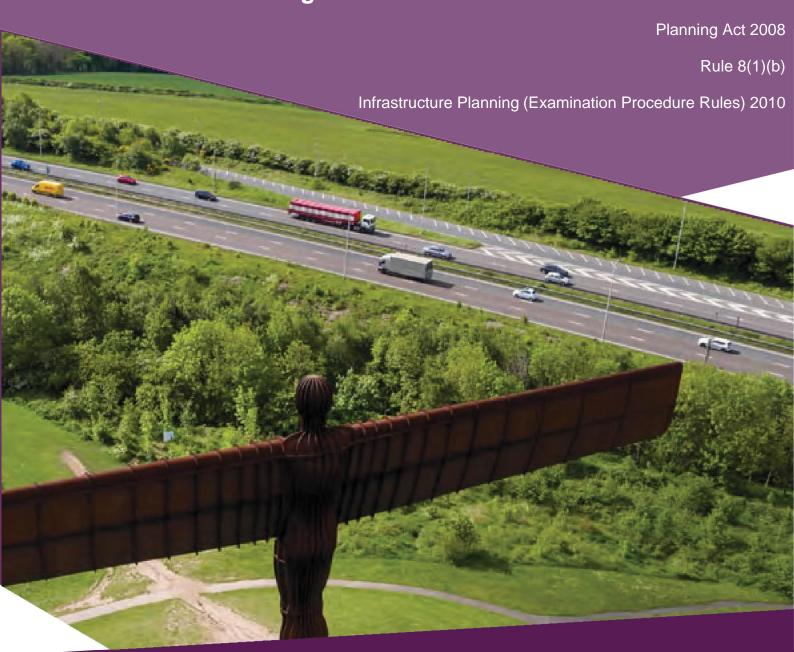


## **A1 Birtley to Coal House**

Scheme Number: TR010031

**Applicant's Responses to ExA's Second Written Questions - Appendix 2.8A - Agricultural Land Holding Assessment** 





#### Infrastructure Planning

Planning Act 2008

## The Infrastructure Planning (Examination Procedure Rules) 2010

## A1 Birtley to Coal House Development Consent Order 20[xx]

**Applicant's Response to ExA's Second Written Questions**- **Appendix 2.8A - Agricultural Land Holding Assessment** 

Rule number:	Rule 8(1)(b)
Planning Inspectorate Scheme	TR010031
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### **APPENDICES**

APPENDIX A

AGRICULTURAL LAND PLAN



#### 1 INTRODUCTION

#### 1.1 INTRODUCTION AND BACKGROUND

- 1.1.1. An application for a Development Consent Order (DCO) was submitted by Highways England to the Secretary of State for Transport via the Planning Inspectorate (Inspectorate) on 14 August 2019 (Application). The DCO would, if made, grant consent for A1 Birtley to Coal House (Scheme). The Application was accompanied by an Environmental Statement (ES), which considered whether there would be significant effects on the environment as a result of the Scheme.
- 1.1.2. The Population and Human Health topic of the ES (Chapter 12: Population and Human Health [APP-033]) followed Design Manual for Roads and Bridges (DMRB) guidance relevant at the time of the Application, which was contained in DMRB Volume 11, Section 3, Part 6. On the basis of the guidance used in that assessment, it was determined that as the agricultural land take within the Order limits was unlikely to exceed 20ha of best and most versatile (BMV) agricultural land, a significant effect was not anticipated. A simple assessment was proposed, consisting of a desk top exercise supported by site survey information from an Agricultural Land Classification Survey. This was in accordance with the Scoping Opinion adopted by the Inspectorate on 18 December 2017 [APP-103].
- 1.1.3. While the assessment of impacts of the Scheme on land use was scoped in to the Population and Human Health topic, following emerging guidance at the time of the assessment, the report on effects upon agricultural land was moved to the Geology and Soils assessment in the ES (Chapter 9: Geology and Soils [APP-030]), and the Population and Human Health chapter included a simple assessment of impacts on non-agricultural land (Private Land). An assessment of the socio-economic effects of the Scheme on agricultural land holdings (ALH) was not included in the scope of the ES, which was in line with relevant guidance at the time.
- 1.1.4. Since October 2019, new guidance for the Population and Human Health topic (DMRB LA 112) has been issued by Highways England. This guidance includes the aspect of "Agricultural Land Holdings", defined in the guidance as "Land and associated infrastructure for the purpose of agricultural production" and provides a methodology for assessing the impact of a Scheme on the viability of a farm holding. This ALH Assessment Report has been compiled in accordance with the guidance contained in DMRB LA 112 and sets out the assessment of effects upon agricultural land due to the Scheme, covering the shorter-term effects during construction, and the longer-term effects arising from the operation of the Scheme.

#### 1.2 THE SCHEME

1.2.1. The Scheme is located on the A1 between a location just south of junction 68 (Lobley Hill) grid reference 423862, 560224 and junction 65 (Birtley), grid reference 428340, 556306, in the metropolitan borough of Gateshead and is approximately 6.5km in length.



- 1.2.2. The Scheme consists of widening the existing carriageway between junction 67 (Coal House) and junction 65 (Birtley) to provide additional lanes and increase capacity. The widening works would mainly comprise online widening, with a short section of realignment (offline) where the A1 crosses the East Coast Main Line on Allerdene Bridge between junction 67 (Coal House) and Smithy Lane Overbridge. The main areas of land take for the replacement of Allerdene Bridge as part of the offline section of the Scheme and land take associated with widening the A1 resulting from the need for the acquisition of land adjacent to the southbound carriageway are located between junction 66 (Eighton Lodge) and junction 65 (Birtley). The existing road width would be maintained north of junction 67 (Coal House). Further details about the Scheme can be found in Chapter 2: The Scheme of the ES [APP-023].
- 1.2.3. The Order limits contain of all the land required to build and operate the Scheme, whether required temporarily for construction purposes or on a permanent basis. The Order limits are shown on the **Agricultural Land Plan** found in **Appendix A** of this assessment report, which also shows each of the land parcels included in this assessment. The colours used on the Agricultural Land Plan represent the land ownership of the land parcels..

