East Midlands Gateway Phase 2 (EMG2)

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ENVIRONMENTAL STATEMENT

Volume 2 Technical Appendices

Appendix 17A

Informal Scoping Exercise with LCC

July 2025

The East Midlands Gateway Phase 2 and Highway Order 202X and The East Midlands Gateway Rail Freight and Highway (Amendment) Order 202X



Health and Equality Scoping Exercise

February 2025

Prepared on behalf of SEGRO (EMG) Ltd



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1 Health and Equality Scoping Exercise

1.1 Introduction

- 1.1.1 Following receipt of the scoping opinion from PINS, a decision has been made by the Applicant to scope population and health into the Environmental Statement (ES).
- 1.1.2 The purpose of this report is to outline the proposed scope and methodology of the human health and equality assessment, and is intended to be used as a basis for discussion with Leicestershire County Council (LCC).
- 1.1.3 The report was initially shared with LCC on 25 November 2024. The report was subsequently updated following comments from LCC on 9 December 2024 and 16 December 2024 in advance of the held on 9 January 2025. This version of the report represents the final version prior to the next opportunity for engagement/comment by LCC, occurring following the submission of the Preliminary Environmental Impact Report (PEIR).
- 1.1.4 The remainder of this report is structured as follows:
 - Section 1.3: Review of scoping opinion summarising all comments made in relation to health and equality matters, and outlining how/where they will be addressed in the ES.
 - Section 1.2: Approach and methodology outlining the method for assessment of health and equality matters, including geographic scope and application of significance criteria.
 - Section 1.3: Scoping exercise draws from spatial analysis to provide a list of vulnerable receptors to be considered and the rationale for scoping in/out a broad range of health determinants.

1.2 Approach and methodology

Introduction

- 1.2.1 The approach is to provide a Health Impact Assessment (HIA) report as a technical appendix to the population and health ES chapter, which will summarise the findings of the HIA and apply significance criteria to meet the regulatory requirements of Environmental Impact Assessment (EIA).
- 1.2.2 The remainder of this section outlines the relevant guidance that has been followed to draft this scoping report, and any additional guidance that will be followed to undertake the HIA.

Guidance

- 1.2.3 The IEMA guidance on 'Effective Scoping of Human Health in EIA' defines the approach for scoping wider determinants of health in or out of an EIA and has been used as a basis for the scoping exercise undertaken in Section 1.3.
- 1.2.4 Furthermore, the IEMA guidance on 'Determining Significance for Human Health in EIA' outlines how health, particularly regarding significance (including sensitivity and magnitude classifications), is assessed in EIA, and is summarised later in this section.



- 1.2.5 Key guidance documents that are relevant to the HIA, and are referenced in the above guidance by IEMA, include:
 - Wales Health Impact Assessment Support Unit (WHIASU) Health Impact Assessment A Practical Guide, 2012;
 - Scottish Health and Inequalities Impact Assessment Network (SHIIAN) Health Impact Assessment Guidance for Practitioners, August 2016, updated March 2019;
 - Public Health England (PHE) guidance, Health Impact Assessment in spatial planning (PHE, 2020); and
 - PHE, Advice on the content of Environmental Statements accompanying an application under the Nationally Significant Infrastructure Planning (NSIP) Regime (2021).

Proposed geographic scope

- 1.2.6 Environmental health determinants (such as changes to air quality and noise exposure) typically have a local distribution pattern, where the hazards are limited by their concentration and physical dispersion characteristics. Likewise, changes in transport nature and flow rate have a particular distribution on the local road network.
- 1.2.7 As baseline data is limited to administrative boundaries, the collection of health data (relevant to environmental health determinants) focusses upon all administrative areas that fall within 500m of the proposed development (see Figure 17.1 overleaf). This comprises:
 - Castle Donnington Central;
 - Castle Donnington Castle;
 - Daleacre Hill;
 - Kegworth;
 - Long Whatton & Diseworth; and
 - Worthington & Breedon.
- 1.2.8 It should be noted that trend data is not readily available at the ward level and therefore data presented in the population and health baseline may primarily relate to North West Leicestershire district, which all of the above wards are located within and is therefore considered to be representative of the communities living in these wards. Despite district level data being used for presentation purposes, data at the lowest geographic level possible will be used for any quantitative assessment to ensure the highest levels of accuracy possible.
- 1.2.9 Socio-economic health determinants (such as employment and related income generation) have a wider geographic scope of influence than environmental health determinants due to the willingness to commute significant distances to work. The study area for socio-economic baseline statistics will remain consistent with the socio-economic technical discipline, extending beyond just North West Leicestershire.
- 1.2.10 The relevant sensitive receptors identified for assessment purposes is proposed to remain consistent with the inter-related technical aspects which inform the assessment of population and human health. For example, noise and air quality will assess different receptors as they have different distribution characteristics; the population and health assessment will use key outputs at the receptor level for both noise and air quality to establish to secondary effect on health and





- wellbeing. In addition, the impact on particularly vulnerable groups will be considered where appropriate, consistent with the Leicestershire Inequalities Joint Strategic Needs Assessment.
- 1.2.11 In order to identify specific receptors that will be the focus of the equality assessment, we propose a study area of 500m from the application boundary. Within this area, we will identify all receptors using OS AddressBase data who may have protected characteristics and could experience disproportionate or differential effects (for example, those using schools and care homes), consistent with the Equality Act 2010. These receptors will be assessed as part of the Equality Statement, which will be appended to the population and health ES chapter.

