



Construction Method Statement

Pewterspear Green Road, Warrington

Revision B

July 2018

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Revision A – Amended in response to comments from Warrington MBC dated 4th October.

IEH

Revision B – Saturday working hours and delivery times amended to suit comments from

Warrington MBC dated 12th October. JSM

1.0 Introduction

1.1 The planning permission for residential development on the site at Pewterspear Green Road, Warrington was approved in September 2017. Warrington BC required a Construction Method Statement to be submitted prior to development commencing. This document seeks to provide information regarding the actions to counter the following environmental concerns;

- a) *Proposed locations of site compound areas*
- b) *Proposed routing of deliveries to site compounds or deliveries direct to site*
- c) *Proposed delivery hours to site and proposed construction hours*
- d) *Control of noise and vibration*
- e) *Control of dust and air quality on site*
- f) *Protection of the existing ditch on site from spillages, dust and debris*
- g) *Consideration for joining a Considerate Contractors Scheme*
- h) *Control of waste materials*
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2.0 Control Measures

a) Proposed Locations of Site Compound Areas

- i) The details and location of the site compounds are shown on the plans in Appendices A and B.
- ii) For the avoidance of doubt, all contractor parking will be within the development site. During the initial days of the works, there may be some minor disruption while a car park/compound area for the road and sewer contractor to use is stoned up within the development site boundary. This is simply because the machine used to establish the hard standing upon which the compound will sit must be unloaded onto a hard standing itself before it enters the site, as the delivery wagon is not an off-road vehicle. Likewise, the initial deliveries of stone to make up the hard standing are not delivered by off-road vehicles. In short, it is not possible to park off-road until the off-road parking area is fully established 3-4 days from commencement. However, once established all materials and vehicles will be parked within the development site.
- iii) Gates must be kept shut and locked when not in use.
- iv) Compound lights must be screened from surrounding roads and houses.

b) Proposed Routing of Deliveries to Site Compounds or Deliveries Direct to Site

- i) All deliveries must report to the site compound before unloading at the materials store.
- ii) The construction site is serviced two existing adopted roads, Pewterspear Green Road and Stretton Road. The site is split by an existing brook and two access points are required. The eastern parcel will be serviced off Pewterspear Green

Road, with vehicles using Longwood Road and then Pewterspear Green Road to access the site. The western parcel will be serviced off Stretton Road, with vehicles using A49 and then Stretton Road to access the site.

- iii) Traffic routes will be briefed out to contractors and suppliers when orders are placed, during site inductions and in toolbox talks. Barratt cannot be held responsible for the actions of a rogue driver, but we will make best endeavours to ensure the given routes are followed.
- iv) All traffic leaving/entering the site must do so in forward gear.
- v) Construction access points must be wide enough to accommodate two-way traffic.

c) *Proposed Delivery Hours to Site and Proposed Construction Hours*

- i) Working times for the project are stipulated are to be as follows:
 - Mon-Fri 8.00am-6.00pm
 - Sat 8.30am-1.30pm
 - No working on Sundays or Bank Holidays
- ii) If any work is necessary outside the above hours of work, this will only be done with prior written agreement from the local planning authority.
- iii) Deliveries to Site B (accessed off Pewterspear Road and close to Stretton St Matthews school) will be restricted to the following hours during school terms:
 - Mon-Fri 9.15am-2.45pm
 - Sat 8.30am-1.30pm
 - No deliveries on Sundays or Bank Holidays

d) *Control of Noise and Vibration*

i) Noise and vibration will be caused during construction activities by:

- Traffic movements;
- Plant movements;
- Demolition operations;
- Drilling and piling operations;
- Excavating operations;
- General construction activities; and
- Emergency sirens.

ii) Mitigation

Noise and vibration will be limited to the core working hours. Contractors must use “best practicable means” (BPM) to minimise the nuisance from noise and vibration. The maintenance and location of plant will be planned to minimise noise levels and screening will be used where necessary. Adherence to noise limits should be included in contractual agreements with contractors.

