



**WELWYN
HATFIELD**

**Joint Examination of the
Welwyn Hatfield Local Plan 2013-2032
and the
East Herts District Plan 2011-2033**

Birchall Garden Suburb/East of Welwyn Garden

Examination Hearing Statements

Matters and Issues

Matter 10 - Waste

Matter - 10 Waste

An extensive area within the central part of this site has been historically filled with household refuse. There are also existing waste operators with functioning premises in the area.

Issues

45) To what extent has the extent and content of the waste tips within the site been surveyed and analysed?

Response

- a) In support of the proposed allocation of Birchall Garden Suburb the site promoter has submitted a number of reports relating to land quality issues. These have been prepared by Royal Haskoning DHV, a contaminated land consultant.
- b) The site promoter has provided evidence relating to both the extent of the landfill and its contents. In October 2014 the site promoter submitted three reports by Royal Haskoning DHV (Welwyn Hatfield ref: **ENV/6**, **ENV/7** and **ENV/8**):
 - Cole Green Site Characterisation and Generic Quantitative Risk Assessment
 - Cole Green Former Mineral Workings Soil Survey and Generic Quantitative Risk Assessment
 - Birchall Farm Site Characterisation and Generic Quantitative Risk Assessment
- c) In response to objections to the allocation WGC5 on land quality grounds and in order to aid the examination of the Welwyn Hatfield Local Plan the site promoter published additional land quality evidence in December 2017 (Welwyn Hatfield ref: **EX35**, East Herts ref: **ED169**). This comprises a Land Quality Note prepared by Royal Haskoning DHV and a number of appendices. The purpose of the note was to summarise the evidence base as a whole and to clearly set out the conclusions which had been reached.
- d) The starting point for the 2014 assessments was a Preliminary Risk Assessment comprising a desktop review and site reconnaissance. In response to the findings of this assessment, a ground investigation strategy was formulated and intrusive ground investigations were subsequently carried out.
- e) Following completion of a site wide Preliminary Risk Assessment Royal Haskoning undertook three phases of ground investigation within the area that has previously been subject to landfilling. In 2014 a total of 49 exploratory holes were completed. Samples were analysed for a spectrum of 155 potential contaminants of concern given the landfill history.
- f) Ground investigations were subsequently carried out on the northern extent of the former landfill. The investigation comprised 4 boreholes and 10 trial pits. The boreholes were advanced to depths ranging from 15.5m and 28.5m and the

maximum depth of the trial pits was 4.56m. The main aim of the boreholes was to determine depth to rock head, with the trial pits providing information on the soil and waste across the site. Boreholes were installed with combined groundwater and gas monitoring wells.

- g) Further ground investigations were carried out in 2017 in relation to the southern extent of the former landfill. This was to provide further data with respect to the presence of contaminants found in limited amounts within 2014 and 2015 intrusive site investigations.
- h) Five intrusive ground investigations have been undertaken in the past 40 years on land south and west of the landfill (the allocated area WGC5) totalling 188 boreholes and 63 excavations. Royal Haskoning's ground investigation undertaken in 2013/14 comprised 10 trial pits and 23 boreholes located across the site including boundary with the landfill. Depths ranged from 3.0m to 10.5m. The results of all previous ground investigations are consistent with the site promoter's claim that these areas have not been filled.

46) Has research been able to demonstrate the full extent and nature of any contaminants in this area, their risk to human health and the necessary remediation measures required to make these areas safe for use by the general public?