Receptor sensitivity

- 1.2.12 Within a defined population, individuals will range in level of sensitivity due to a series of factors such as age, socio-economic deprivation and the prevalence of any pre-existing health conditions which could become exacerbated. These individuals can be considered particularly vulnerable to changes in environmental and socio-economic factors (both adversely and beneficially), whereby they could experience disproportionate effects when compared to the general population.
- 1.2.13 As an example, the elderly, young children and individuals with chronic pre-existing respiratory conditions would be more sensitive to adverse changes to air quality, with the potential for emergency admission to hospital more likely than for someone of working age who has good respiratory health. On the other hand, an individual who has been unemployed for a long period of time would benefit more from employment opportunities generated by the proposed development in comparison to an individual who is already employed.
- 1.2.14 The health sensitivity methodology criteria shown in Table 1.1 are proposed to be used to inform the assessment of significance.

Table 1.1: Sensitivity of receptor criteria

Category /level	Indicative criteria
High	High levels of deprivation (including pockets of deprivation); reliance on resources shared (between the population and the project); existing wide inequalities between the most and least healthy; a community whose outlook is predominantly anxiety or concern; people who are prevented from undertaking daily activities; dependants; people with very poor health status; and/or people with a very low capacity to adapt.
Medium Medium Medium Moderate levels of deprivation; few alternatives to shared resources; existing widening incomplete between the most and least healthy; a community whose outlook is predominantly uncert some concern; people who are highly limited from undertaking daily activities; people proveduring a lot of care; people with poor health status; and/or people with a limited capacity.	
Low	Low levels of deprivation; many alternatives to shared resources; existing narrowing inequalities between the most and least healthy; a community whose outlook is predominantly ambivalence with some concern; people who are slightly limited from undertaking daily activities; people providing or requiring some care; people with fair health status; and/or people with a high capacity to adapt.
Very low	Very low levels of deprivation; no shared resources; existing narrow inequalities between the most and least healthy; a community whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependent); people with good health status; and/or people with a very high capacity to adapt.

Source: IEMA Guide to Determining Significance for Human Health in EIA



1.2.15 The IEMA guidance on 'Determining Significance for Human Health in EIA' requires consideration of particularly vulnerable groups. Through our vulnerable group analysis, such groups will be identified and assessed as having 'high' sensitivity.

Magnitude of impact

1.2.16 The health magnitude methodology criteria shown in Table 1.2 are proposed to be used to inform the assessment of significance.

Table 1.2: Magnitude of impact criteria

Category/level	Indicative criteria
High	High exposure or scale; long-term duration; continuous frequency; severity predominantly related to mortality or changes in morbidity (physical or mental health) for very severe illness/injury outcomes; majority of population affected; permanent change; substantial service quality implications.
Medium	Low exposure or medium scale; medium-term duration; frequent events; severity predominantly related to moderate changes in morbidity or major change in quality-of-life; large minority of population affected; gradual reversal; small service quality implications.
Low	Very low exposure or small scale; short-term duration; occasional events; severity predominantly related to minor change in morbidity or moderate change in quality-of-life; small minority of population affected; rapid reversal; slight service quality implications
Negligible	Negligible exposure or scale; very short-term duration; one-off frequency; severity predominantly relates to a minor change in quality-of-life; very few people affected; immediate reversal once activity complete; no service quality implication.

Source: IEMA Guide to Determining Significance for Human Health in EIA

Significance of effect

- 1.2.17 The significance of an effect is determined based on the sensitivity of a receptor and the magnitude of impact. The method employed for this assessment is presented in Table 1.3.
- 1.2.18 In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect will be informed by professional judgement and will be underpinned by narrative to explain and justify the conclusions reached. Where a range of significance levels are presented, the final assessment for each effect will be based upon expert judgement.

Table 1.3: Level of effect

Mognitudo	Sensitivity			
Magnitude	High	Medium	Low	Very low
High	Major	Major/moderate	Moderate/minor	Minor/negligible
Medium	Major/moderate	Moderate	Minor	Minor/negligible
Low	Moderate/minor	Minor	Minor	Negligible
Negligible	Minor/negligible	Minor/negligible	Negligible	Negligible

Source: IEMA Guide to Determining Significance for Human Health in EIA





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1.3 Review of scoping opinion

1.3.1 Table 1.4 overleaf summarises all comments made in the scoping opinion which are relevant to health and equality matters, outlining how/where they will be addressed in the ES.