#### 1.3 ADDITIONAL LAND

- 1.3.1. As a result of further design development undertaken by Highways England, additional land at junction 67 (Coal House), not included in the DCO application submitted in August 2019, has now been identified to allow material stockpiling during construction of the Scheme. An application has been made to amend the Application to include the additional land within the Order limits. In order to assess any environmental impacts of the additional land, an environmental impact assessment has been carried out [EXA/D4/009].
- 1.3.2. For consistency, the Population and Human Health assessment of the activities proposed on the additional land followed the same guidance as used in Chapter 12: Population and Human Health of the ES [APP-033] and impacts on the agricultural land holding were not assessed. The additional land currently sits outside the Order limits but has been included in this assessment on a precautionary basis to ensure completeness.
- 1.3.3. The additional land is referred to as "Additional Land" within this assessment and marked accordingly on the **Agricultural Land Plan** (**Appendix A**) of this assessment report.

#### 1.4 COMPETENT EXPERT EVIDENCE

1.4.1. As detailed in **Table 1-1**, the professionals contributing to the production of this assessment have sufficient expertise to ensure the completeness and quality of this assessment.



**Table 1-1 - Population and Human Health Professional Competence** 

Name	Role	Qualifications and Professional Membership	Experience
Sheri Shai	Author	BSc (Hons) Environmental Science  MSc Environmental Consultancy  IEMA Graduate	<ul> <li>- 3 years of experience in preparing ESs, including Population and Human Health assessments.</li> <li>Relevant Population and Human Health Experience:</li> <li>- A27 Arundel Options Selection Stage 2, population assessment input to population and health chapter.</li> <li>- A1 Northumberland Morpeth to Felton population assessment input to population and health chapter.</li> <li>- M4 Junction 15 population and health assessment.</li> </ul>
Claire Beard	Reviewer	BSc Biology  MSc Sustainability, Planning and Environmental Policy  IEMA Practitioner	<ul> <li>EIA Experience:</li> <li>- 13 years of experience undertaking environmental and health assessments.</li> <li>Relevant Population and Human Health Experience:</li> <li>- A27 East of Lewes Stage 3, Population and Human Health ES Chapter.</li> <li>- A59 Kex Gill, Population and Human Health ES Chapter.</li> <li>- A27 Arundel PCF Stage 2 &amp; 3, health assessment, and Stage 3 health input into Population &amp; Health chapter.</li> </ul>



#### 2 ASSESSMENT METHODOLOGY

2.1.1. Using Guidance in the DMRB LA 112, this assessment sets out the anticipated overall effects of the Scheme on ALH.

#### 2.2 SCOPE OF ASSESSMENT

2.2.1. The scope of this assessment includes any agricultural land parcels (receptors) where land is required either temporarily or permanently during the construction or operational phases of the Scheme. Receptors have been identified for inclusion where any land classified as "Agricultural Land" falls within the Order limits. Details of the land parcels, which for the purpose of this assessment have been grouped together by ownership and referred to as an Agricultural Land Holding, are set out in **Section 3.1**. The receptors' proximity to the Scheme are shown on the Agricultural Land Plan which can be found in **Appendix A** of this assessment report.

#### 2.3 DATA SOURCES

- 2.3.1. Information and data for each ALH was collected from the Applicant's Land Valuer, who manages communication between the landowners and the Applicant. Information was collected on the following;
  - **a.** The type location and number of receptors at risk of demolition or from which land will be required/access affected by the Scheme;
  - b. The level of existing severance/accessibility restrictions to the receptors; and
  - **c.** The frequency of use of the receptors.
- 2.3.2. The desk-based assessment has also used publicly available aerial images and has been informed by Relevant Representations RR-010 and RR-011 made during the Examination of the Application for the Scheme.

#### 2.4 METHODOLOGY

2.4.1. To assess the significance of the effects of the Scheme on receptors, the information gathered from the Land Valuer were considered, and a judgement made on the sensitivity of each receptor using the relevant guidance in DMRB LA 112 Table 3.11 as reproduced in Table 2-1 below.



Table 2-1 - Environmental Value (Sensitivity) and Descriptions

Receptor value (sensitivity)	Description
Very High	areas of land in which the enterprise is wholly reliant on the spatial relationship of land to key agricultural infrastructure; and
	2) access between land and key agricultural infrastructure is required on a frequent basis (daily).
High	areas of land in which the enterprise is dependent on the spatial relationship of land to key agricultural infrastructure; and
	2) access between land and key agricultural infrastructure is required on a frequent basis (weekly).
Medium	areas of land in which the enterprise is partially dependent on the spatial relationship of land to key agricultural infrastructure; and
	2) access between land and key agricultural infrastructure is required on a reasonably frequent basis (monthly).
Low	areas of land which the enterprise is not dependent on the spatial relationship of land to key agricultural infrastructure; and
	2) access between land and key agricultural infrastructure is required on an infrequent basis (monthly or less frequent).
Negligible	areas of land which are infrequently used on a non- commercial basis.

2.4.2. The criteria for the assessment of the magnitude of impacts considers the main impacts of the Scheme on land take, severance, and agricultural infrastructure through the initial desktop assessment and information gathered from the Land Valuer. This has been considered for both the construction and operational phases of the Scheme using the relevant guidance from DMRB LA 112 Table 3.12 as reproduced in **Table 2-2**.



Table 2-2 - Magnitude of impact and typical descriptions

Magnitude of Impact (Change)	Description
Major	1) loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements. e.g. direct acquisition and demolition of buildings and direct development of land to accommodate highway assets; and/or
	2) introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision.
Moderate	1) partial loss of/damage to key characteristics, features or elements, e.g. partial removal or substantial amendment to access or acquisition of land compromising viability of agricultural holdings; and/or
	2) introduction (adverse) or removal (beneficial) of severe severance with limited / moderate accessibility provision
Minor	1) a discernible change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements, e.g., amendment to access or acquisition of land resulting in changes to operating conditions that do not compromise overall viability of agricultural holdings; and/or 2) introduction (adverse) or removal (beneficial) of severance with
Negligible	adequate accessibility provision.  1) very minor loss or detrimental alteration to one or more
rrogiigible	characteristics, features or elements. e.g. acquisition of non- operational land or buildings not directly affecting the viability of agricultural holdings; and/or
	2) very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision.
No change	No loss or alteration of characteristics, features, elements or accessibility; no observable impact in either direction.

