.3.7 The hours of working for the construction works are to be limited to between 7.00am and 6.00pm Monday to Friday and between 8.00am and 1.00pm on a Saturday for general construction activities. This is unless the Contractor proposes additional or alternative working hours for construction reasons or the Employer require the Contractor to undertake certain works outside these hours. Night time working must be kept to an absolute minimum. In instances where the Contractor proposes a change to the working hours he shall seek the prior agreement of the Employer. Procedures for notifying the public of changes to working hours shall be carried out in accordance with Section 2.13.1 of this Code.

Effective from 1st March to 31st October 2017, a temporary extension to the working hours set out within paragraph 2.3.7 has been approved by Stockport and Cheshire East councils across the scheme, with the exception of a 200 metre section adjacent to Mill Hill Hollow.

The temporary extended working hours apply to Monday to Friday only and are as follows:

- 6.30am: deliveries of imported stone can commence
- 7am to 7pm: main works
- 7pm to 7.30pm: vehicle maintenance only

Working hours for Saturdays remain 8am to 1pm and no work is permitted on Sundays.

- 2.3.8 Certain particularly sensitive locations are likely to require different hours of working during construction to those described in Section 2.3.7 above, these are addressed in Section 3.0 of this Code. There may also be restrictions, for example (only): *no construction work is allowed in some areas during the Christmas period (between 15 November and 14 January inclusive)*; any such restrictions are addressed in Section 3 of this Code.
- 2.3.9 Certain roads are 'traffic sensitive' routes and as such works affecting the carriageway are restricted to between 9.30am and 3.30pm on weekdays unless otherwise agreed with the Employer, TMLG and Greater Manchester Police, these routes will be identified within the tender documentation. Traffic management is discussed in detail in section 2.2 of this Code.
- 2.3.10 The Contractor shall provide suitably designed and constructed temporary acoustic screens in addition to the permanent acoustic screens that have been specified within the tender documentation (specifications for temporary acoustic screens shall be included within the proposed tender documents) which shall be used as necessary and when directed by the Employer.

2.4 VIBRATION

- 2.4.1 The Contractor will ensure that all reasonable measures are taken to protect local residents, nearby property and the occupiers thereof from nuisance and physical damage that may be caused by vibration. The Employer will as far as practicable prepare predictions of construction vibration prior to appointment for the construction works in order to establish achievable vibration levels at specific work sites. Following agreement with the Employer there shall be provided on appointment clearly defined vibration criteria which must be complied with by the successful Contractor in relation to the proposed method of working, type of plant to be used, and vibration mitigation measures for each work site. The use of impact driven piles must be avoided as far as practicable. If the Contractor is proposing to use driven piles at any location, it must provide a report by an independent Chartered Engineer explaining why no other option is feasible. In particular the Contractor shall be required to comply with the provisions of BS 6472:2008 – Guide to Evaluation of Human Exposure to Vibration in Buildings parts 1 and 2, and BS 7385 Evaluation and measurement for vibration in buildings (Part 2: Guide to damage levels from ground borne vibration).
- 2.4.2 In order to ensure such measures are taken, a programme of on-site monitoring by a suitably qualified practitioner is to be agreed between the Contractor and the Employer. Such a programme will include the location and frequency of readings, and to whom the results should be made available.

2.5 DUST AND AIR POLLUTION

- 2.5.1 The Contractor will take all necessary measures to avoid creating a dust nuisance and will, prior to commencement of any construction work, submit to the Employer a statement, for approval, setting out the proposed measures to be taken to prevent dust nuisance, and which shall be approved by the Employer prior to the commencement of any construction work. Upon commencement of the construction work, the approved statement shall be implemented and complied with throughout the period of the construction work.

2.5.2 Additional control measures and site boundary monitoring are likely to be required, depending upon the working methods employed, where land known to be contaminated is disturbed. Site boundary monitoring is to be carried out by an independent contractor at the Contractors expense for the Employer.

2.5.3 Examples of measures to prevent dust nuisance to be included in the Contractor's statement are:-

- i. The enclosure of site compounds with solid hoardings to a height of at least 2m.
- ii. Where feasible, routing of vehicles and positioning of construction of plant at maximum possible distances from sensitive receptors and residential areas.
- iii. The enclosure of material stockpiles (such as sheeting) at all times and damping down of potentially dusty materials/construction sites using suitable water sprays during dry weather.
- iv. Covering the surface of long term stockpiles with topsoil and grassing over.
- v. Where conveyors are used for handling spoil they shall be fitted with drop chutes. The surface of the material on the conveyor shall be sprayed with water after deposit onto the conveyor if practicable, where there is a likelihood of a dust problem.
- vi. Storage of cement and other dust generating materials in silos with appropriate filters and overfill alarms or storage in bags.
- vii. The hard surfacing of heavily used areas which are to be kept clean by regular brushing and water spraying.
- viii. All surfaced haul roads in regular use shall be regularly cleaned mechanically after being sprayed to suppress dust emission. Care shall be taken to prevent the emission of dust from the air outlets on vacuum road sweepers.
- ix. The installation and use of vehicle wheel and body washing stations at exit points of the site and public roads, combined with cleaning of public roads where necessary and practicable.
- x. Enforcement of a speed limit, such limit to be displayed on appropriately designed signs, located at all entrances to each construction site, for vehicles on unpaved roads and on the construction site.
- xi. As soon as is practicable the permanent site roadways shall be used for haulage across site.
- xii. Additives and binders may be added to water for dust suppression subject to the approval of the Environment Agency.
- xiii. The adequate sheeting of vehicles carrying spoil and other dusty materials.
- xiv. All fires are prohibited, this includes fires for the disposal of vegetation, packaging, or any other material. The use of braziers is permitted for the heating of hand held black-top-application tools.
- xv. Cutting or grinding equipment shall be fitted with dust extraction where practicable.