Table 1.4: Review and response to scoping opinion comments relating to health and equality

ID	Consultee	Summary of PINS comment	Applicant Response
3.0.1	PINS	The Scoping Report does not confirm whether population and human health impacts will be considered in relation to other environmental topics such as (but not limited to) electromagnetic fields (EMF), ground conditions, lighting (including landscape and visual impacts), or flood risk. Not all details of the Proposed Development are yet defined, and this has affected the Inspectorate's ability to comment on this matter.	A population and human health ES chapter will now be provided. The inclusion of all health determinants listed have been explored as part of the informal scoping exercise provided in Table 1.6, with the rationale for scoping in/out also detailed. We welcome LCCs comments on the proposed scope and focus for agreement/discussion.
3.0.1	PINS	In light of comments raised by consultation bodies in relation to the assessment of human health, the Inspectorate considers that a broader range of potential population and human health effects than air quality, noise and socio-economics could arise. As such, the Inspectorate considers this is best addressed together in a comprehensive human health and population chapter.	A comprehensive population and human health ES chapter will be provided and will include an assessment of a broader range of health determinants than those listed.
n/a	Kegworth Parish Council	 Kegworth Parish Council would like to see the following included in the ES: A description of the production processes (manufacturing) at the main site, and a description of the effects on human health from any such air pollution and radiation An estimate of expected noise from the expanded rail freight interchange and a description of the noise's likely significant effects on human health A description of the expected significant adverse effects of the development on the environment (including to human health) deriving from the vulnerability of the development to risks of accident and disaster 	In addition to human health being considered Chapter 8: Air Quality and Chapter 7: Noise, such consideration will be high level and to pre-defined thresholds. As outlined in Table 1.6, potential human health effects from air quality and noise have been scoped into the population and health ES assessment. The intention is to provide a more in depth analysis than Chapter 8: Air Quality and Chapter 7: Noise would independently, where impacts are considered beyond just pre-defined thresholds. Radiation has been scoped out on the basis that there are no significant sources of ionising or non-ionising radiation. The potential impacts on human health from major accidents and disasters will be considered within its own independent chapter (Chapter 20: Major Accidents and Disasters).



ID	Consultee	Summary of PINS comment	Applicant Response
n/a	LCC	The Applicant has justified the scoping out of population and human health on the basis that noise, air quality and socioeconomic impacts will be considered in separate chapters. However, air quality, noise and socioeconomic impacts do not cover the full extent to which this proposal would impact on health. Chapters on air quality, noise and socioeconomic impacts may not specifically look through the lens of health in the same way that a dedicated population and human health chapter would. This could result in the chapters failing to consider the health needs of the local population, current challenges to health, and the likely cumulative impact to health on the local population, therefore missing the opportunity to mitigate any risks identified and/or enhance any positive impacts.	A dedicated population and human health ES chapter will be provided and will include a health specific baseline which will identify any existing burdens of poor health. The population and human health ES chapter will draw from key outputs across a range of technical disciplines (such as those listed: air quality, noise and socio-economic) to robustly consider the potential impacts, including cumulative impacts, from a public health perspective.
n/a	LCC	 LCC consider that the following would be assessed more fully if a population health chapter or health impact assessment were to be included within the scope of the ES: Direct influences on health and behaviour – including but not limited to physical activity and mental wellbeing. Community and Social Influences - including but not limited to local pride, divisions in community, social isolation, community identity, cultural and spiritual ethos, design for low crime. Living environmental conditions potentially affecting health – including factors such as built environment, noise, air and water quality, flooding risk, attractiveness of area, street furniture, shade and rest, green space, blue space, outdoor physical activity, community safety, smell/odour, waste disposal, road hazards / safety, community severance, cycling and walking facilities and infrastructure, public transport, prioritise pedestrian and cyclists, traffic calming, walkability including connectivity, mixed land use, injury hazards. Economic conditions and links affecting health - including unemployment, income, economic inactivity, type of employment and workplace conditions. Access to and quality of services - including public amenities, transport including parking; public transport including stops, education and training and information technology. 	As outlined in Section 1.2, a HIA will be appended to the population and human health ES chapter. An informal scoping exercise has been undertaken in Table 1.6 to establish which health determinants outlined in IEMAs Guide to Effective Scoping of Human Health in EIA are considered relevant to the proposed development, with the rationale for scoping in/out also detailed. We welcome LCCs comments on the proposed scope and focus for agreement/discussion.