Response

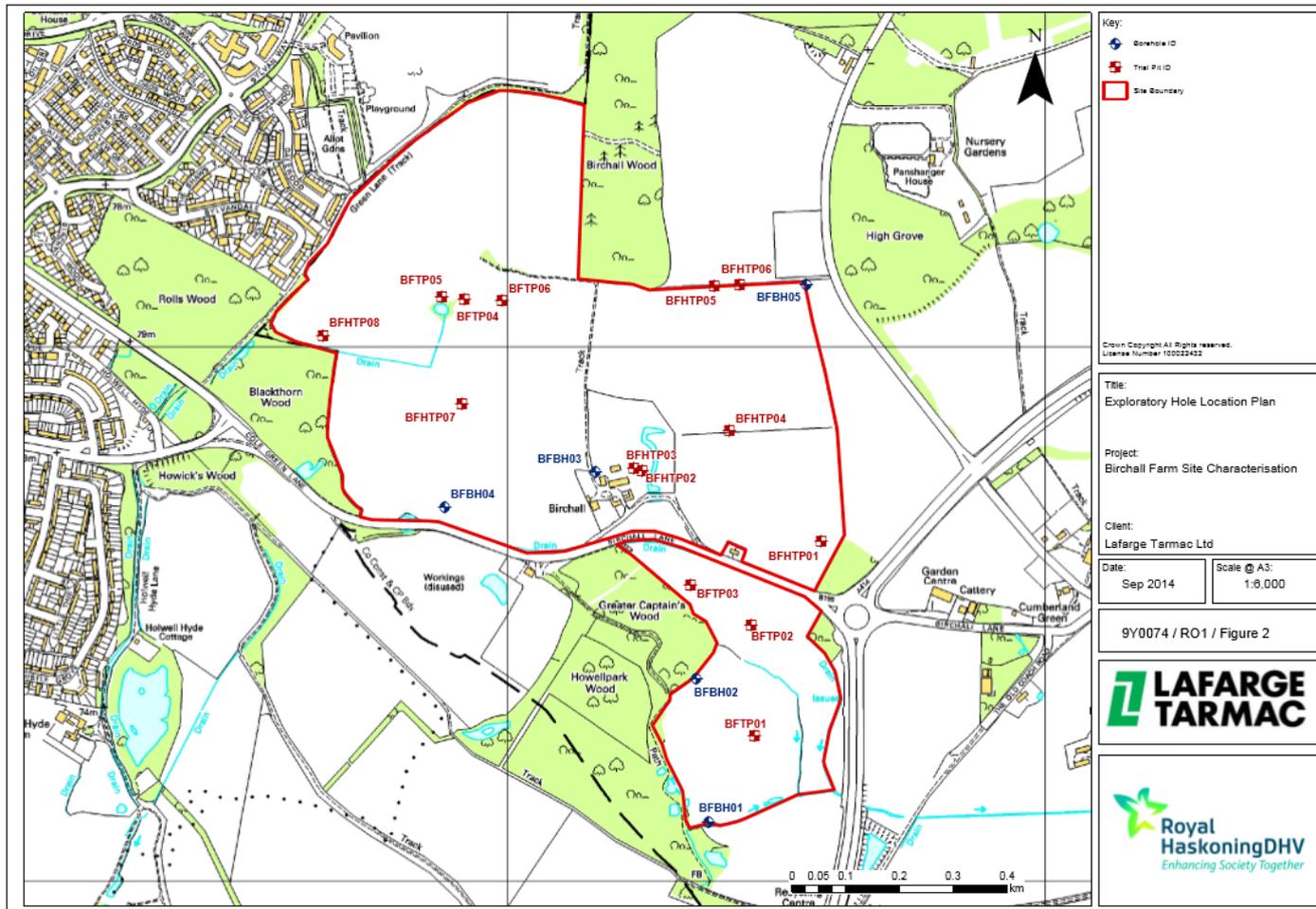
- a) The proposed allocation of Birchall Garden Suburb is supported by evidence prepared by the contaminated land consultant Royal Haskoning DHV.
- b) In October 2014 the site promoter submitted three reports by Royal Haskoning DHV (Welwyn Hatfield ref: **ENV/6**, **ENV/7** and **ENV/8**):
 - Cole Green Site Characterisation and Generic Quantitative Risk Assessment
 - Cole Green Former Mineral Workings Soil Survey and Generic Quantitative Risk Assessment
 - Birchall Farm Site Characterisation and Generic Quantitative Risk Assessment
- c) These reports comprise the bulk of the land quality evidence submitted to date and thus are the primary data in support of the allocation.
- d) The evidence provided by Royal Haskoning is intended to demonstrate that the proposed allocation of the site is appropriate. It does not comprise a definitive assessment in support of the proposed end uses and is not intended for this purpose. In accordance with best practice a risk based phased approach has been undertaken to site investigation to determine the existence or otherwise of contamination. The starting point for this was a preliminary risk assessment having regard to a desk top assessment exercise (including a review of historic data available in the public

domain and also that held by the landowner) and site reconnaissance. In light of this assessment a sampling strategy was devised for intrusive ground investigations and controlled waters sampling designed to be broadly representative of the site as a whole. An approach was also developed to ground water risk assessment and ground gas risk assessment.