- General induction training for site operatives and specific training for staff having responsibility for particular aspects of controlling noise from the site.
- Use of most environmentally acceptable and quietly operating plant and equipment appropriate to the works with emission levels limited to relevant EC Directive/UK Statutory Instrument levels and levels quoted in BS5228.
- Intermittently operating plant will be shut down in the intervening periods between operations.
- Any compressors brought on to site would be silenced or sound reduced models fitted with acoustic enclosures.
- All pneumatic tools will be fitted with silencers or mufflers.
- The excavation and demolition of existing structures will, wherever possible, be undertaken without the use of pneumatic breakers.

- Wherever possible, the use of hydraulic attachments or other means of crushing concrete and hard materials will be used in preference to pneumatic breakers. Where the use of impact hammers is necessary, their attachment to larger and heavier excavators will be employed to reduce the level of vibration.
- Care will be taken when erecting or striking scaffolds to avoid impact noise from banging steel. All operatives undertaking such activities will be instructed on the importance of handling the scaffolds to reduce noise to a minimum.

e) Control of Dust and Air Quality

- i) Construction sites have the potential, if uncontrolled, to generate considerable dust. Particular care is to be taken to maintain dust emissions to a practicable minimum when working in the vicinity of residential properties. By using effective site management and planning techniques, the potential for dust emissions to arise at a construction site and its impact on surrounding receptors can be minimised.
- ii) This plan will be monitored by Barratt to ensure compliance throughout the development programme, through weekly inspections. Robust contractual remedies have been put in place to ensure compliance can be achieved.
- iii) The potential for dust to arise during the construction process, especially excavations, is highly weather-dependent. If excavations are carried out in dry weather, increased water spraying will be required to ensure that the surface material remains damp. In wetter weather, greater attention will be required to ensure that mud does not leave the site through vehicle cleaning, which if deposited on roads, will produce dust when dry.
- iv) The construction programme proposes that the initial excavations and earthworks are carried out in Autumn 2018. This presents benefits and negatives to the control of dust. Dried mud and dust carried onto roads is a significant dust generator.

Roads should therefore be surfaced as soon as possible during the construction programme.

- v) Throughout the construction process, care will be required to ensure that dust produced from vehicles delivering and removing materials to and from the site is minimised. This will be achieved by ensuring that drop heights are kept to a minimum and that dusty loads are sheeted. Completed roads on the site are to be regularly cleaned.
- vi) When the site roads have been surfaced and buildings are under construction, the potential for significant dust production is greatly reduced. There is still, however, a potential for emissions from storage of dusty materials. To combat this risk, the material storage compounds will be screened by hoardings. Also, certain construction activities will inevitably cause dust e.g. brick / block cutting – these activities will require additional controls such as water spraying.
- vii) It is generally accepted that unpaved haul routes account for significant dust emissions. In dry or windy weather, dust and mud can become airborne through the movement of vehicles. The early paving of roads will significantly reduce fugitive dust emissions. Dust reduction measures will include the following:
 - Roads will be cambered to reduce puddles.
 - Speed limits of 10mph will be introduced during construction activities.
 - Roads will be swept to ensure cleanliness, when there are operations that generate large amounts of mud, a road sweeper will be on site full-time and at other times this will be monitored by our site manager who has the authority to order a sweeper when needed.
 - Roads will be inspected for cleanliness by the site manager at regular intervals throughout the working day.
 - Vehicular routes will be strictly controlled with delivery vehicles being directed to dedicate waiting areas – this measure will control vehicular journeys and minimise unnecessary journeys.

viii) Excavation and earthworks are a potential source of dust, especially in dry and windy weather. Given the size of the project, it is inevitable that some excavations and earthworks will take place during dry and/or windy weather conditions. The following control measures will be adopted to minimise dust:

- Activities in dry weather will be damped down.

ix) Stockpiling and mounding of materials on site will be avoided, wherever possible.