ID	Consultee	Summary of PINS comment	Applicant Response
		 Macro-economic, environmental and sustainability factors - this domain considers factors such as Government policies, gross domestic product, economic development, biological diversity, climate. 	
			While we appreciate that the MSOAs listed by LCC are identified as high risk in terms of potential health inequalities, all fall outside the proposed study area for baseline data collection in relation to environmental determinants of health and some are located at large distances from the site.
		LCC request that the following areas (middle layer super output areas), which are identified as high risk in terms of potential health inequalities, to be considered more fully in a dedicated population and human health chapter and supported by a Health Impact Assessment: Charnwood: Loughborough Lemyngton & Hastings, Storer and Queens Park, University, Shelthorpe & Woodthorpe, Syston West and Shepshed	It should be reiterated that the wards which make up the proposed study area for baseline data collection in relation to environmental determinants of health are those located within 500m of the redline boundary and are likely to experience the most impacts.
n/a	LCC	 East Harborough: Market Harborough Central Hinckley and Bosworth: Barwell, Hinckley Central and Hinckley Clarendon Park Melton: Melton Mowbray West North West Leicestershire: Agar Nook, Coalville Oadby and Wigston: Wigston Town, South Wigston 	As the study area for the socio-economic assessment would extend beyond North West Leicestershire, it is more likely that some of these MSOAs will be captured for this part of the assessment where existing high levels of deprivation may result in disproportionate benefits to these communities through employment opportunities associated with the proposed development.
			We will keep under review the distribution of environmental impacts reported as part of receptor analysis across the relevant topics and will capture within the population and health assessment if appropriate.
n/a	LCC	Implications to the following groups should be explored: People who identify as Lesbian, Gay, Bisexual or Transgender (LGBT) People with a disability, including people with a learning disability People who are homeless Victims of modern slavery	The potential impact (adverse and beneficial) on vulnerable receptor groups (as defined by LCC) will be considered in the population and health assessment where appropriate. As discussed with LCC, some groups may be scoped out from



ID	Consultee	Summary of PINS comment	Applicant Response
		 Sex workers Vulnerable migrants Carers People with severe mental illness Prisoners People who have experienced trauma Looked after children and care experienced adults People living in poverty/deprivation A complex picture was identified around race and ethnicity but evidence of health inequalities being most common for people who are Bangladeshi, Pakistani or Gypsy or Irish Travellers 	analysis – the rationale for this will be provided clearly in the ES chapter.
n/a	LCC	We would ask for the proximity to Traveller sites near to the development and potential health impacts to be scoped within a population health chapter or health impact assessment. At least two traveller sites appear to be close to the development area.	LCC have provided local insight on the location of gypsy/traveller sites, which will be included in the equality assessment.
n/a	LCC	In relation to air quality and noise, consideration should be given to the cumulative impacts on the health and wellbeing of local residents during both construction and operational phases.	Consistent with the regulatory requirements of EIA, cumulative population and human health effects will be assessed within the ES chapter.
n/a	LCC	The air quality chapter (in addition to a standalone population health chapter) should examine current health outcomes for the area including links to air pollution, for example Dementia rates. Dementia rates in North West Leicestershire are significantly higher than the England average. Asthma QOF prevalence (6 years plus) in North West Leicestershire (at 7.8%) is also higher than the value for East Midlands and England. The chapter should also consider population groups most vulnerable to the impacts of poor air quality on health as per the Chief Medical Officer Annual Report on Air Quality 2022. Taking into consideration areas of vulnerability indicated by the Health Inequalities JSNA and likely population changes to the districts shown in the Demography JSNA.	Baseline health circumstance will be explored as part of the baseline assessment and will include analysis of health outcomes relevant to air pollution, for example dementia, hospital admissions for respiratory disease. While the intention will be to collect data at the lowest geographical level possible, this will be limited by third party availability. The equality assessment will consider impacts on people with protected characteristics (e.g. young people, older people and people with existing health conditions/disabilities).
n/a	UKHSA	We believe the summation of relevant issues into a specific section of the ES provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk	A dedicated population and human health ES chapter will now be provided, enabling detailed consideration of all topic from a public health perspective.



ID	Consultee	Summary of PINS comment	Applicant Response
		assessments, proposed mitigation measures, conclusions, and residual impacts, relating to human health.	
n/a	UKHSA	UKHSA and OHID's predecessor organisation Public Health England produced an advice document 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime', setting out aspects to be addressed within the Environmental Statement.	The advice document 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime' is noted and will be taken into consideration, although the main guidance documents of reference when undertaking the population and human health assessment will be the more recent IEMA Guide to Effective Scoping of Human Health in EIA and IEMA Guide to Determining Significance for Human Health in EIA.
n/a	UKHSA	Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.	The justification for scoping out health determinants is included in Table 1.5, which will be used as a basis for informal engagement with LCC.
n/a	UKHSA	With regards to air quality, our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e, an exposed population is likely to be subject to potential harm at any level and that reducing public exposure to non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure) and maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent.	Air quality is a key determinant of health that will be assessed in the population and health ES chapter. Embedded mitigation measures to reduce air quality impacts will be detailed in the ES and considered in the assessment of significance.
n/a	UKHSA	The applicant should assess the potential public health impact of EMFs associated with electrical equipment on the development, or, alternatively, provide a statement or explain why EMFs can be scoped out. Further UKHSA advice is available in the document Advice on the content of Environmental Statements accompanying an application under the NSIP Regime'.	The rationale for scoping out EMF is provided in Table 1.5.