- e) The approach taken by Royal Haskoning to their initial assessments is considered appropriate at this stage and the evidence submitted is proportionate to support a local plan allocation. Further detailed assessments and sampling relating to land quality will be required as part of an Environmental Impact Assessment to support a future planning application for the site. This will also need to include ongoing and enhanced monitoring relating to certain risks identified through the initial assessment. The applicants will be required to submit a remediation strategy which is flexible and adjustable to deal with any uncertainties and contamination matters identified during the remediation and construction phase. A planning condition will be secured such that this will be required including notifying the regulator of any additional contamination and required steps.

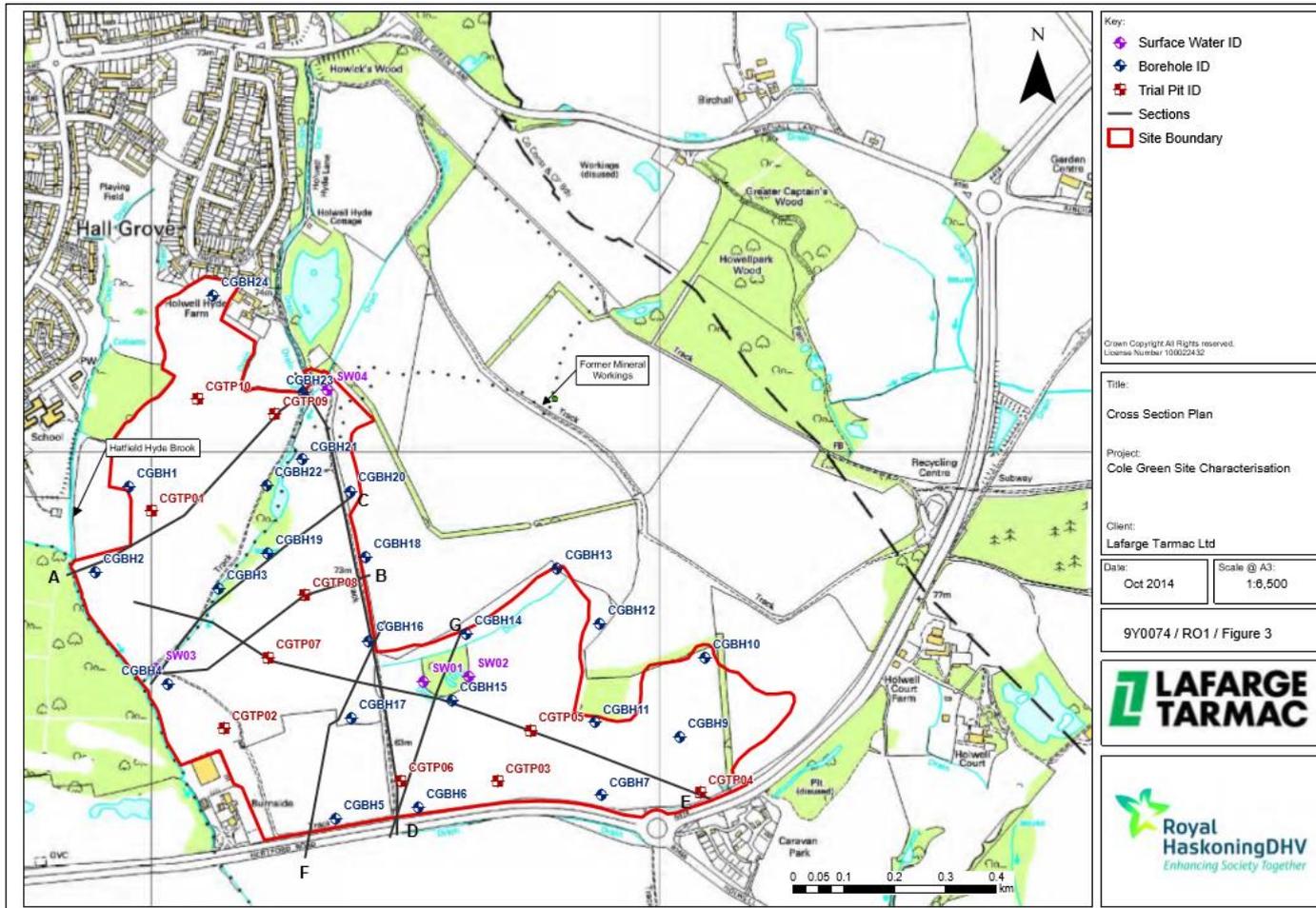
EWEL1

- f) The Birchall Farm Site Characterisation and Generic Quantitative Risk Assessment relates to allocation EWEL1 within East Herts (see Figure 2 below). The site has no history of mineral extraction or filling. Matters of contamination and the extent of landfill in relation to the East Herts part of the development are set out in East Herts ref: **ED166**. This identifies that some localised contamination exists as a result of the infilling of the moat at Birchall Farm and possible unexploded ordinance, both of which are not likely to represent a significant constraint and can be mitigated through design and remedial measures.



WGC5

- g) The Cole Green Site Characterisation and Generic Quantitative Risk Assessment relates to allocation WGC5 within Welwyn Hatfield (see Figure 3 on the following page). The site has no history of mineral extraction or filling. The ground conditions identified through intrusive ground investigations were consistent with the site promoter's claim that the site has not been filled. Whilst the assessment has indicated a limited number of unacceptable risks and topics for further investigation and monitoring the report considers that, based on the assessments undertaken, understanding of the site conditions and the proposed development, these risks are not likely to represent a major constraint to the proposed development of the site. The report considers that the potentially unacceptable risks of the type identified can be mitigated through design/remedial measures via a range of techniques commonly utilised during masterplanning or site redevelopment.

