APPENDIX 9.1 Code of Construction Practice

Control of Noise and Vibration

A Prior to commencement of works, the Contractor is to seek the Local Authority's formal consent via a Section 61 application (Control of Noise and Pollution Act 1974) for the proposed methods of work and the steps to be taken in order to minimise noise. In terms of the control of noise and vibration, liaison with the Local Authority should be with: Principal Environmental Health Officer, Barnsley Metropolitan Borough Council.

B It is anticipated that the Local Authority requirements as part of the Section 61 application relating noise and vibration, would be similar to the Employer's requirements set out within this Appendix. Compliance with the Employer's requirements should however in no way compromise full compliance with any requirements agreed with the Local Authority in the Section 61 formal consent.

C The normal working hours within the site shall be Mondays to Fridays between 0800 and 1800 hours and Saturdays between 0800 and 1300 hours, with no working on Public Holidays. Exceptionally, consent for work outside these hours may be given after any necessary consultation, particularly with the Environmental Health Officer (EHO). Fourteen days' notice is required from the Contractor when seeking such consent.

D The noise levels scheduled below for periods outside normal working hours shall only be permitted when consent has been given to exceptional working.

E The ambient noise level, $L_{Aeq,T}$ from all sources when measured 2.0m above the ground at any noise sensitive receiver position shall either not exceed the appropriate level given in the Schedule or not exceed by more than 3dB(A) the existing ambient noise level, $L_{Aeq,T}$, at the receiver location measured over the same period, whichever is the greater.

F The maximum sound level, $L_{Amax,S}$ measured 2.0m above ground at the noise control stations shall either not exceed the appropriate maximum noise levels given in the Schedule or not exceed by more than 3dB(A) typical existing maximum noise level exposures, whichever is the greater. The maximum sound level given in the Schedule shall be permitted for a period not exceeding 5 minutes in any one hour.

G Existing ambient noise level data has been monitored at or near the noise sensitive receiver locations and the data will be updated prior to commencement of the works. The data will be made available to the Contractor on site as it is updated and is to act as the baseline existing ambient noise level data with which compliance with the requirements of paragraphs E, F and L is to be tested. The data has either been measured at or corrected to be representative of the existing noise levels at the noise sensitive positions and will be provided in terms of hourly L_{A90}, L_{Aeq} and $L_{Amax,S}$ noise indices.

H Exceptionally, the Contractor may be given permission to carry out works which exceed the noise levels in the Schedule, provided that 14 days' notice of the date and timing of the work is given to the Employer's Agent and the Contractor demonstrates that he has taken all reasonable measures to mitigate the noise nuisance. After consultation with the Local Authority and any other interested bodies a decision will be given within 7 days of receipt of the notice.

I If the need arises to measure noise levels at a location other than one of the designated noise sensitive locations, the permitted noise level shall be related to the nearest designated noise sensitive location. The permitted noise levels at another location shall take into account the difference in distance, topography and screening between the noise source and the nearest designated noise sensitive location and the noise source and the measuring location.

		Total Noise Levels at Designated Noise Sensitive Locations		
Period	Hours	Ambient Construction Noise Level $L_{Aeq,T}$, dB(A)	Period T over which Ambient $L_{Aeq,T}$ is applicable, hours	Maximum Construction Sound Level $L_{Amax,S}$ (see note (iv) below)
Mondays – Fridays	0800 – 1800	65	any 4 hours	75
Mondays – Fridays (if permitted)	1800 – 2200	60	any 1 hour	70
Saturdays (if permitted)	0800 – 1300 1300 – 1800 1800 – 2200	65 65 55	any 4 hours any 1 hour any 1 hour	75 75 65
Sundays (if permitted)	0800 – 0900 0900 – 1700 1700 – 2200	55 60 55	any 1 hour any 1 hour any 1 hour	65 70 65
Any day (if permitted)	2200 - 0800	Construction Noise Levels subject to negotiation with EHO		

Notes:

1. Construction noise levels in the schedule relate to free-field conditions, where designated noise sensitive locations are located more than 3.5m from building façades or other reflective surfaces other than the ground. Where noise designated noise sensitive locations are located within 1.0m from building façades, the permitted noise levels can be increased by 3dB(A).