#### SIGNIFICANCE OF EFFECTS

2.4.3. The significance level attributed to each effect is based on the magnitude of impact resulting from the Scheme, and the sensitivity of the affected receptor. The significance of effect is determined by combining the sensitivity, of a receptor (see **Table 2-1**) with the magnitude of impact (see **Table 2-2**). The criteria for significance of effects follows guidance in DMRB LA 104 Table 3.8.1 which is reproduced below in **Table 2-3**. It is considered that all effects



assessed as being of moderate significance and above are significant in EIA terms; only effects considered significant are reported below in **Section 3.5**.

Table 2-3 - Criteria for Significance of Effects

		Magnitude of impact (degree of change)				
		No change	Negligible	Minor	Moderate	Major
	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
Environmental value (sensitivity)	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Moderate or large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
Envire (sens	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

#### 2.5 ASSUMPTIONS AND LIMITATIONS

- 2.5.1. The following assumptions and limitations have been applied to this assessment:
  - a. The assessment carried out is based on the best information available at the time of writing and has followed appropriate, industry recognised guidance and techniques. Time restrictions in completing the assessment have meant that information for the assessment has been gathered from the Land Valuer, rather than using individual landowner questionnaires or holding discussions with individual land owners.
  - **b.** Where there is doubt in the available information used for the assessment (e.g. frequency of land use), a worst-case assumption has been made.
  - **c.** Only land parcels falling within the Order limits, which is classified as "Agricultural Land" by the Agricultural Land Classification (ALC) system, have been included within the assessment.
  - **d.** For the purpose of this assessment, land parcels have been grouped together by ownership. Full details of the larger ALHs that each land parcel belongs to were not available at the time of the assessment.
  - e. The report has been prepared without consideration of any negotiations with land agents, landowners and district valuers. However, compensation has been considered as a potential mitigation where appropriate.



f. This assessment has identified potential mitigation measures which are likely to be relevant. It has been assumed that best practice will be followed, specifically the measures set out in the Outline Construction Environmental Management Plan (CEMP) [REP2-050 and 051].

#### 2.6 STUDY AREA

2.6.1. The Study Area for this assessment is based on the Order limits. Where land classified as "Agricultural Land" falls within the Order limits, the associated Agricultural Land Holding has been included as a receptor.



#### 3 ASSESSMENT

#### 3.1 BASELINE CONDITIONS

- 3.1.1. The following section presents the baseline conditions of the land parcels that fall within the Order limits which are likely to be impacted during construction and operation of the Scheme. The land parcels included in the assessment, and their proximity to the Scheme are shown on the **Agricultural Land Plan** in **Appendix A** of this assessment report, where land ownership is indicated by colour. For the purpose of this assessment land parcels with the same owner have been grouped together and referred to as an Agricultural Land Holding.
- 3.1.2. The types of data collected and presented below comprise the following:
  - a. The type, location and number of ALH at risk of demolition or from which land will be required/access affected by the Scheme;
  - **b.** The level of existing severance/accessibility restrictions to ALH within the Study Area; and
  - c. The frequency of use of the ALH/assets within the Study Area.
- 3.1.3. There are eight ALH identified for this assessment. The ALH and their associated land parcels as shown on the **Agricultural Land Plan** are set out in **Table 3-1**.

Table 3-1 – Agricultural Land Holdings and Land Parcels

Agricultural Land Holding	Land Parcel	Associated plot numbers	
Unnamed holding A	653	3/3cc, 3/3dd	
Unnamed holding B	765	3/6a, 3/6b, 3/6c, 3/6e, 3/6f	
Additional Land	980	3/13a	
Longacre Farm	1365, 1335, 1281, 1283, 1285, 1375	4/4a, 4/4b, 4/4c, 4/4d, 4/4e, 4/4f	
Dunkirk Farm	1095	4/6a, 4/6b, 4/6c	
Unnamed holding C	1570, 1625	4/7a, 4/7b, 4/7c, 4/7d, 4/7e, 4/7f	
Northside Farm and Unnamed holding D	1645, 1685, 1780	4/13a, 4/13b, 4/13c, 4/13d, 4/13e, 4/13f, 4/14a, 4/14b, 4/14c	
Unnamed holding E	1940	5/11	



3.1.4. The identified land parcels are predominantly owner-occupied with some areas occupied on tenancy agreements or grazing licenses. The majority of land parcels are used for horse grazing. The agricultural infrastructure associated with each agricultural land holding, such as internal tracks and livery yards, are all set back from the existing A1 road. However, associated accesses to agricultural infrastructure and identified land parcels are influenced by the presence of the A1 and so any changes to this route, such as those proposed by the Scheme, may have associated impacts on access. The baseline conditions of the eight identified ALH are listed below in Table 3-2 The baseline has been informed by information from the Agricultural Land Classification Survey in Appendix 9.1: Agricultural Land Assessment of the ES [APP-137] and the Agricultural Land Classification (ALC) Survey in Appendix B.1 of Appendix A Proposed Changes to the Application, Additional Land: Desktop Assessment and Scoping Report of the ES Addendum: Additional Land [EXA/D4/009].