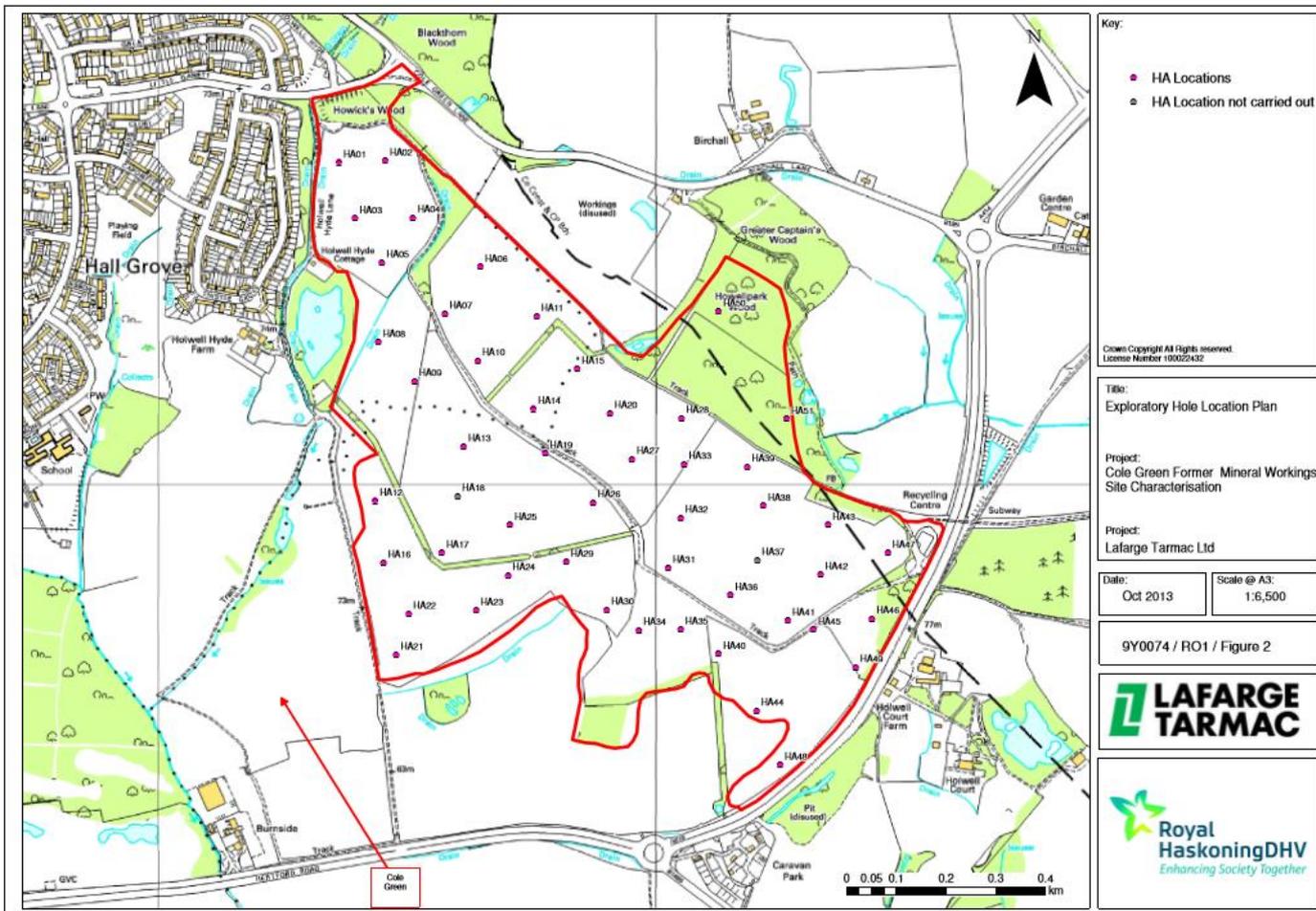


Open space

- h) The Cole Green Former Mineral Workings Soil Survey and Generic Quantitative Risk Assessment relates to land within Welwyn Hatfield proposed to be used as open space (see Figure 2 on the following page). The land comprises the former Cole Green mineral workings which were restored to the current landform by landfilling which ended in the early 1980s. The landfilled former mineral workings will not be built upon but are proposed to become a new public open space crossed by footways and cycleways.
- i) Royal Haskoning's Soil Survey and Generic Quantitative Risk Assessment reports that topsoil was encountered at most exploratory holes underlain by made ground. Suspected landfill material was present in some exploratory holes.
- j) The soil survey confirmed that concentrations of the majority of the potential contaminants of concern did not exceed the assessment criteria. Four samples contained asbestos fibres and asbestos containing material, and three samples exhibited elevated concentrations of PCB compounds. The report concluded that these contaminants can be mitigated through design/remedial measures.
- k) Landfill gas monitoring undertaken during the site characterisation studies has generally confirmed low gas concentrations. Periodically, high methane

concentrations have been recorded. To ensure appropriate mitigation measures are adopted in the development, further gas monitoring is required.

- l) Whilst the assessment indicated a limited number of unacceptable risks and topics for further investigation and monitoring, Royal Haskoning concluded that, based on the assessments undertaken, understanding of the site conditions and the proposed development, these risks are not likely to represent a significant constraint to the proposed redevelopment of the site. The potential unacceptable risks of the type identified can be mitigated through design/remedial measures via a range of techniques commonly utilised during site redevelopment.