ID	Consultee	Summary of PINS comment	Applicant Response
n/a	UKHSA	The following wider determinants of health and wellbeing we expect the ES to address, to demonstrate whether they are likely to give rise to significant effects, are: Access Traffic and Transport Socioeconomic Land Use	As detailed in Table 1.5, the listed health determinants will be assessed in the population and human health ES chapter.
n/a	UKHSA	Diseworth will be the most likely affected community, where the residents will already be subject to effects from East Midlands Airport in addition to any East Midlands Gateway intra-project cumulative effects.	The existing impacts of East Midlands Airport will be taken into consideration through establishing the current baseline circumstance for public health and all relevant determinants of health (e.g. air quality, noise and transport). Therefore, the main assessment will take into consideration the intra-project effects.
n/a	UKHSA	Within a population health chapter consideration should be given to the cumulative impacts of multiple changes in determinants of health cross all potential impacts. These collectively can have the potential be significantly affect the population, and vulnerable population groups, and the combined effect should be identified, considered and appropriately mitigated.	Consistent with the regulatory requirements of EIA, cumulative, inter-related and in-combination population and human health effects will be assessed within the ES chapter.
n/a	UKHSA	Environmental noise can cause stress and sleep disturbance, which over the long term can lead to a number of adverse health outcomes. The Noise Policy Statement for England (NPSE) sets out the government's overall policy on noise. Its aims are to: avoid significant adverse impacts on health and quality of life; mitigate and minimise adverse impacts on health and quality of life; and contribute to the improvement of health and quality of life. UKHSA's consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the Environmental Noise Guidelines for the European Region 2018 published by the World Health Organization and informed by high quality systematic	Noise is a key determinant of health that will be assessed in the population and health ES chapter. The overall significance of effect will take into consideration the NPSE aims. The study area for assessing the population and health impacts of changes in the noise environment will remain consistent with the noise assessment to ensure that all areas that are impacted are captured.



ID	Consultee	Summary of PINS comment	Applicant Response
		reviews of the scientific evidence including the UKHSA' Spatial Assessment of the Attributable Burden of Disease due to Transportation Noise in England.	
		For noise exposure, UKHSA expects assessments of significance to be closely linked to the associated impacts on health and quality of life in line with the NPSE, and not on noise exposure per se.	



1.4 Scoping exercise

Equality

- 1.4.1 The equality receptors listed in Table 1.5 have been identified within 500m of the application boundary used for scoping purposes. Please note that this analysis will be re-run with the final iteration of the redline boundary.
- 1.4.2 Through local insight, we have scoped in some additional receptors (such as the Diseworth Heritage Centre) and have located one gypsy/traveller site that will be considered in the assessment.

Table 1.5: Equality receptors

Receptor name	Receptor classification	Address	Scoped in/out justification
Diseworth Heritage Centre	Community services	Lady Gate, Diseworth, DE74 2QF	Scoped in (age) – through local insight from LCC, it has been established that this resource is used for youth groups and by a large proportion of elderly people
Wakefield Court	Residential institution	Wakefield Court, Barroon, Castle Donington, DE74 2PE	Scoped in (age) – retirement housing where primary user will be elderly
Castle Donington Surgery	Medical	53 Borough Street, Castle Donington, Derby, DE74 2LB	Scoped in (disability, pregnancy and maternity, age) – medical facilities are likely to be used by a high proportion of individuals who are either disabled, pregnant, or who are more sensitive than the general (i.e. young and elderly people) population
St Edwards Church Hall	Community services	St Annes Lane, Castle Donington, DE74 2JH	Scoped in (age) – likely to be used by a high proportion of elderly individuals
East Midlands Training Ltd	Education	Building 65c, Ambassador Road, East Midlands Airport, Castle Donington, Derby, DE74 2SA	Scoped out – not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Bentley Project Management UK Ltd	Education	Pavilion 5 Garden Court, Lockington Hall, Main Street, Lockington, Derby, DE74 2RH	Scoped out – this is an office and therefore is not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Fire Station	Emergency / rescue service	Beverley Road, East Midlands Airport, Castle Donington, DE74 2SA	Scoped out – impacts on emergency service response is inherently considered as part of the transport assessment
Air Ambulance Service	Emergency / rescue service	Leicestershire and Rutland Air Ambulance, Dakota Road, Castle Donington, Derby, DE74 2SA	Scoped out – operations would be ground- based and would not impact air ambulance services