Table 3-2 – Agricultural Land Holding: Existing Conditions

able 5-2 - Agricultural Land Holding. Existing Conditions					
Agricultural Land Holding	Land Parcel No.	Agricultural Land Classification	Current Activity	Existing Severance	Frequency of Use
A	653	Grade 3b	The holding is located south east of Coal House roundabout.  The land parcel is currently used for horse grazing and there is no other agricultural infrastructure within the parcel.	There is existing severance between the land parcel and the main farm infrastructure located on the opposite side of Lamesley Road (Horse World).	Daily
В	765	Grade 3b	The holding is located south east of Coal House roundabout.  There is no agricultural infrastructure within the land parcel.	There is existing severance between the land parcel and the main farm infrastructures located across Lamesley Road.	Daily
Additional Land	980	Grade 3a and 3b	The holding is located north of Smithy Lane and east of Lamesley Road.  The land parcel is currently used for horse grazing with a stable located to the south west of the land parcel.	While there is a line of hedgerow within the land parcel, it does not result in severance between the stable and eastern end of the land parcel due to gaps within the hedge.	Daily
Longacre Farm	1365, 1335, 1281, 1283, 1285, 1375	Grade 3a	The holding is located north of the existing A1 between the B1296 and the southbound slip road onto the A1 at junction 66 (Eighton Lodge)  There are no farm buildings located within the land parcels affected. Land is currently used for crop production.	There is no existing severance between the land parcels.	Daily
Dunkirk Farm	1095	Grade 3a	The holding is located north of the existing A1 with the western edge of the parcel adjacent to the A1 where the southbound slip road meets the dual carriageway. Longbank Bridleway runs adjacent to the southern boundary of the land parcel.  There is no agricultural infrastructure located within the land parcel affected. The land parcel is currently used for crops and livestock on rotation.	There is no existing severance between the land parcel and the main farm infrastructure, which is located near the north-eastern end of the land parcel.	Daily
С	1570, 1625	Land holding not included in the Agricultural Land Survey. Land classification is therefore undetermined.	The land holding is located north of the A1.  There are no farm buildings located within the land parcels affected. The land parcels are currently overgrown with trees and is currently not agricultural purposes.	There is no farm infrastructure located within the land parcels and no barriers between the two land parcels; no existing severance has been identified.	Monthly or less frequent
Northside Farm and Unnamed holding D	1645, 1685, 1780	Grade 3a	The land holding is located north of the existing A1. The North Dene Footbridge crosses the A1 and lands between land parcels 1685 and 1780. The Bowes Incline Hotel is located adjacent to the southern boundary of parcel 1780.	There is some level of severance between land parcel 1780 and the main farm infrastructure located within land parcel 1685 where a road acts as a barrier between the land parcels.	Daily



Agricultural Land Holding	Land Parcel No.	Agricultural Land Classification	Current Activity	Existing Severance	Frequency of Use
			There is a stable in operation in parcel 1685. There are three agricultural buildings located towards the northern end of land parcel of 1685.  There are no farm buildings located within land parcel 1780. The land is currently used for horse grazing.  Land parcel 1780 is under different ownership to parcels 1645 and 1685. However, they are all used as part of the same farm holding.	There is no existing severance between the main farm infrastructure located at the north-eastern side of land parcels 1645 and 1685.	
E	1940	Land holding not included in the Agricultural Land Survey. Land classification is therefore undetermined.	This holding is located north of the existing A1 at the southern end of the Scheme, adjacent to the slip road between the A1 and A1231.  Land is being let for horse grazing purpose. There is a stable located adjacent to the existing A1 slip road.	There is no existing severance between the land parcel and the farm infrastructure located at the south-western side of the land parcel.	Daily



#### 3.2 SENSITIVITY OF RECEPTORS

3.2.1. This section outlines the sensitivity of the eight agricultural land holdings. The determination of farm holdings sensitivity has been made using the information provided by the Land Valuer and professional judgement following the criteria outlined in Section 2 (see Table 2-1). The sensitivity of each Agricultural Land Holding is set out in Table 3-3 below.

**Table 3-3 – Sensitivity Assessment** 

Agricultural Land Holding	Land Parcel	Sensitivity
А	653	Low – While the land is in regular use for horse grazing, alternative land can be found for these horses. Grazing activities are not reliant on this specific land parcel.
В	765	Low – While the land is in regular use for horse grazing, alternative land can be found for these horses. Grazing activities are not reliant on this specific land parcel.
Additional Land	980	Medium – The land is used on a regular basis, and the number of horses able to graze on the land is dependent on size of the land parcel.
Longacre Farm	1365, 1335, 1281, 1283, 1285, 1375	Medium – Land parcels are used on a regular basis and while the holding generates income from these parcels, the wider farming operation is not solely dependent on these parcels.
Dunkirk Farm	1095	Medium – The portion of land required for the Scheme is used on a regular basis and while the holding generates income from the farming activity on the land required, the wider farming operation is not solely dependent on it.



Agricultural Land Holding	Land Parcel	Sensitivity
С	1570, 1625	Negligible - due to the land not being used for agricultural purposes.
Northside Farm and Unnamed holding D	1645, 1685, 1780	Medium – The land is used on a regular basis, and the number of horses able to graze on the land is dependent on size of the land parcel.
Е	1940	Low - While the land is used regularly for grazing activities, activities are not dependent on the portion of land required for the Scheme.

#### 3.3 POTENTIAL IMPACTS

- 3.3.1. This section identifies the potential temporary and permanent impacts on the identified ALH during the construction and operational phases of the Scheme.
- 3.3.2. Further details about the works required for the Scheme are set out in the Statement of Reasons (Reasons for the seeking of powers for compulsory acquisition of rights over land) [AS-014 and 015] and activities, including the temporary and permanent requirements of land, are shown on Figure 2.2 Land Plan (Details of Plots of Land Required for the Projects) [REP2 -037].
- 3.3.3. In a number of cases, there will be permanent acquisition of rights over subsoil in order to enable grouting works which are required to treat underground historical mine workings and reduce the risk of ground instability. Following the construction phase, grout will be in situ after the works are complete at a subsoil level. The presence of grout in the subsoil level will not alter the land from its previous condition and it will remain suitable for agricultural use at all times. Grouting is not assessed as an impact on receptors as a result.

#### CONSTRUCTION

The magnitude of impact for the identified land parcels during construction are presented in **Table 3-4**.