2.5.4 It should be noted that the measures listed above are not exhaustive. Further reasonable measures may be required from time to time which should be agreed between the Contractor and the Employer. If a dust nuisance or annoyance does arise, then such measures as are required to prevent nuisance or annoyance shall be adopted by the Contractor without waiting to be instructed to do so by the Employer or an Environmental and Consumer Services Officer.

- 2.5.5 The effectiveness of the dust control measures are reviewed at regular intervals by the Contractor and the Employer.
- 2.5.6 The Contractor will take all necessary precautions to prevent the occurrence of smoke emissions or fumes from site plant or stored fuel oils for safety reasons and to prevent as far as is reasonable, such emissions or fumes drifting into residential areas, nearby workplaces or areas of public open space. In particular, plant shall be well maintained and measures taken to ensure that engines are not left running for long periods when not directly in use. Plant which emits visible emissions after warm-up shall be taken out of service either repaired or replaced.

2.6 HANDLING AND DISPOSAL OF CONTAMINATED MATERIALS (INCLUDING WASTE)

- 2.6.1 The Contractor will carry out the works in such a way as to prevent, contain or limit as far as reasonably practicable any adverse impacts arising from the presence of contaminated land or material during construction activities. The Contractor shall take all necessary measures to deal with noxious and toxic materials encountered. All contaminated sites and the hazards that they present shall be identified in consultation with the Employer prior to the commencement of work.
- 2.6.2 Where potentially contaminated material is excavated, it is necessary to determine the concentrations of any contaminants to ascertain whether the material can be placed elsewhere on the site, or if it is classified as an environmental hazard by the Environment Agency, or as a Special Waste as defined in the Environmental Protection Act 1990 and The Hazardous Waste (England and Wales) Regulations 2005 (as amended 2009). Excavated materials classified as giving rise to an environmental hazard is disposed of at a suitably licensed waste disposal site and all parties will discharge their statutory obligations in relation to the waste management Duty of Care, imposed by Section 34 of the Environmental Protection Act 1990 and, if applicable, The Hazardous Waste (England and Wales) Regulations 2005 (as amended 2009).
- 2.6.3 The Contractor shall ensure that if any contaminated material is to be brought onto any part of a work site, the prior written approval of the Environment Agency is obtained.
- 2.6.4 The disposal of waste, including any surplus spoil, is managed to maximise the environmental and developmental benefits from the use of surplus material and to reduce any adverse environmental effects of disposal. Waste materials are managed in accordance with current statutory guidance concerning the disposal of controlled wastes i.e. The Environmental Protection Act 1990, The Hazardous Waste (England and Wales) Regulations 2005 (as amended 2009), The Waste (England and Wales) Regulations 2011 and The Environmental Permitting Regulations (England and Wales) 2010 (as amended).
- 2.6.5 In the event that the Contractor 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 agreement of the Employer (such agreement not to be unreasonably withheld) to the recycling of materials. In this respect a period of fourteen days should be allowed by the Contractor for the consultation and obtaining of agreement from the Employer.
- 2.6.6 Waste generated from the construction works is to be prevented and minimised as set out in the Waste Hierarchy as part of the Waste Regulations. Waste stored on site is segregated according to its type to prevent cross contamination of controlled wastes and hazardous wastes. Separate

storage facilities for waste to be recycled will also be provided by the Contractor. The Contractor shall have a target of 70% of construction waste to be recycled as stipulated within the Waste Regulations.

2.6.7 Waste should be stored in covered skips to prevent dust and litter being blown out and to prevent rainwater accumulating in the skip.

2.6.8 Where the Contractor is required to deal with Japanese Knotweed or other invasive weeds on the site, a Method Statement for the eradication and disposal of the plant shall be agreed with the Employer. In the case of mechanical control being necessary, the Contractor should excavate soil, to a depth agreed with the Employer's representative, around the edge of the plant and dispose of the material at a licensed landfill site. Alternatively, the material should be buried on site at a depth greater than 5m or greater than 2 metres depth with the use of an approved root barrier membrane. Such sites shall be monitored by the Contractor for a period of 2 years following burial. Soils contaminated with invasive weeds must not be reused for construction or landscaping purposes. Refer to Managing Japanese knotweed on Development Sites; the knotweed code of practice – Environment Agency and Managing Invasive Non-Native Plants, Environment Agency 2010

2.6.9 The Contractor shall make reference to the HSE publication, HSG 66 Protection of Workers and General Public During the Development of Contaminated Land 1991, for guidance on precautions required during construction on potentially contaminated sites. In particular, the Contractor shall ensure that all reasonable precautions are taken to protect workers and members of the public from exposure to any noxious or toxic chemicals. These precautions should include:

- i. Protective clothing, including overalls, hand protection, head protection, and safety boots to be worn at all times.
- ii. Contact with fill materials be avoided.
- iii. If skin contact occurs, the affected area should immediately be washed.
- iv. Shoes and boots should be cleaned off prior to leaving the site.
- v. During prolonged dry periods, if there is the potential for significant dust generation in construction, the surface of the site should be damped down.
- vi. Entry into confined spaces and trenches should be minimised. If entry is necessary, then clear procedures should be developed for entry into trenches, manholes, etc, where there is a possibility of oxygen deficiency or asphyxiation from toxic gases. This should include monitoring for a range of gases, etc. Any person entering a confined space must be trained/certified to operate in confined spaces
- vii. If it is necessary to remove contaminated materials from site, then open lorries or skips used for that removal shall be sheeted.
- viii. Detailed records of disposal are necessary and the Contractor should discuss the content of such records with the Environment Agency.