- m) One of the key recommendations of the assessment was the need for localised soil sampling in the vicinity of the exploratory holes where asbestos and PCB concentrations were recorded, in order to establish their extent. In 2017 further ground investigation was undertaken. The conclusion of this was that asbestos and PCB do not represent a significant risk to site users.



47) How long are the methane vents expected to remain?

Response

- a) The need for methane vents to remain will be determined by risk assessment and ongoing monitoring. It is not possible at this time to estimate how long they may be required to remain. A Section 106 agreement attached to any future planning permission would set out the requirements regarding ongoing monitoring and maintenance post development.

48) Is there a short term remedy to the outflow of methane from some/all of the tipped areas?

Response

- a) Any required mitigation of methane or other gases will be determined having regard to current and future risk assessments and the results of ongoing monitoring.

49) Is the site capable of being considered as non-contaminated land under Part IIA of the Environmental Protection Act 1990 in the short term?

Response

- a) Paragraph 121 of the NPPF requires that after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990. In order to determine this, the authorities would need to carry out a relevant assessment under Part IIA of the Environmental Protection Act 1990.
- b) It will be a requirement of any future permission that the site is not considered to be contaminated land when measured against the Act and it is proposed that a further modification be made to Policy SP19 and Policy EWEL1 to this effect in accordance with the requirements of paragraph 121 of the NPPF:

New paragraph after existing paragraph 5:

“The developer will submit a detailed remediation strategy designed to secure a permanently safe environment for the human population and local wildlife and that following remediation will submit sufficient information to demonstrate that the site is not capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.”