Table 3-4 – Magnitude of Impact during Construction

Agricultural Land Holding	Land Parcel	Description of Impact	Magnitude of Impact
A	653	Temporary possession of the whole land parcel is required for works within and around junction 67 (Coal House) Roundabout including works to the River Team. The land would also be required for access to construct works to junction 67 (Coal House) northbound off slip road.	Minor – While the land parcel will be temporarily possessed, horse grazing activities could be temporarily relocated, resulting in a limited impact on agricultural activities.
		The land parcel would be inaccessible for its current activity of grazing horses during the construction phase, however the horse owners have indicated that alternative grazing can be found.	
В	765	There would be temporary possession of the whole land parcel for use as a construction compound for Allerdene Bridge and associated access.	Minor – While the land parcel will be temporarily possessed, horse grazing activities could be temporarily relocated, resulting in a
		Land would be required for the construction of the replacement Allerdene Bridge to cross the East Coast Main Line. Works would also take place for the diversion of existing Northern Gas Networks (NGN) gas pipeline. Alteration and realignment of existing culverted watercourse. Construction of new maintenance access track to access new Allerdene Bridge and Network Rail land.	limited impact on agricultural activities.
		The land parcel would be inaccessible for its current activity of horse grazing for the duration of the construction period, however the horse owners have indicated that alternative grazing can be found.	
Additional Land	980	There would be temporary possession of a portion of the land parcel for material stock piling.	Minor – Due to the temporary possession of a portion of the additional land, which could result in a temporary impact on
		The portion of additional land required will be inaccessible for the current activity of horse grazing for the duration of the construction period, and the number of horses able to graze on the remaining land would have to reduce. The landowner would be able to keep their horses on the land, but would be unable to rent space to other horse owners during this period	income due to the loss of rent from other horse owners.
		Suitable fencing between the construction compound and the land left for horse grazing will be provided by the Applicant.	
Longacre Farm	1335, 1281,	There would be temporary possession of all land parcels for use as a construction compound at junction 66 (Eighton Lodge) and associated access.	Moderate – due to the temporary possession of land which could result in a temporary impact on farming income.
	1283, 1285,	The land parcels would be inaccessible for their current activity of growing crops for the duration of the construction period which would result in a loss of income. However it is not considered	
	1365, 1375	that the possession of these lands on a temporary basis would result in the wider farming operations becoming unviable.	
Dunkirk Farm	1095	There would be temporary possession of the portion of the land parcel that falls within the Order limits. This is required for access and to construct proposed highway, associated embankment and realignment of junction 66 (Eighton Lodge) southbound on slip road. Land is required to	Minor – due to the temporary possession of a portion of land which would not interfere with the remainder of the farming activities



Agricultural Land Holding	Land Parcel	Description of Impact	Magnitude of Impact
		construct the extension of Longbank Bridleway Underpass, including temporary working space and diversions for pedestrians during the Underpass closure.	
		The portion of the land parcel that falls within the Order limits would be inaccessible for the current activity of growing crops or livestock grazing (on rotation) for the duration of the construction period. The remainder of the farming operations would be unaffected.	
С	1570, 1625	There would be temporary possession of the portions of the land parcels that fall within the Order limits to enable construction works associated with new pavements, embankments, retaining walls, ground improvements and directional gantry signs.	Negligible – due to the land not currently being used for agricultural purposes
		The land is not currently being used for agricultural purposes; therefore, these impacts are not anticipated to affect the viability of the holding.	
Northside Farm and Unnamed holding D	1645, 1685, 1780	There would be temporary possession of the portions of the land parcels that fall within the Order limits required for access and to construct proposed highway and associated embankment. Land is also required temporarily to carry out the demolition and construction of the replacement North Dene Footbridge and for temporary diversion of pedestrians during closure of the Footbridge.	Minor – due to the temporary possession of a portion of the land parcels which could result in a temporary impact on income from the livery business, though not impact the overall agricultural business
		The portion of the land parcels that fall within the Order limits would be inaccessible for the current activity of horse grazing for the duration of the construction period, however the remainder of the land parcels that fall outside of the Order limits would be unaffected.	
		The number of horses able to graze on the remaining land would have to reduce, which the owner has indicated could result in the temporary loss of livery clients. However livery operation is not the main source of income for the holding, and therefore this impact would be limited.	
E	1940	There would be temporary possession of the portion of the land parcel that falls within the Order limits. This is required for the construction of junction 65 (Birtley) southbound off slip road works and temporary footpath diversion.	Minor – due to the temporary possession of a portion of the land parcel which will not compromise the overall viability of the land holding.
		Demolition would be required of the stable block near the southern fringe but this would be replaced by the Applicant.	
		The portion of the land parcel that falls within the Order limits will be inaccessible for the current activity of horse grazing for the duration of the construction period, however the remainder of the land parcel that falls outside of the Order limits would be unaffected.	



#### **OPERATION**

- 3.3.5. Following construction temporary land taken will be reinstated to its original condition. It is anticipated that there would be no further impact to the following ALH once the Scheme is operational;
  - **a.** A (land parcel 653) The land parcel would be returned to its previous condition following construction enabling horse grazing to resume.
  - **b.** Additional Land (land parcel 980) The land parcel would be returned to its previous condition following construction, enabling horse grazing to resume.
  - **c.** Longacre Farm (land parcels 1335, 1281, 1283, 1285,1365, and 1375) The land parcels would be returned to their previous condition following construction, enabling the growing of crops to resume.
  - **d.** E (land parcel 1940) The land parcel would be returned to its previous condition following construction, enabling horse grazing to resume.
- 3.3.6. The potential magnitude of impact on land parcels during operation is shown below in **Table 3-5**.

**Table 3-5 – Magnitude of Impact During Operation** 

Agricultural Land Holding	Land Parcel	Description of Impact	Magnitude of Impact
В	765	There would be permanent acquisition of land to the north of the land parcel, adjacent to the A1, for the widening, alteration and realignment of the existing southbound carriageway of the A1 dual carriageway on the approach to the junction 67 (Coal House), northbound off slip road and the construction of a new offline section of the A1 with construction of new pavements, embankments, retaining walls, ground improvements and directional gantry signs. Land will also be required for a new maintenance access track to access the new Allerdene Bridge and Network Rail land.  This northern portion of the land parcel would no longer be able to be used for its current activity of grazing horses, though the remainder of the land parcel would be returned to its previous	Minor – due to the permanent loss of land which would not compromise the overall viability of the land holding.