2.7 PROTECTION OF SURFACE AND GROUNDWATER RESOURCES

2.7.1 The Contractor will carry out the works and implement working methods devised to protect surface and groundwater from pollution and other adverse impacts including changes to flow volume, water levels and quality. All site activities are to be carried out in accordance with current Pollution Prevention Guidance notes prepared by the Environment Agency (see Appendix A).

- 2.7.2 The Contractor will ensure that any proposed drainage schemes required for the construction of the relief road are discussed in advance with the Employer, the Environment Agency and the statutory water undertaker.
- 2.7.3 The Employer has carried out a Flood Risk Assessment which is included within the tender documentation. The contractor is to review and adopt the philosophy and recommendations or propose an alternative.
- 2.7.4 The Contractor will obtain the appropriate consents, permits or licences from the appropriate bodies including the Environment Agency or statutory water undertaker for discharges to watercourses, sewers or groundwater in accordance with relevant statutory provisions.
- 2.7.5 The Contractor will obtain the appropriate consents, permits or licences from the Environment Agency for works within eight metres of the top of the bank or wall confining a main river. Appropriate consents, permits or licences will also be required for works affecting ordinary watercourses.
- 2.7.6 In planning and carrying out any construction works, precautions are to be taken to secure the protection of watercourses and water in underground strata against pollution. Those should include a ground investigation of sites where past use of the site has indicated the potential for contamination to ensure that suitable mitigation measures are applied where contaminated land is disturbed.
- 2.7.7 The Contractor will implement a training programme to ensure that all site staff are aware of the risks of site activities to the water environment.
- 2.7.8 The contractor will ensure that all staff are aware of the risks of infections, such as leptospirosis when working in a watercourse environment.
- 2.7.9 If any pollution occurs, then the Contractor should advise the Environment Agency immediately and take prompt action to minimise the effect. A procedure shall be in place to ensure an effective response to a pollution incident. This shall be agreed with the Employer in advance of the commencement of any works.
- 2.7.10 A common cause of pollution from sites is through vandalism. Therefore, the Contractor should ensure that sites are adequately protected by the provision of industry standard hoardings, secure fences, and locked accesses/egresses where possible.
- 2.7.11 In order to limit pollution from silt and cement, the Contractor should ensure the following measures are followed:
- i. The washwater from concrete mixing plants, or the cleaning of ready mixed concrete lorries must not be allowed to flow into any drain or watercourse. Washings must be contained in sealed units for permitted disposal off site
 - ii. Site roads must be regularly swept or scraped and kept free from deposits in order to prevent silt, oil or other materials entering any drain or watercourse.
 - iii. Any wheel wash facilities should be securely constructed with no overflow and effluent should be contained for proper treatment and disposal.
 - iv. Before any discharge of water is made from the site, adequate provisions, such as settlement lagoons or silt traps fitted with oil absorbent booms, must be made to ensure

that pollution will not occur. The local Environment Agency office should be consulted in order to obtain approval.

2.7.12 In order to prevent pollution from oil, fuel and chemicals:

- i. The construction of any storage facilities for oils, fuels or chemicals shall be carried out in accordance with details submitted to and approved in writing by the Employer before the development is commenced. The storage facilities for fuel and oil must comply with the Control of Pollution (Oil Storage) Regulations (England) Regulations 2001, as such the following must be in place:
 - a. Provision of a secondary containment (a bund or drip tray) to ensure that any leaking or spilt oil does not enter controlled waters.
 - b. Any associated equipment such as valves, filters or sight gauges must be within the bunded area.
 - c. The volume of the secondary containment facility must be sufficient to contain 110% of the contents of the tank in single tank installations. If more than one storage container is involved, the bund must be capable of containing 110% of the largest tank, or 25% of the total aggregate capacity, whichever is the greatest.
 - d. The base and walls of the containment facility must be impermeable to water and oil and checked regularly for leaks.
 - e. There must be no drainage valve in the bund.
 - f. Any oily water collected within the secondary containment facility must be disposed of correctly by a suitably licensed contractor.
 - g. Where practicable the storage facility should be placed in a location at minimal risk from collision damage, with any underground pipework adequately protected from physical harm.
- ii. Filling and refuelling must be strictly controlled and together with any oil storage tanks, should be confined to a location remote from any watercourse or drain.
- iii. Leaking or empty drums must be removed from the site immediately.
- iv. Any tanks or drums of non-oil based chemicals should be stored in accordance with the Control of Substances Hazardous to Health Regulations 2002. Storage facilities should, at the very least, be secure containers or compounds which should be kept locked when not in use.
- v. Before any tank is removed or perforated, particularly during demolition works, all contents and residues must be identified for safe disposal. Pipes which may contain significant quantities of oil or chemicals should be capped, or valves closed to prevent spillage.

2.7.13 Prior to being discharged into any watercourse, surface water sewer or soakaway system, all surface water drainage from impermeable parking areas, roadways and hard standings for vehicles shall be passed through an oil interceptor designed and constructed to have a capacity and details compatible with the site being drained. Roof water shall not pass through such interceptors.