- c) There is nothing within the existing Royal Haskoning evidence which is considered would preclude the site coming forward in accordance with paragraph 121 of the NPPF. The contamination which has been identified through the initial risk assessment will need to be explored further as part of a more detailed risk assessment comprising additional sampling and supported by appropriate monitoring. Once the outcomes of the further investigations and monitoring are known then a suitable remediation strategy will need to be prepared. This information will need to be provided in support of any future planning application for the site.

50) If not, what further remediation measures are likely to be necessary and when will they be fully implemented?

Response

- a) An assessment of the site under Part IIA of the Environmental Protection Act 1990 has not been carried out. The evidence submitted by Royal Haskoning has identified that a number of measures will be required to remediate the site and make it safe for the intended uses. Once further detailed risk assessments have been carried out then a detailed remediation strategy will need to be prepared for the site. This will need to be flexible and adjustable to deal with any uncertainties and contamination matters identified during the remediation and construction phase. A planning condition will be secured such that this will be required including notifying the regulator of any additional contamination and required steps.
- b) A verification report would need to be prepared and submitted to the regulator to provide evidence of the satisfactory completion of the works in accordance with the agreed strategy.
- c) The Land Quality Note submitted by Royal Haskoning DHV in December 2017 (Welwyn Hatfield ref: **EX35**) details what remedial works are likely to be required based on the initial site investigations. An indicative remediation cost estimate is provided of £2.492m (as at November 2017). Welwyn Hatfield's viability assessment of Birchall Garden Suburb to inform the Welwyn Hatfield CIL Preliminary Draft Charging Schedule included a contamination assumption of £2m (Welwyn Hatfield ref: **VIB4**). The viability of the site was found to be strong and with this remediation cost included could support the Council's policy requirements together with an assumed Section 106 contribution and an additional CIL charge.

51) Are the existing waste management facilities expected to remain for the duration of the plan period?

Response

- a) There are two existing waste management facilities located within the site boundary and one located adjacent to the site boundary.
- b) In the heart of Birchall Garden Suburb is an existing area of employment development accessed off Birchall Lane. This area contains an existing inert waste recycling facility with permanent planning permission. Construction of the facility was only recently completed therefore this is expected to remain for the duration of the plan period.
- c) Along the south east boundary of the site is the Cole Green household waste recycling centre. The site is run by Hertfordshire County Council but leased from the Birchall Garden Suburb landowner. There are some issues related to the site entrance which can result in queuing for the facility at peak times on the A414. The County Council is therefore considering the potential relocation of the facility. It is possible that the facility will be relocated during the plan period however in

accordance with the Hertfordshire Waste Local Plan 2011-2026 the site would be safeguarded for waste management operations.

- d) Adjacent to the south west boundary of the site is an existing waste management facility known as Burnside. This has permanent planning permission. The permitted use at the site is to operate a mobile plant for the Activity of "Other Mineral Activities" (the crushing, grinding or other size reduction, with machinery designed for that purpose, of bricks, tiles or concrete). This facility is expected to remain for the duration of the plan period.

52) If so, have the ramifications of their continued operation for the living conditions at proposed nearby dwellings been fully considered and does the notional layout meet the requirements of NPPF paragraph 123 in the context of the operations of the existing users as well as any future residents?

Response

- a) Welwyn Hatfield and East Herts have had full regard to the requirements of NPPF paragraph 123 in proposing to allocate Birchall Garden Suburb.
- b) There are no new dwellings proposed to the south or east of the existing waste management facility accessed off Birchall Lane. New dwellings are proposed to be delivered to the north of this site but these will be buffered by the B195 and an established tree belt running along the southern boundary of proposed allocation EWEL1.
- c) There are no new dwellings proposed in the vicinity of the existing household waste recycling centre.
- d) The facility with greatest potential to impact upon future residents is the Burnside aggregates facility located adjacent to the south west boundary of proposed allocation WGC5. Table 2.1 of the Hertfordshire Waste Local Plan Site Allocations 2011-2026 indicates that a buffer of 100m would be generally appropriate for facilities of this nature. Evidence relating to the individual circumstances of a site might, however, result in a different buffer requirement. In 2014 the site promoter submitted a noise assessment and a dust assessment to the Council which considered the potential impacts of the Burnside aggregates facility on new development. The noise assessment suggested that mitigation would be required to prevent noise nuisance to sensitive receptors (residential uses and schools). Whilst the authorities did not consider those assessments to be suitable or sufficient for properly identifying impacts and required mitigation, it is considered that subject to further detailed assessments being carried out and the provision of an appropriate buffer and other required control measures, development would not be precluded from coming forward.
- e) The Local Plans partly address potential issues by the inclusion of a Strategy Diagram which proposes a green buffer between Burnside and new development (a modification to the Strategy Diagram proposes that the extent of the buffer should be increased). This buffer, which is likely to be in the form of a noise bund and planting,