Agricultural Land Holding	Land Parcel	Description of Impact	Magnitude of Impact
		condition and suitable for horse grazing.	
Dunkirk Farm	1095	There would be permanent acquisition of land adjacent to the A1 required for the widening, alteration and realignment of the existing highway with construction of new pavements, embankments, retaining walls, ground improvements and directional gantry signs, and extension of the north side of the Longbank Bridleway Underpass.  This portion of the land parcel would no longer be able to be used for its current activity of growing crops or grazing livestock (on rotation), though the remainder of the land parcel would be returned to its previous condition and suitable for growing crops or livestock.	Minor – due to the permanent loss of land which would not compromise the overall viability of the land holding.
C	1570, 1625	There would be permanent acquisition of land adjacent to the A1 for the widening, alteration and realignment of the existing highway with construction of new pavements, embankments, retaining walls, ground improvements and directional gantry signs.  There would be permanent acquisition of rights over a portion of the southwest corner of land parcel 1625, adjacent to the A1, for new right to access, operate, make alterations to and maintain the existing drainage outlet pipeline.  The portion of the land parcels taken permanently would no longer be able to be used, though this land it not currently used for agricultural purposes.	Negligible – due to the land not currently being used for Agricultural purposes



Agricultural Land Holding	Land Parcel	Description of Impact	Magnitude of Impact
Northside Farm and Unnamed holding D	1645, 1685, 1780	There would be permanent acquisition of land adjacent to the A1 for the widening, alteration and realignment of the existing highway with construction of new pavements, embankments, retaining walls, ground improvements and directional gantry signs.	Minor – due to the permanent loss of land which would not compromise the overall viability of the land holding.
		The portions of the land parcels taken permanently would no longer be able to be used for their currently activity of horse grazing, though the remainder of the land parcels would be returned to their previous condition and suitable for horse grazing.	
		The reduction in size of the land parcel would result in the permanent loss of one livery client. However, the livery operations are not the main source of income for this holding, resulting in a limited impact.	

#### 3.4 PROPOSED MITIGATION

- 3.4.1. This section provides the potential mitigation measures which aim to reduce the identified construction and operational impacts on ALH and associated land parcels.
- 3.4.2. It is noted that if temporary or permanent land take is required, financial compensation could be claimed by the landowner under the compulsory purchase compensation code with the level determined by the Upper Tribunal (Lands Chamber) if not agreed.

#### **CONSTRUCTION MITIGATION**

- 3.4.3. Potential mitigation measures to be implemented during the construction phase are as follows:
  - a. The duration of any temporary possession would be minimised, where possible.
  - **b.** Where land parcels are used for livestock or horse grazing, construction activities would be scheduled with consideration of livestock and horse grazing, where possible. If construction disturbance to crops, livestock or horses is unavoidable, secure fencing would be erected in order to establish safe working areas and ensure crops and animals in areas of land unaffected by the works are protected.



- **c.** Land and surface water drainage affected by the construction works would be reinstated and land restored to a functional state.
- d. Best practice construction methods including damping down at construction compounds and low noise emission construction machinery would be used to minimise potential disturbance to livestock and crops in terms of air and noise pollution, and dust. Specific measures are set out in the **Outline CEMP** including those in ref [A1], [A2], and [N5] of the Register of Environmental Actions and Commitments (REAC) [REP2-050 and 051].
- e. Access agreements are not known at the time of this assessment. These measures would be discussed between the Applicant and agricultural land holding owners. If agricultural activities are to continue during the construction period, infrastructure such as water troughs and stable blocks would be moved and re-located to an agreed alternative location before commencement of work. It is understood that any relocation fee would be reclaimed through financial compensation.

#### **OPERATION MITIGATION**

- 3.4.4. All temporarily possessed land will be returned to its previous condition following completion of construction works It is anticipated that once the Scheme is operational, all land that was temporarily acquired would be able to be used for the same activities as currently used for.
- 3.4.5. No further mitigation measures are proposed for the operational phase of the Scheme.

#### 3.5 ASSESSMENT OF THE SIGNIFICANCE OF EFFECTS

3.5.1. The significance of effects are shown in **Table 3-6** and **Table 3-7**.

Table 3-6 – Significance of Effects during Construction

Agricultural Land	Land Parcel	Significance
A	653	This land parcel is currently used daily for horse grazing, the whole parcel will be required temporarily for the duration of the construction period and horse grazing would cease in this land parcel during this period. The owners of the horses have indicated that alternative lands for grazing activities can be used during this period.  The sensitivity of the land parcel has been judged to be low, and the magnitude of impact as minor, resulting in a temporary, slight adverse (not significant) effect.
В	765	This land parcel is currently used daily for horse grazing, the whole parcel would be required temporarily for the duration of the construction period for a site compound, and horse grazing would cease in this land parcel during this period. The owners of the horses have indicated that



Agricultural Land	Land Parcel	Significance
		alternative lands for grazing activities can be used during this period.
		The sensitivity of the land parcel has been judged to be low, and the magnitude of impact as minor, resulting in a temporary <b>slight adverse</b> (not significant) effect.
Additional Land	980	This land parcel is currently used daily for horse grazing, a portion of the parcel would be required temporarily for the duration of the construction period. While a sufficient area of land will remain for the landowners horses to continue grazing on, the total number of horses able to graze on the land would reduce, resulting in the temporary loss of rental income during this period.  The sensitivity of the land parcel has been judged to be medium, and the magnitude of impact as minor, resulting in a temporary slight adverse (not significant) effect.
Longacre Farm	1335, 1281, 1283, 1285, 1365, 1375	These land parcels are currently used regularly for growing crops, all of the parcels would be required temporarily for the duration of the construction period for a construction compound, and crop growing would cease in these land parcels during this period.  The temporary possession of these parcels would result
		in temporary loss of income, but not result in the wider farming operation becoming unviable.
		The sensitivity of the land parcels has been judged to be medium, and the magnitude of impact as Moderate, resulting in a temporary <b>moderate adverse</b> (significant) effect.
Dunkirk Farm	1095	This land parcel is currently used daily for growing crops or grazing livestock (on rotation), a portion of the land parcel would be required temporarily during construction and crop growing or livestock grazing would not be possible in this area during this period. However, the remainder of the land parcel would remain unaffected and existing activities are still able to take place outside of the Order limits.  The sensitivity of the land parcel has been judged to be medium, and the magnitude of impact as minor, resulting in a temporary <b>slight adverse</b> (not significant) effect.