2.8 ECOLOGY AND LANDSCAPE: GENERAL REQUIREMENTS

- 2.8.1 Prior to commencing the construction work, the Contractor shall establish, in conjunction with the Employer, a policy for dealing with trees which may be directly, or indirectly, affected by the works. Such a policy to be consistent with BS 5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations. In particular:
- i. The Contractor shall carry out all arboricultural works in accordance with BS 3998:2010 Tree Work. Recommendations
 - ii. The Contractor shall ensure that any trees or hedges which are not required to be taken down under the contract shall be protected by fencing and visible barriers prior to works commencing, and these shall be maintained throughout the works. The protection provided by such fencing shall include protection of the area occupied by the tree roots or as advised by the Employer appointed representative. The timing of the fencing erection and its removal shall be as agreed with the Employer.
 - iii. Where any existing trees or hedges are to be removed for the construction of the works, the Contractor shall, before commencing any clearing in the areas concerned, agree with the Employer those trees and hedges to be protected and those to be removed and any measures/working methods necessary to safeguard trees to be retained.
 - iv. If the Contractor considers it essential to trim branches or to carry out work adjacent to roots, it shall be necessary to first obtain the permission of the Employer. Such permission, if given, may include a requirement to hand dig and may specify the size of roots to be trimmed and remedial/reinstatement procedures. Before giving such permission, the Employer shall consult the relevant department of the local authority.
- 2.8.2 In addition, any new planting of trees or the re-location of plant species shall be agreed with the Employer and maintained as is reasonable, by the Contractor for a period of two years from the completion of the construction works and any trees or plant species that may die, as a result of natural dieback within that period shall as far is reasonable be replaced by the Contractor at their own cost.
- 2.8.3 The Contractor will comply with the provisions of the Wildlife and Countryside Act 1981, The Protection of Badgers Act 1992, The Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006 together with any specific requirements agreed with the Employer.
- 2.8.4 Site specific requirements for the construction and relevant adjacent areas are considered in section 3.0. The following general principles are applied, however, it must be noted that the Contractor must implement any necessary additional measures in order to comply fully with legislative requirements:
- i. Wherever wildlife habitats remain alongside working areas, provision shall be made to prevent encroachment onto valuable ecological areas that are not essentially required for construction. This will include the provision of secure fencing where appropriate. These sites will not be used for the storage of construction materials or the stockpiling of excavated material.
 - ii. Badgers and other wildlife -The Contractor will ensure that construction materials and structures that may pose the risk of entrapment or injury will be contained within secure compounds or means of escape provided (e.g. from pits and trenches). Water storage tanks shall be sealed so as to prevent entry to bats or other wildlife.

- iii. Clearance of woody vegetation from the route will be supervised by a qualified ecologist outside of the main breeding bird season (March to July inclusive) to assess whether breeding birds are present prior to clearance. No clearance works will be permitted if the clearance would contravene the requirements of the Wildlife and Countryside Act and this will be determined on site by the ecologist.
- iv. Clearance of vegetation within the main breeding bird season will only be permitted with the agreement of the Employer and under supervision from a qualified ecologist. No clearance works will be permitted if the clearance would contravene the requirements of the Wildlife and Countryside Act and this will be determined on site by the ecologist.
- v. The Contractor will be responsible for ensuring appropriate mitigation in respect of protected species present in the works area or where such species in adjacent sites may nevertheless be adversely affected by the works. This will be in accordance with all consents and licences granted by Natural England for work that may disturb Great Crested Newts, Bats and Badgers.
- vi. The Contractor will be responsible for ensuring that appropriate action is undertaken in respect of habitat and species Biodiversity Action Plans. Further details are given in the scheme Biodiversity Action Plan.
- vii. Suitable precautions are taken to prevent entry of pollutants into any bodies of water as set out in Section 2.7.
- viii. Additional ecological measures outlined in the planning conditions will be incorporated into the CoCP or scheme Biodiversity Action Plan as necessary.

2.8.5 The contractor shall be familiar with, and aim to contribute to the objectives of (wherever possible) the scheme biodiversity action plan, (appended to this document). Where there are opportunities, whether through method of construction or implementation of mitigation, to contribute to BAP targets they should be pursued.

2.8.6 The contractor is required to appoint a "Biodiversity Champion". The 'Biodiversity Champion' would be responsible for implementing the BAP during construction and have the authority to influence site activities and ensure that detrimental impacts on site biodiversity are minimised. The biodiversity champion does not have to be an ecologist but should have sufficient knowledge, authority and time on site to influence activities and ensure they have minimal detrimental impact of biodiversity. The champion should also be suitably qualified. The biodiversity champion could be different people at different stages of construction and site management

2.9 SITE BOUNDARIES/HOARDINGS/TEMPORARY STRUCTURES ON THE PUBLIC HIGHWAY

2.9.1 The Contractor shall ensure all work sites are sufficiently and adequately fenced off from members of the public and so as to prevent any animals straying on to the work sites. Such fencing shall be constructed to the reasonable satisfaction of both the Employer as detailed in the tender documentation. If hoardings are provided, suitable bulkhead lights shall be fitted where necessary.

2.9.2 The provision of gates in the fencing or hoarding should, as far as practicable, be positioned and constructed to minimise the noise transmitted to nearby noise sensitive buildings from the work site directly or from plant entering or leaving the site.