Receptor name	Receptor classification	Address	Scoped in/out justification
Castle Donington Bowls Club	Leisure	Clubhouse, Delven Lane, Castle Donington, Derby, DE74 2LJ	Scoped in (age) – likely to be used by a high proportion of elderly individuals
Co-Operative Funeral Service	Community services	14 Borough Street, Castle Donington, Derby, DE74 2LA	Scoped out – not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Castle Donnington Residential Home	Residential institution	Donington Nursing Home, Delven Lane, Castle Donington, Derby, DE74 2LJ	Scoped in (age, disability) – nursing home where primary user will be elderly
Castle Donington Museum	Leisure	4 Apiary Gate, Castle Donington, Derby, DE74 2JA	Scoped out – not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Worm Purple Ltd	Emergency / rescue service	20 Borough Street, Castle Donington, Derby, DE74 2LA	Scoped out – this is an office and therefore is not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
53-55 Borough Street	Medical	53-55 Borough Street, Castle Donington, DE74 2LB	Scoped in (disability, pregnancy and maternity, age) – medical facilities are likely to be used by a high proportion of individuals who are either disabled, pregnant, or who are more sensitive than the general (i.e. young and elderly people) population
Soldiers & Sailors Club	Leisure	7 Clapgun Street, Castle Donington, Derby, DE74 2LE	Scoped out – a pub which is now permanently closed according to google
Atwell Dental Surgery	Medical	8 Borough Street, Castle Donington, Derby, DE74 2LA	Scoped out – not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Castle Donington Community College	Education	Mount Pleasant, Castle Donington, Derby, DE74 2LN	Scoped in (age) – attended by young people
Village Hall	Community services	Hall Gate, Diseworth, DE74 2QJ	Scoped in (age) – likely to be used by a high proportion of elderly individuals
St Michaels and All Angels Church	Place of worship	Clements Gate, Diseworth, DE74 2QE	Scoped in (religion or belief)
St. Edwards C of E Primary School & St Edwards Junior School	Education	Dovecote, Castle Donington, Derby, DE74 2LH	Scoped in (age) – attended by young people
Castle Donington Methodist Church	Place of worship	Market Street, Castle Donington, DE74 2JB	Scoped in (religion or belief)
Diseworth C of E Primary School	Education	Grimes Gate, Diseworth, Derby, DE74 2QD	Scoped in (age) – attended by young people



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Receptor name	Receptor classification	Address	Scoped in/out justification
Church of The Risen Lord	Place of worship	Castle Hill, Castle Donington, DE74 2LD	Scoped in (religion or belief)
The Biggin	Residential institution	The Biggin, Castle Donington, DE74 2PB	Scoped in (age) – retirement housing where primary user will be elderly
Living Well	Leisure	Junction 24, Ashby Road, Castle Donington, DE74 2YW	Scoped out – a private gym which is not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
St Nicholass Church	Place of worship	Church Street, Lockington, DE74 2RH	Scoped in (religion or belief)
Cemetery	Community services	Barroon, Castle Donington, DE74 2PH	Scoped out – not used by any particularly vulnerable group and therefore no potential for disproportionate/differential effects
Castle Donington Fire & Rescue Station	Emergency / rescue service	Building 97, Beverley Road, East Midlands Airport, Castle Donington, Derby, DE74 2SA	Scoped out – impacts on emergency service response is inherently considered as part of the transport assessment
Gypsy and traveller site	Residential	Station Yard, Station Road Hemmington, DE74 2RD	Scoped in (race) – through local insight from LCC, this gypsy/traveller site has been identified
Gypsy and traveller site	Residential	Showmen Site at Hemmington, DE74 2RE	Scoped in (race) – through local insight from LCC, this gypsy/traveller site has been identified
Gypsy and traveller site	Residential	Midsummer Stables, Netherfield Lane, Shardlow, DE72 2HP	Scoped in (race) – through local insight from LCC, this gypsy/traveller site has been identified

Health

1.4.3 Table 1.6, overleaf, outlines all determinants of health outlined in IEMAs Guide to Effective Scoping of Human Health in EIA, providing the justification for all matters to be scoped in and out of the construction and operation of the proposed development.