Agricultural Land	Land Parcel	Significance
С	1570, 1625	This land parcel is not currently used for agricultural purposes.  The land parcels have been judged to have a negligible sensitivity and negligible magnitude, resulting in a <b>neutral</b> (not significant) effect.
Northside Farm and Unnamed holding D	1654, 1685, 1780	These land parcels are currently used daily for horse grazing, a portion of each land parcel will be required temporarily during construction to accommodate the widening of the A1 and horse grazing would not be able to take place in these areas during this period.  Due to the temporary possession of land the number of horses able to graze on the land would reduce, resulting in the temporary loss of livery clients.  The sensitivity of the land parcels has been judged to be medium, and the magnitude of impact as minor, resulting in a temporary slight adverse (not significant) effect.
E	1940	This land parcel is currently used daily for horse grazing, a portion of the parcel will be required temporarily for the duration of the construction period and horse grazing in this area would not be possible during this period.  A stable will need to be demolished, which the Applicant has agreed to replace.  The sensitivity of the land parcel has been judged to be low, and the magnitude of impact as minor, resulting in a temporary slight adverse (not significant) effect.



**Table 3-7 - Significance of Effects During Operation** 

Agricultural Land	Land Parcel	Significance
В	765	This land parcel is currently used daily for horse grazing, a portion of the land parcel is required permanently to accommodate the widening of the A1, and horse grazing would no longer be able to take place in this area.  The horse owners have indicated that alternative lands for grazing activities can be used.  The sensitivity of the land parcel has been judged to be low, and the magnitude of impact as minor, resulting in a permanent <b>slight adverse</b> (not significant) effect.
Dunkirk Farm	1095	This land parcel is currently used daily for growing crops or livestock (on rotation), a portion of the land parcel would be required permanently to accommodate the widening of the A1 and crops or livestock would no longer be able to occupy this area.  The sensitivity of the land parcel has been judged to be medium, and the magnitude of impact as minor, resulting in a permanent <b>slight adverse</b> (not significant) effect.
С	1570, 1625	This land parcel is not currently used for agricultural purposes.  The land parcels have been judged to have a negligible sensitivity and negligible magnitude, resulting in a <b>neutral</b> (not significant) effect.
Northside Farm and Unnamed holding D	1654, 1685, 1780	These land parcels are currently used daily for horse grazing, a portion of each land parcel would be required permanently to accommodate the widening of the A1 and horses would no longer be able to graze in this area.  The reduction in size of the land available would result in the permanent loss of one livery client.  The sensitivity of the land parcels has been judged to be medium, and the magnitude of impact as minor, resulting in a permanent slight adverse (not significant) effect.



#### 3.6 SUMMARY

- 3.6.1. All but one of the eight ALH assessed are used on a daily basis for the purpose of horse grazing and tending to crops or livestock.
- 3.6.2. Three of the eight ALH (A, B, and Longacre Farm) require the complete temporary possession of land parcels for the duration of the construction phase, resulting in all agricultural activity on these parcels ceasing during this period. In the cases of holdings A and B, horse grazing activities will be able to continue on alternative land. Longacre Farm is expected to experience a reduction in income, however the overall viability of the farming operations is not expected to be impacted.
- 3.6.3. The remaining five ALH (Additional Land, Dunkirk Farm, C, Northside Farm and Unnamed holding D, and E) would require the temporary possession of land from their land holdings during construction, though the remainder of the land parcels set outside of the Order limits, or in the case of the Additional Land not required for stockpiling, would be unaffected and existing activities able to continue.
- 3.6.4. All land possessed temporarily for construction would be returned to its previous condition once construction of the Scheme is completed.
- 3.6.5. Once the Scheme is operational, four ALH (B, Dunkirk Farm, C, and Northside Farm and Unnamed holding D) would experience the permanent loss of portions of land from their land holdings, however this loss is not anticipated to impact the viability of the wider farm holdings.
- 3.6.6. The overall significance of effect is likely to be neutral to **moderate adverse** during construction and **neutral** to **slight adverse** during the operational phase. Hence, the Scheme is deemed as having a significant effect on agricultural land holdings during the construction phase only.