- 2.9.3 The Contractor shall maintain security at each enclosed work site on a 24 hour basis so as to prevent unauthorised entry or exit from the work sites. Site gates are closed and locked when there is no site activity. Any alarms provided by the Contractor shall meet health, safety and nuisance requirements.
- 2.9.4 The Contractor shall ensure that if hoardings are provided they are painted on the side facing away from the site in a plain uniform manner and include a project logo and the Contractors logo as agreed with the Employer.
- 2.9.5 The Contractor is expressly prohibited from displaying or allowing to be displayed any advertisement, notice etc. including illicit bill or fly posting on the hoardings. The Contractor shall also ensure that all graffiti or defacement to the hoardings are removed and made good as soon as reasonably practicable.
- 2.9.6 There shall be provided at each enclosed work site an 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 or comments.
- 2.9.7 Any fenced storage areas, scaffolding gantries, loading/unloading bays, skips and other temporary structures on the public highway provided by the Contractor shall be maintained by the Contractor in accordance with the appropriate licence granted by the Employer.
- 2.9.8 The Contractor shall ensure that construction buildings, equipment and lighting are sited so as to minimise visual intrusion, consistent with the efficient operation of each work site.

2.10 ARCHAEOLOGICAL REMAINS

- 2.10.1 The Contractor, prior to commencement of any construction work, will submit to the Employer and the Heritage Advisor a scheme for archaeological mitigation, for approval, setting out the proposed measures to be taken to prevent damage to known and unknown archaeological remains. Upon commencement of the construction work, the approved statement shall be implemented and complied with throughout the period of the construction work.
- 2.10.2 Measures to be addressed in the scheme of archaeological mitigation include the field investigation and recording work, and these should be considered in advance of the appointment of the Contractor. Any archaeological excavation and recording work will be required to be undertaken by the Contractor's Field Archaeologist for the preservation of features in-situ, translocation of features to be preserved away from the scheme, procedures for advance notification of works in areas where close archaeological monitoring is necessary, methodology for the watching brief and liaison with the Employer, methodology for any archaeological excavation fieldwork assessment and preparation of the cultural heritage archive. The methodologies adopted for various stages of the work will conform to the Institute of Field Archaeologists Standards and Guidance documents.
- 2.10.3 The Contractor shall take all reasonable precautions to prevent his workmen or any other persons from removing or damaging any fossils, coins, articles of value or antiquity, structures or other remains, or any other thing of archaeological interest discovered either at the time of the archaeological excavation or during subsequent construction works except for material recovered

during archaeological mitigation or for the purposes of preservation at another location. The requirements of the Treasure Act 1996 will be adhered to.

2.11 BUILT HERITAGE

- 2.11.1 The Contractor should carry out the works in such a way as to protect, conserve, enhance or minimise the impact on historic buildings (including Listed Buildings), historic areas (including Conservation Areas) and their settings. The Contractor will submit to the Employer a statement or statements for approval, setting out the proposed works, methods to be used and measures to be taken, with respect to historic buildings and areas on sites to be approved by the Employer prior to commencement. This statement will include specialist monitoring measures. Any such statement shall be approved by the Employers prior to the commencement of work at the site(s) to which the statement relates. Upon commencement of the construction work any relevant statement shall be implemented and complied with throughout the construction period. The advice given in National Planning Policy Framework and BS 7913:1998 Guide to the Principles of Conservation of Historic Buildings should be followed.
- 2.11.2 The Employer will ensure that all necessary consents (including planning, listed building and conservation area) are obtained before the start of the relevant part of construction and that the Employer and Contractor comply with the requirements stipulated in any consents and the conditions therein.

2.12 OTHER SITE ACTIVITIES

General Requirement for Site Compounds

- 2.12.1 The construction site compounds would act as the main site offices, stores and marshalling areas; smaller worksites would act as individual storage areas and location for welfare facilities for individual sections of the work.
- 2.12.2 The Contractor shall ensure the following general requirements are met in relation to the construction works:
- i. All fires are prohibited, this includes fires for the disposal of vegetation, packaging, or any other material. The use of braziers is permitted for the heating of hand held black-top-application tools.
 - ii. Waste is removed at frequent intervals and each work site kept clean and tidy.
 - iii. Toilet facilities are provided and kept clean.
 - iv. Food waste is contained and removed at least weekly
 - v. Wheel washing facilities are brushed clean at frequent intervals.
 - vi. Detailed daily records are kept of climatic conditions including rainfall, minimum and maximum temperatures, humidity and wind direction.
 - vii. Records of construction plant used on the site shall be maintained at weekly intervals.
 - viii. All necessary measures shall be taken to minimise fire risks and the Contractor shall comply with the requirements of the local Fire Authority.
 - ix. Radios (other than two-way radios for the purposes of communication between operators of the contract) and other forms of audio equipment shall not be allowed on any work site.

- 2.12.3 Each work site may be inspected on a frequent basis by a nominated representative from the Employer. A mutually acceptable timescale for site inspections is agreed between the Contractor and the Employer prior to commencement of construction. Should the contractor be found not to be complying in any respect with the Code he shall have a period of three days or a shorter period such as may be deemed necessary to rectify the situation. Otherwise action will be taken to do so at the Contractor's expense.
- 2.12.4 The Contractor shall not allow any living accommodation on site except with the prior consent of the Employer. Portable mess rooms, locker rooms, toilets and showers are permitted.
- 2.12.5 At each work site all vehicles shall enter and exit in a forwards direction except where space restriction does not permit this. In that event movement shall be properly controlled by a responsible person(s) observing the rear of the vehicle.
- 2.12.6 The Contractor shall provide suitable lighting to the site boundaries with illumination sufficient for the safety of the passing public including mobility impaired people as necessary. Site lighting must be designed, positioned and directed so as not to unnecessarily intrude on passing drivers on public highways, and having due regard to residential premises neighbouring the site.
- 2.12.7 If site security cameras are provided by the Contractor, these must be located in positions which are not likely to cause offence to local residents or commercial business premises.
- 2.12.8 The Contractor will prepare emergency procedures to be implemented in the event of an environmental incident such as a breach of a consent or an accidental spillage.
- 2.12.9 On completion of the construction works the Contractor will clear away and remove from each work site all plant, surplus materials, rubbish and temporary works of every kind and leave the whole of each work site and works in a clean and tidy condition to the satisfaction of the Employer.