Where necessary to stockpile/mound, the following control measures will be adopted:

- Stockpiles or mounds will be located away from boundaries.
- Stockpiles or mounds will not have steep sides or sharp changes in direction.
- Fine or powdery material will be stored in containers or inside buildings.
- Drop heights will be kept to a minimum to control the fall of materials.

x) The grinding sawing and cutting of materials shall be carried out using the following control measures:

- All equipment used to cut bricks and block or any other masonry product will be fitted with a water spray system
- Dust extraction techniques shall be utilised

xi) The potential for dust migration from skips and chutes is considerable, but controllable. The following control measures will be adopted:

- Enclose skips or securely cover.
- Minimise drop height
- Damp down surfaces with water.

xii) Bonfires and burning of waste on site is prohibited. All waste material is to be re-used or safely removed from site in accordance with relevant legislation.

- xiii) Visual dust monitoring to be carried out on a daily basis, morning and afternoon by a dedicated site operative.
- xiv) Complaints – a log book to be kept of all complaints, together with details of any action taken to deal with the complaint.
- xv) It is required that all of the above control measures will be put in place to control dust production and movement. Therefore, no additional measures will be appropriate.

f) *Protection of the existing ditch on site from spillages, dust and debris*

- i) The existing brook is to remain open during the development programme. Throughout the development the brook will be protected by temporary demarcation fencing. This fencing will be of 1.8m high Heras-type. This will protect the brook from debris blowing from the site and incursion from operatives or plant who may bring mud and debris with them.
- ii) If required, sand bags will be placed between construction zones and the brook to reduce the risk of silt runoff. However, roads are to be tarmacked early in the development programme and are to be regularly scrapped and swept as required.
- iii) All road gully pots are to be trapped and have temporary grilles fitted to stop debris and silt entering the surface water system.
- iv) The brook will be inspected by the site manager as part of his daily check on site boundary fencing. Should any debris be discovered, it will be removed. Should any silt be discovered groundworks activities will cease until the source of the silt is discovered and remedial action taken.
- v) All contractors and site visitors will be made aware of the function of the protective fencing as part of the site induction.

g) Consideration for joining a Considerate Contractors Scheme.

- i) As part of our Group environmental policy, Barratt Homes (Manchester) division is ISO14001 accredited. This means that we have a Safety, Health and Environmental (SHE) management system which is independently accredited and audited by a UKAS approved body. This system puts in place a robust regime of measures and site inspections to deal with environmental matters. The system requires environmental constraints and receptors (including neighbours, schools and businesses) to be identified and actions taken to ensure disruption is kept to a minimum. Those actions are monitored on a day-to-day basis by the site management team and audited.
- ii) The system is audited in the following way;
 - a. Monthly compliance inspections by a Barratt SHE manager with results reported at board level.
 - b. Annual compliance inspection by second a Barratt SHE manager, one who is not based locally and is therefore unfamiliar with the site or its management team.
 - c. Annual compliance inspection by a UKAS approved body, currently Ocean Certification.
- iii) All audits require site visits and oversight of the site-specific environmental constraints, the actions and the effectiveness of the site management team in delivering on the actions.
- iv) Given the robustness of our SHE management system and the audit regime, there is no requirement to register the site with the Considerate Contractor scheme.

h) Control of Waste Materials.

- i) As part of Barratt's Safety, Health and Environment (SHE) policy, each site has a Waste Management Plan. This document splits waste types into streams and sets target for waste reduction. The document covering this site is attached in Appendix C.
- ii) Barratt employ a third-party supplier, Reconomy, to report on waste recycling. Over 90% of waste from Barratt sites is currently reused on-site or recycled.

i) Control of the spread of materials onto the adjacent public highway.

- i) Our strategy for mitigating mud and debris spreading onto neighbouring roads is to have a road sweeper in operation full-time during earthworks operations. This will operate both on and off-site. Once on-site roads are surfaced, the threat of mud and debris spreading is reduced, so the sweeper will operate as required and be called to site by the Barratt site manager.
- ii) If required, once the permanent compound and water supply is established, additional wheel washing will be done with a manned jet washer.
- iii) This is a common strategy that is being used successfully on similar sites. Our experience is that the use of sweepers has created a clean and safe environment both off and on the site.

Appendix A

Site Execution Plan

Appendix B

Barratt Standard Compound Plan

Appendix C

Waste Management Plan