2. The ambient noise level, $L_{Aeq,T}$ at a designated noise sensitive location is the total L_{Aeq} from all the noise sources in the vicinity over the specified period.

3. The existing ambient noise level, $L_{Aeq,T}$ at a designated noise sensitive location is the total L_{Aeq} from all the noise sources in the vicinity over the specified period prior to the commencement of the Works. Refer to paragraph G.

4. The maximum sound level, $L_{Amax,S}$ shall be the highest value indicated on a sound level meter which meets the requirements of BS EN 60651, Type 1 or 2 set to SLOW response and frequency weighting A or on an integrating – averaging sound level meter to BS EN 60804.

J The Contractor shall employ the best practical means to minimise the noise and vibration produced by his operations and shall have regard to the recommendations in BS5228:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites - Part 1: Noise, and Part 2: Vibration.

K Without prejudice to the generality of the Contractor's obligations under paragraph J the Contractor shall comply in particular with the following requirements:-

- All vehicles and mechanical plant used for the purpose of carrying out the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order so that extraneous noises shall be reduced to a minimum.

- All compressors and generators shall be "sound reduced" models fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use. All ancillary pneumatic percussion tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Generators shall be positioned and enclosed so

as to minimise noise transmission to the inhabitants in the neighbourhood as agreed with the Employers Agent.

- All pumps shall be positioned and enclosed so as to minimise noise transmission to inhabitants in the neighbourhood.

- All machines in intermittent use shall be shut down in the intervening periods between work or, where this is impracticable, throttled down to a minimum.

- No machine shall be permitted which uses a system of dropping a heavy weight, power assisted or by gravity, for the purpose of breaking up paving or foundations.

- Access to the Site shall be such as to ensure a minimum of disturbance to persons in adjacent buildings by vehicles or plant entering or leaving the Site. No deliveries to Site shall take place outside the agreed working hours.

- Any work agreed to be carried out between 2200 and 0800 hours will be subject to agreement to noise levels with Environmental Health Officer. The Contractor shall provide details on work involved, machinery or plant used, exact location, and calculated noise levels at monitoring points.

L Any fixed or static plant operating outside normally permitted working hours shall not give rise to a 'rating level', as defined in BS4142:1997 "Rating industrial noise affecting mixed residential and industrial areas," in excess of the existing free-field background LA90 noise levels at noise control stations. The existing baseline free-field background noise levels are to be provided as explained in paragraph G.

M Without prejudice to the foregoing and to requirements of particular clauses in the Conditions of Contract, the Contractor shall not be permitted to carry out works as stated below, except where such work is absolutely necessary for the saving of life or property and the safety of the Works or as is required under the terms of the Contract.

- Piling, including sheet piling, by percussive methods outside the hours of 0800 to 1800 Mondays to Fridays.

- The maintenance of mechanical or other constructional plant in the proximity of noise sensitive buildings outside the hours of 0800 to 1800 on Mondays to Saturdays or at any time on Sundays and public holidays.

N All construction operations shall be such that they do not exceed a peak particle velocity vibration level of 5mms-1 at any nearby occupied location as well as the VDV's set out in the table below in the relevant areas.

Area	VDV 7.00am to 11.00pm	VDV 11.00pm to 7.00am
Residences	0.13	0.13
Commercial Buildings	0.20	0.40

O The Contractor will submit for approval by Barnsley Metropolitan Borough Council a construction traffic management plan that sets out, among other matters, details of the restrictions on routing and timing of construction vehicle movements so as to minimise the noise impact generated at off-site noise sensitive receivers.