2.13 LIAISON

- 2.13.1 The Employer shall be responsible for nominating a liaison officer(s) in relation to all public relations, information issues and press related matters who shall undertake the role of liaison with the relevant department of the local authority, members of the public, the press and the media. The Employer shall establish procedures for notifying the public in advance of any alterations in the construction programme or working hours that have been agreed with the Contractor and the relevant departments of the local authorities.
- 2.13.2 The Employer shall put in place a complaints procedure whereby members of the public can, if necessary, make contact by telephone direct with a "hot line" facility which shall be answered by a person, not an answer phone, during all hours when works, including deliveries, are taking place and also provide details of the named contacts to whom all written complaints, including emails, should be addressed.
- 2.13.3 The Contractor will ensure that details of the relevant contacts within the Employer are readily available and shall ensure that all site construction staff are easily identifiable to the public by use of identity cards or an equally effective system. In addition, the Contractor shall nominate an

individual to act as a point of contact for liaison with the Employer, the relevant departments of the local authorities and members of the public. A procedure to be adopted in the event of an inspection by Planning Officers, EHOs and representatives from other statutory bodies will be prepared by the Contractor and agreed with the Employer.

- 2.13.4 The Employer shall introduce a system for the recording of all complaints which shall be collated by them and a copy made available to the Contractor and the relevant department of the local authorities.

2.14 TRAINING AND MONITORING THE IMPLEMENTATION OF THE CODE

- 2.14.1 The Contractor will prepare and implement a training programme to ensure that all site staff are aware of the requirements of the Code. The training package is approved by the Employer in consultation with third parties including the relevant departments from the local authorities and the Environment Agency.
- 2.14.2 Any specialised training that will be required for areas of works will be specified with section 3.0 of this Code.
- 2.14.3 A suitably qualified person appointed by the Contractor and approved by the Employer will oversee the on-going implementation and monitoring of the Code. This person will ensure the continued effective implementation of the Code for the duration of the construction works.

3.0 Site Specific Requirements

3.1 INTRODUCTION

- 3.1.1 This chapter is available should any specific requirements be identified which should be included in the Code.

3.2 CONSTRUCTION COMPOUNDS

- 3.2.1 *Site boundaries* – The locations and areas of permanent and temporary land take will be submitted to the Contractor as part of the tender documentation. The permitted site boundaries shall be clearly defined prior to the commencement of the works. Suitable boundary fencing and locked gates shall be installed to prevent unauthorised access to the site.
- 3.2.2 *Anticipated period of occupation* – due to the nature of the work it is anticipated that over the construction period several site compounds will be erected on a rolling basis. The Contractor is to submit a programme of works as part of the tender return, detailing the length of time required for each compound, and when it will be required.
- 3.2.3 *Hours of working* – Generally the hours of working will be limited to between 7.00am and 6.00pm Monday to Friday and 8.00am to 1.00pm on a Saturday. There will however be exceptional circumstances, in which the contractor may be required to undertake night working, weekend working and in some instances 24 hour working may be required, this will be identified as part of the tender documentation, and will be kept to a minimum as is practicable. Where 24 hour working may be required the Contractor shall submit a method statement detailing the shift arrangements of all employees to the Employer and others as necessary.
- 3.2.4 *Noise Limits* – the contractor shall provide the Employer with estimations of the expected noise levels arising from the construction works as set out in 2.3.2. The Contractor shall produce a method statement outlining how they intend to reduce the noise levels as far is practicable for approval by the Employer.
- 3.2.5 *Road, footpath and Cycleway Closures* – details of permanent and temporary closures/diversions required will be submitted to the contractor as part of the tender documentation.
- 3.2.6 *HGV Routes* – The contractor shall refer to the Consultant Contractors Report within Volume 3 of the Tender Documentation for the approved routes for access requirements. Where temporary access roads are deemed to be required, the contractor will submit his proposals to the Employer prior to the commencement of the works.
- 3.2.6 *Contractor Parking* – The contractor is to agree any areas of parking for their employees that fall outside the boundary of the site compound with the relevant department of the local authority prior to the commencement of the works. The contractor shall ensure that any disruption caused to local residents is kept to a minimum.
- 3.2.7 *Service Diversions* – There will be several areas where complex service diversions will be required, details of these have been included within the tender documentation. The Employer cannot confirm the accuracy of the service locations provided, the contractor is to confirm the exact

position/depth of services throughout the works. Where large discrepancies are discovered the contractor is to inform the Employer and the relevant statutory undertaker.

3.2.8 *Lighting* - The site compounds are to be adequately lit as necessary

3.2.9 *Waste Management and contaminated materials* – Details for site waste management can be found in the Site Waste Management Plan, submitted as part of the tender documentation.