will help mitigate adverse impacts on sensitive receptors relating to the operations of the existing site. In order to ensure that the requirements of paragraph 123 are met, Policy SP19 and Policy EWEL1 require a joint masterplan which will form the basis of an SPD to be prepared to provide further guidance on site specific matters. The SPD will be informed by appropriate assessments relating to noise and air quality and will provide detailed guidance on the layout of new development and any required mitigation measures to secure suitable living conditions for future residents.

53) Have the requirements of NPPF paragraphs 120-121 been taken fully into account in the planning of this garden suburb?

Response

- a) NPPF paragraphs 120-121 have been taken fully into account in connection with the proposed allocation of Birchall Garden Suburb. The key requirement of paragraphs 120 and 121 is that planning policies and decisions should take account of risk factors such as ground conditions, land instability and pollution and that planning policies and decisions subsequently ensure sites should be suitable for their new use and that development is appropriate for its location.
- b) To support the proposed allocation the land promoter has submitted evidence by the contaminated land consultant Royal Haskoning, who are considered to be a competent person in line with the requirements of NPPF Paragraph 121. Royal Haskoning has assessed potential contamination issues across the entire site and considered the likely risks to human health as a result of the proposed end uses. Welwyn Hatfield has scrutinised the submitted information with assistance from an independent contaminated land consultant and has seen no evidence from the land promoter to indicate that proposed land uses are unsuitable. It is considered that the data submitted to date is proportionate to support a local plan allocation.
- c) The evidence relating to the areas of Birchall Garden Suburb proposed for development (WGC5 and EWEL1) indicates that they have not been landfilled, that contamination is minimal, that any contamination identified can be mitigated with common design/remedial measures and consequently that the areas are suitable for the proposed mixed-use end use.
- d) The area proposed for open space comprises the site of the former Cole Green landfill. As the land has been filled it has not been promoted for development. This is understood to be due to a combination of engineering and viability factors. Royal Haskoning have assessed the risks to human health of the land being made available as public accessible open space. The evidence identifies that whilst some contamination exists which could cause risks to human health, the contamination can be remediated and that the land can subsequently be made suitable for the proposed use. A more detailed assessment will be required as part of the Environmental Impact Assessment which will accompany a planning application for this site.
- e) There are also noise and air pollution issues which could impact upon the site. This is mainly related to the proximity of the A414 road and the three established waste uses

previously referred to. In order to help ensure the delivery of a high quality development, Policy SP19 and EWEL1 require a joint masterplan which will form the basis of an SPD to be prepared to provide further guidance on site specific matters. The SPD will be informed by appropriate assessments relating to noise and air quality and will provide detailed guidance on the layout of new development and any required mitigation measures to secure suitable living conditions for future residents.

- f) Any future planning application for the development will need to be accompanied by a full range of appropriate assessments including noise, air quality and land quality.
- g) It is noted that paragraph 121 of the NPPF contains a requirement that after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990. In order to determine this, the authorities would need to carry out a relevant assessment under Part IIA of the Environmental Protection Act 1990.
- h) It will be a requirement of any future permission that the site is not considered to be contaminated land when measured against the Act and it is proposed that a further modification be made to Policy SP19 and Policy EWEL1 to this effect in accordance with the requirements of paragraph 121 of the NPPF:

New paragraph after existing paragraph 5:

“The developer will submit a detailed remediation strategy designed to secure a permanently safe environment for the human population and local wildlife and that following remediation will submit sufficient information to demonstrate that the site is not capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.”

- i) There is nothing within the existing Royal Haskoning evidence which is considered would preclude the site coming forward in accordance with paragraph 121 of the NPPF. The contamination which has been identified through the initial risk assessment will need to be explored further as part of a more detailed risk assessment comprising additional sampling and supported by appropriate monitoring. Once the outcomes of the further investigations and monitoring are known then a suitable remediation strategy will need to be prepared. This information will need to be provided in support of any future planning application for the site.