Table 1.6: Health scoping exercise

Category	Determinant of health	Justification (construction)	Justification (operation)
	Physical activity	Scoped in – while the proposed development would primarily be built on agricultural land, which is not publicly accessible, access to some public rights of way (PRoW) would be affected. The impacts and mitigation associated with this (to maintain access to PRoW) would be included in the population and human health chapter. In addition, there may be indirect impacts on the amenity of PRoW and open space, whereby the deterrence of using such resources and spaces will also be considered.	Scoped in – there may be indirect impacts on the amenity of PRoW and open space, whereby the deterrence of using such resources and spaces during operation will be considered.
Health related behaviours	Risk taking behaviour (i.e. use of alcohol, cigarettes, non-prescribed drugs, problem gambling and communicable illness including STIs / other infections)	Scoped out – risk taking behaviour during construction is generally associated with a large non-home based workforce who temporarily relocate to the area surrounding the proposed development and may contribute to a change in the social/cultural environment locally, which includes risk taking behaviour. From an initial analysis, 41% of the construction workforce would come from North-West Leicestershire. While the remaining 59% would come from outside of North-West Leicestershire, it is considered likely that such workers would commute on a daily basis due to the proposed developments proximity to major conurbations such as Derby (17 km away), Nottingham (20 km away) and Leicester (24 km away).	Scoped out – the proposed development is for an employment development whereby anyone on-site would be part of the workforce who would commute to/from the site on a daily basis. As the workforce would remain on-site during the day, there is limited potential for external impacts on risk taking behaviour.
	Diet and nutrition	Scoped in – while the proposed development results in the loss of agricultural land, this would not have a material impact on food production during construction. LCC have raised the potential impact	Scoped in – while the proposed development results in the loss of agricultural land, this would not have a material impact on food production during operation. LCC have raised the potential impact on access to



Category	Determinant of health	Justification (construction)	Justification (operation)	
		on access to food banks (associated with potential severance impacts from changes in transport nature and flow rate); should significant effects on severance are identified, this will be explored in the ES chapter.	food banks (associated with potential severance impacts from changes in transport nature and flow rate); should significant effects on severance are identified, this will be explored in the ES chapter.	
	Housing	Scoped out – the proposed development does not include the provision of any residential development. As such, there would be no direct impact on housing. Any potential indirect impacts on access to housing from the construction and/or operational workforce would be addressed in Chapter 5: Socio-economics.		
	Relocation	Scoped out – no dwellings would be demolished due to the proposed development, and therefore no relocation would be required.		
Social environment	Open space, leisure and play	Scoped in – the proposed development would be built on land which is primarily agricultural in nature and is not publicly accessible and so will not impact existing access to open space. However, some PRoW would be affected; the impacts and mitigation associated with this would be included in the population and human health chapter.	Scoped in – there may be indirect impacts on the amenity of PRoW and open space (used for leisure and play), whereby the deterrence of using such resources and spaces during operation will be considered.	
	Transport modes, access and connections	Scoped in – the proposed development would generate changes in transport nature and flow rate on existing transport infrastructure (associated with the delivery of construction materials and worker travel to/from the site). The population and health effects associated with changes in transport and access during the	Scoped in – the proposed development has the potential to primarily transfer freight movements from road to rail via the SRFI facility at EMG1, with an overall net reduction in transport movements. However, acknowledging that some of the proposed warehousing will serve a road-borne purpose, the proposed development will result in a change in transport movements and nature locally.	
		construction phase would be scoped into the ES to more effectively communicate the themes most relevant to health and wellbeing (i.e. severance, pedestrian and cyclist amenity, fear and intimidation and risk of road traffic accidents/injury).	The population and health effects associated with changes in transport and access during the operation phase would be scoped into the ES to more effectively communicate the themes most relevant to health and wellbeing (i.e. severance,	



Category	Determinant of health	Justification (construction)	Justification (operation)
		The population and health topic would draw from and build upon key outputs from the Chapter 6: Traffic and Transport in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.	pedestrian and cyclist amenity, fear and intimidation and risk of road traffic accidents/injury). The population and health topic would draw from and build upon key outputs from the Chapter 6: Traffic and Transport in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.
	Community safety (e.g. crime and injury risk)	Scoped in – the site during the construction phase would be secure, and subject to security measures to deter the potential for anti-social behaviour and/or crime. In addition, any contractors hired would be subject to the Considerate Contractors Scheme to reduce any impacts on the local community, while the safety of construction workers themselves would be ensured through relevant measures required under the Health and Safety at Work Act.	Scoped in – once operational, the site would be sufficiently secure to deter trespassing, anti-social behaviour and crime. Furthermore, the safety of operational workers would be ensured through relevant measures required under the Health and Safety at Work Act.
	Community identity, culture, resilience and influence	Scoped in – construction of the proposed development may impact the visual environment (including due to night lighting). Such changes may influence local pride and wellbeing, and how local communities sense control over their living environment.	Scoped in – operation of the proposed development may impact the visual environment (including due to night lighting). Such changes may influence local pride and wellbeing, and how local communities sense control over their living environment.
	Social participation, interaction and support	Scoped out – the proposed development would not result in the loss of any community/non-residues resources and therefore would not impact on social participation, interaction and support.	
Economic environment	Education and training	Scoped out – while there is the potential for education and training opportunities as part of the proposed development, this would be addressed by Chapter 5: Socio-economics where appropriate and necessary Scoped in – impacts on non-residential receptors such as education facilities will be considered as patthe assessment of vulnerable groups.	