3.2.10 *Safety* - Several guidelines are to be followed with regard to safety, such as:

- i. All employees are to wear PPE at all times on the work site
- ii. Information boards are to be provided around the site providing information about the potential hazards on site
- iii. A site office is to be provided close to the pedestrian entrance of the site so any entering pedestrians are subject to the minimum risk.
- iv. A maximum speed limit is to imposed upon the site at all times

The above list is not exhaustive, and provides only a few examples of the guidelines to be followed. All regulations are to be adhered to with regard to the Control of Substances Hazardous to Health (COSHH) Regulations 2002 and the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995, as well as all the guidelines set out in the Construction Design and Management (CDM) Regulations and all other relevant HSE Guidelines (see Appendix A for further regulations).

3.3 LIVE RAILWAYS

3.3.1 Several areas of construction are going to take place over and adjacent to live railways including the construction of several new bridges over the railway and widening of existing bridges over the railway.

3.3.2 Unless prior approval is given by Network Rail, no person or person operated machine shall enter within network rail land. All access on or above ground, including and not exclusively crane jibs, or other machinery is to be agreed by network rail, and if necessary is to be supervised by a network rail appointed supervisor.

3.3.2 Subject to Network Rail agreement/approval it is possible that night-time and potential 24hr working under a network rail possession may be necessary to complete works to network rail infrastructure as fast as is practicable. Proposed programmes should be submitted to the Employer and network rail for approval.

3.3.3 All construction methods and practices are to be agreed by Network rail prior to the commencement of works and should be produced in accordance with Network Rail guidelines.

3.3.4 All employees working on or adjacent to network rail land should undergo all relevant training as specified by network rail prior to working on the appropriate sites.

3.4 SCHOOLS

- 3.4.1 A number of construction activities are to be carried out in the vicinity of Queensgate Primary School, Woodford. The working hours in this vicinity are to be agreed by the Contractor with the Employer and Queensgate Primary School, prior to the commencement of works.
- 3.4.2 Where any walking routes to the school may be affected, appropriate measures shall be taken by the Contractor to ensure the ongoing safety of all children, parents and school employees. This includes provision for adequate lighting and crossing points as required. The contractor shall liaise with Queensgate Primary School and the relevant department of the local authority to determine the appropriate measures required.
- 3.4.3 Any overly intrusive works that may hinder the day-to-day activities of the school (piling, for example) shall be programmed, where practicable, to coincide with closures of the school as agreed with Queensgate Primary School and the relevant department of the Local Authority.

3.5 ECOLOGICAL AND LANDSCAPE REQUIREMENTS

- 3.4.1 The attention of the contractor is drawn to the Environmental Statement and the Biodiversity Action Plan, which will be available on appointment.
- 3.5.2 No Sites of Special Scientific Interest appear to have been identified within the construction envelope. The Contractor is to confirm this prior to the commencement of the works. There are however several environmental constraints, particularly in the area of Ancient Woodland that is located within the working envelope.
- 3.5.3 The landscaping requirements are to be in accordance with the Environmental Statement and the landscaping drawings which have been included as part of the tender documentation. Where temporary land take and easements are located in private land, the landscaping requirements are subject to approval of the land owner and the land owners reasonable specification as agreed with the Employer.
- 3.5.4 Comprehensive ecology surveys have been carried out to be included within the tender documentation however, it will be necessary to undertake further surveys prior to the commencement of work, to determine the ecological requirements prior to construction.

Appendix A – Relevant Legislation, British Standards and Guidelines

In addition to compliance with all relevant legislation applicable at the time of the construction works and compliance with British Standards as applicable referred to in Part A of this Code, the following British Standards and guideline, and any subsequent updates, issue by various statutory bodies also apply.

A Wildlife Legislation and Advice Notes

1. Wildlife and Countryside Act, 1981
2. The Conservation of Habitats and Species Regulations 2010
3. The Hedgerow Regulations, 1997 SI1160
4. The Protection of Badgers Act 1992
5. The Countryside and Rights of Way Act 2000
6. The Natural Environment and Rural Communities Act 2006.
7. English Nature (2002). Badgers and development. English Nature, Peterborough.
8. English Nature (2004) Reptiles: Guidelines for Developers. English Nature, Peterborough
9. BS 5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations
10. Tree Roots, Leaflet No.6, The Arboricultural Association Hedgerow Regulations, 1997
11. BS 3998:2010 Tree Work. Recommendations

B Environmental Protection and Pollution Control

1. The Hazardous Waste (England and Wales) Regulations 2005 (as amended 2009)
2. Technical Guidance WM2 Hazardous Waste: Interpretation of the definition and classification of hazardous waste, Environment Agency 2011
3. DoE Circular 11/94 Environmental Protection Act 1990, Part II Waste Management Licensing, The Framework Directive on Waste, 1994
4. The Environmental Permitting Regulations (England and Wales) 2010 (as amended)
5. The Waste (England and Wales) Regulations 2011
6. Controlled Waste Regulations 1992 (as amended)
7. Clean Air Act 1993
8. Control of Pollution Act 1974 (as amended 1989)
9. Environmental Protection Act 1990
10. Water Resources Act 1991 (as amended 2009)
11. Land Drainage Act 1991 (as amended 1994)
12. Water Industry Act 1991 (as amended 1999)
13. Environment Act 1995
14. The Control of Pollution (Oil Storage) (England) Regulations 2001
15. DoE Waste Management Papers
16. Relevant Environment Agency Pollution Prevention Guidelines (PPGs):
 - i. PPG 1 -General Guide to the Prevention of Pollution
 - ii. PPG 2 -Above Ground Oil Storage Tanks
 - iii. PPG 3 -Use and design of oil separators in surface water drainage systems
 - iv. PPG 4 -Treatment and disposal of sewage where no foul sewer is available
 - v. PPG 5 -Works in or near water
 - vi. PPG 6 -Working at construction and demolition sites
 - vii. PPG 7 -Refuelling facilities
 - viii. PPG 8 -Safe storage and disposal of used oils