Category	Determinant of health	Justification (construction)	Justification (operation)
	Employment and income	Scoped in – the construction phase would generate temporary direct employment opportunities (primarily for construction workers), with associated indirect employment opportunities from supply chain activity (indirect) and local spending on goods and services by employees (induced). Having a consistent income and being in long-term employment are two of the most important wider determinants of health. As such, the population and human health effects associated with changes in socio-economic factors during the construction phase would be scoped into the ES to communicate the population and health benefits associated with this. The population and health topic would draw from and build upon key outputs from Chapter 5: Socio-economics in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.	Scoped in – the proposed development would generate long-term direct employment opportunities, with associated employment opportunities from supply chain activity (indirect) and local spending on goods and services by employees (induced). The population and health topic would draw from and build upon key outputs from Chapter 5: Socioeconomics in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.
	Climate change mitigation and adaptation	Scoped in – in addition to being addressed within Chapter 19: Energy and Climate Change, as part of the EIA Regulations, each topic (including population and human health), will consider the implications of climate change on the conclusions reached in the assessment. The population and health topic will therefore consider how the future impacts of climate change might alter the assessment conclusions.	
Bio-physical environment	Air quality	Scoped in – the construction phase is anticipated to contribute to local and temporary changes in air quality (dust, particulate matter and nitrogen dioxide) associated with on-site construction activities and additional traffic movements required for the delivery of construction materials and worker travel to/from the site.	Scoped in – traffic will be generated by operational staff and freight movements, with associated impacts on air quality. As such, the population and human health effects associated with changes to air quality from the proposed development would be scoped into the ES



Category	Determinant of health	Justification (construction)	Justification (operation)	
		Embedded mitigation measures would be implemented in order to reduce the generation of dust and release of air pollutants, outlined within a Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP) and Travel Plan. While this is the case, this determinant will be scoped into the ES to further communicate how known hazards are addressed to prevent any material risk to human health. The population and human health topic would draw from and build upon key outputs from Chapter 8: Air Quality in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.	to assess the magnitude and distribution of such changes for existing residents and any other sensitive receptors in the surrounding area. The population and human health topic would draw from and build upon key outputs from the Chapter 8: Air Quality in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.	
	Water quality or availability	Scoped out – changes in water quality and availability will be adequately dealt with in Chapter 13: Flood Risk and Drainage. No further health assessment is considered necessary.		
	Land quality	Scoped out – the potential health impacts from ground conditions (e.g. exposure to contaminated land) will be included as part of the Chapter 14: Ground Conditions scope. No further health assessment is considered necessary.		
	Noise and vibration	Scoped in – the construction phase is anticipated to contribute to local and temporary changes in noise exposure associated with on-site construction activities and additional traffic movements required for the delivery of construction materials and worker travel to/from the site.	Scoped in – the proposed development would be operational 24 hours a day, 7 days a week, and traffic will be generated by HGVs entering/exiting the site and rail movements associated with the rail freight terminal at EMG1, with associated impacts on noise.	
		Embedded mitigation measures, contained within a CEMP, would also contribute to a reduction of noise impacts. While this is the case, this determinant will be scoped into the ES to more effectively	As such, the human health effects associated with changes to noise exposure from operational development would be scoped into the ES to assess the magnitude and distribution of such changes for	



Category	Determinant of health	Justification (construction)	Justification (operation)
		communicate the magnitude and distribution of potential impacts, and the resultant significance of effect on population and health, if any.	existing residents and any other sensitive receptors in the surrounding area.
		The population and human health topic would draw from and build upon key outputs from the Chapter 7: Noise and Vibration in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.	The population and human health topic would draw from and build upon key outputs from the Chapter 7: Noise and Vibration in order to carry out the assessment and reach a conclusion regarding the significance of effect in population and health terms.
	Radiation	Scoped out – no significant sources of ionising or non-ionising radiation (e.g. electric and magnetic fields) would be introduced during construction or operation of the proposed development.	
	Health and social care services	Scoped out – on the basis that the construction workforce are anticipated to be home-based and would commute on a daily basis, there would be no impact on health and social care services, which would only occur with a temporary non-home-based workforce.	Scoped out – the proposed development is for an employment development whereby anyone on-site would be part of the workforce who would commute to/from the site on a daily basis. As such, there would be no material impact on access to health and social care services.
Institutional and built	Built environment (i.e. man-made structures, features, and facilities)	Scoped out – the proposed development does not influence (positively or negatively) the built environment of any community.	
environment	Wider societal infrastructure and resources	Scoped out – the proposed development would not impact wider societal infrastructure and resources until operational.	Scoped out – the proposed development would deliver transport infrastructure, would contribute to economic development and a low carbon economy. However, these impacts would be dealt with in the relevant topic chapters and it is not considered necessary to provide additional analysis from a population and health perspective.