- ix. PPG13 – vehicle washing and cleaning
 - x. PPG18 -Managing fire water and major spillages
 - xi. PPG20 -Dewatering underground ducts and chambers
 - xii. PPG 21 -Pollution incident response planning
 - xiii. PPG22 -Dealing with spills
17. CIRIA/Environment Agency Joint Guidelines Masonry Bunds for Oil Storage Tanks
 18. CIRIA/Environment Agency Joint Guidelines Concrete bunds for oil storage tanks

C Archaeology and Cultural Heritage

1. Planning (Listed Buildings and Conservation Areas) Act 1990
2. Ancient Monuments and Archaeological Areas Act, 1979
3. The Treasure Act 1996
4. The Burial Act 1857
5. Circular 09/05: Arrangements For Handling Heritage Applications Notification To National Amenity Societies Direction 2005
6. BS 7913:1998 Guide to the Principles of Conservation of Historic Buildings

D Planning Policy Guidance and Statements (PPG, PPS)

1. National Planning Policy Framework

Majority of PPG's and PPS's superseded

E Noise and Vibration Abatement: Guidance and Legislation

1. BS 4142: (1997) Method of rating industrial noise affecting mixed residential and industrial areas
2. BS 7445: Part 1: 2003 - Description and measurement of environmental noise
3. BS EN 61672-1: 2003 - Electroacoustics. Sound level meters. Specifications
4. BS 5228: Noise control on construction and open sites:
 - a. Part 1 (2009) Code of Practice for Noise and Vibration Control on Construction and Open Sites. Noise
 - b. Part 2 (2009) Code of Practice for Noise and Vibration Control on Construction and Open Sites. Vibration
5. BS 6472:2008 – Guide to Evaluation of Human Exposure to Vibration in Buildings.
 - a. Part 1 – Vibration Sources Other than Blasting
 - b. Part 2 – Blast-induced Vibration
6. BS 7385-2:1993 Evaluation and measurements for vibration in buildings. Guide to damage levels from ground-borne vibration
7. BS ISO 4866:2010 – Mechanical Vibration and Shock. Vibration of Fixed Structures. Guidelines for the Measurement of Vibrations and Evaluation of their Effects on Structures
8. Noise and Statutory Nuisance Act 1993

F Health and Safety

1. HSE Guidance Note EH40/2005 -Occupational Exposure Limits 2011
2. HSE – Asbestos: The Analysts Guide for Sampling, Analysis and Clearance Procedures (2006)

3. HSG264 – Asbestos: The Survey Guide (2012)
4. Health and Safety at Work Act 1974
5. Control of Substances Hazardous to Health (COSHH) Regulations 2002
6. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995
7. Work with Materials Containing Asbestos. Approved Code of Practice (2006)
8. The Control of Asbestos Regulations 2012

G Ground Contamination

1. CIRIA. Remedial Treatment for Contaminated Land, Volumes I -XII (SP 164),1995-1998
2. HSE HSG66 Protection of workers and the general public during the development of contaminated land 1991
3. BS 10175:2011 Investigation of potentially contaminated sites -Code of Practice
4. DEFRA Contaminated Land Reports
5. DETR Guidelines for Environmental Risk Assessment and Management (2011)
6. Site Investigation in Construction Part 4: Guidelines for the Safe Investigation by Drilling of Landfills and Contaminated Land. 1993, Thomas Telford publication.
7. Remedial processes for contaminated land -principles and practice (C549)CIRIA, 2001
8. Environment Agency Guidance on the disposal of contaminated soils. Version 3, April 2001
9. Environment Agency. Remedial Targets Methodology (2006)
10. Environment Agency. Managing Japanese knotweed on Development Sites; the knotweed code of practice.
11. BS 6031: (2009) Code of Practice for earthworks

H Construction and Traffic

1. The Construction (Design and Management) Regulations 2007
2. The Traffic Signs Regulations and General Directions 2002. SI 2002 No. 3113
3. Chapter 8 of the Traffic Signs Manual 2009
4. Highways Act 1980 and Amendment Act 1986
5. New Road and Street Works Act, 1991
6. Traffic Management Act 2004
7. Design Manual for Roads and Bridges (DMRB)

Appendix B – List of Useful Contacts

Department	Organisation	Contact details
A6MARR General Enquiries	Carillion Morgan Sindall	0161 474 2055 Semms.relief.road@stockport.gov.uk
Environmental Control	SMBC	Karen Dyson Karen.dyson@stockport.gov.uk 0161 474 4295
	CEC	environmentalprotection@cheshireeast.gov.uk 0300 123 5015
	MCC	www.manchester.gov.uk/environment 0161 234 5000/5004
Public Realm Inspectors	SMBC	SMBC online reporting forms www.stockport.gov.uk
		Team Duty Officer: 0161 218 1492 district.standards@stockport.gov.uk
		SMBC Contact centre 0161 217 6111
	CEC	0300 123 5020
		www.cheshireeast.gov.uk/highways_and_roads/highways_and_roads.aspx
		cehnorth@cheshireeasthighways.org
MCC	Matthew Turner m.turner2@manchester.gov.uk 0161 234 5815	