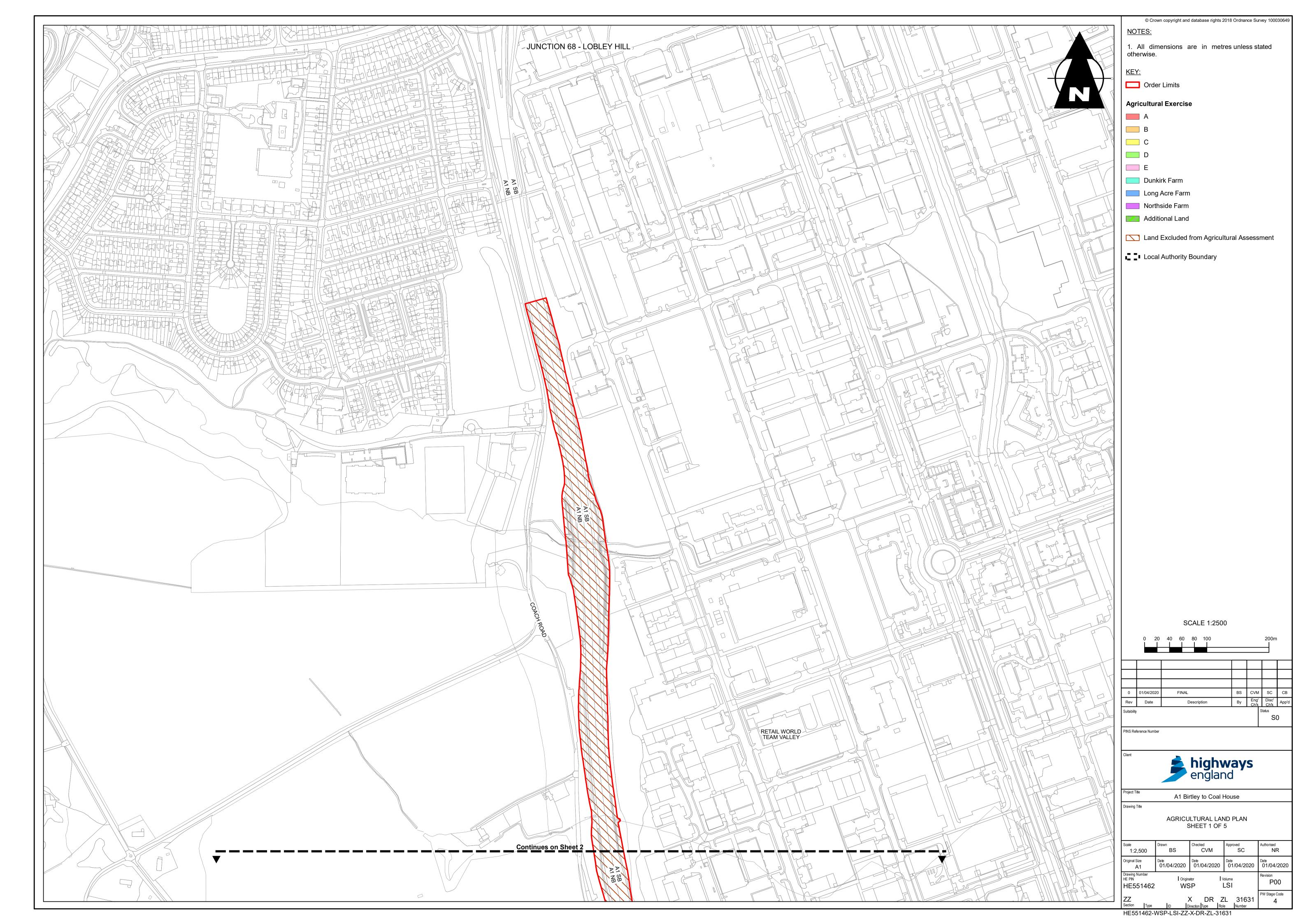


#### 4 CONCLUSIONS

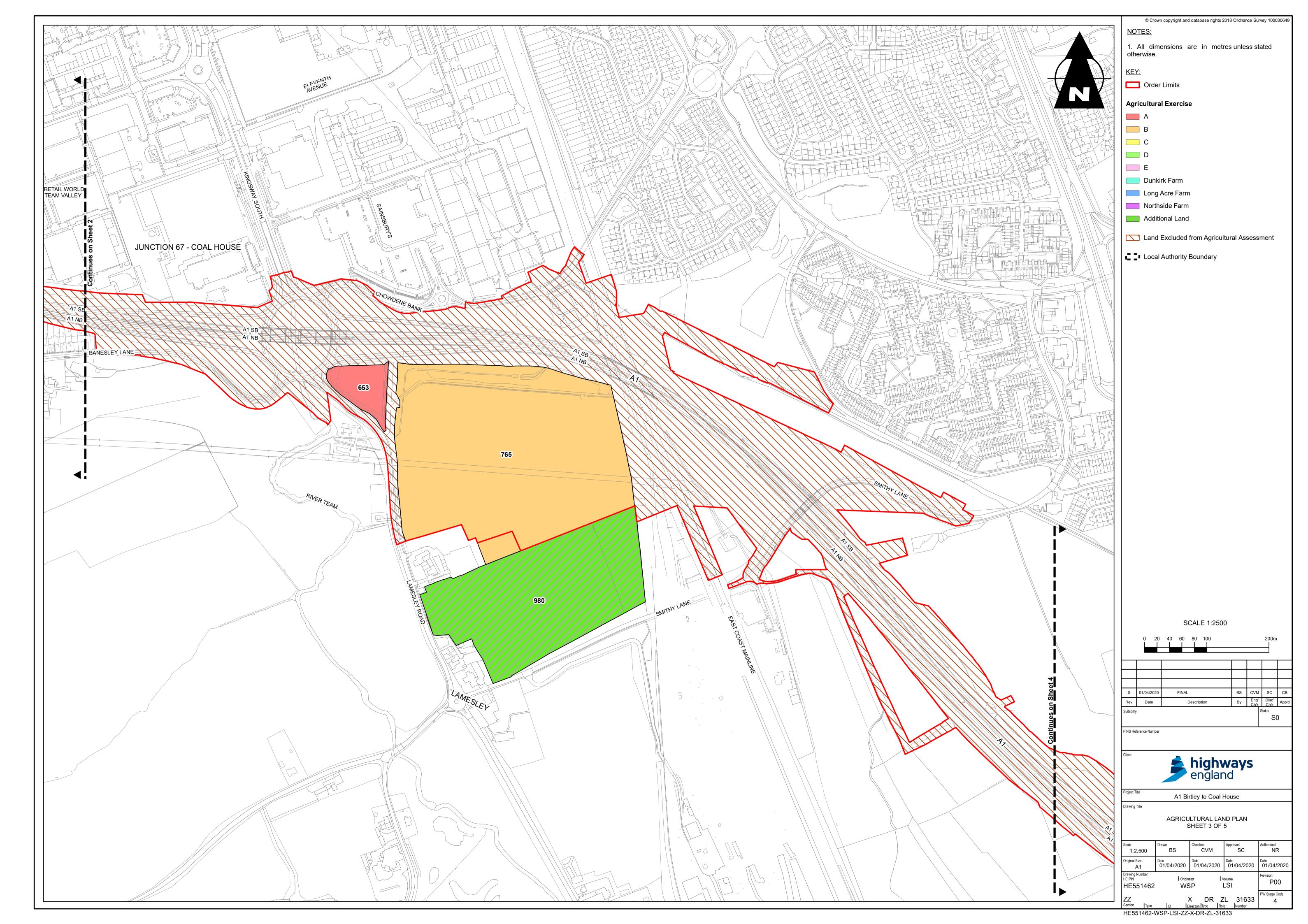
- 4.1.1. The significance of effect ranges from **neutral** to **moderate adverse** during the construction period depending on the area of land take and impact on the viability of the business. This range of significance is due to the reliance of current agricultural activities on the size and proximity of the land parcels affected.
- 4.1.2. During the construction phase it is anticipated that one land holding will experience a moderate (significant) adverse effect, which is due to the land parcels, which current have crops grown on them, being temporarily possessed for the duration of the construction period. The loss of ability to grow crops in this location will result in a loss of income for the farmer, however this is not expected to impact the viability of the wider farm holding.
- 4.1.3. During the operation of the Scheme, four land holdings will permanently lose portions of land, required for the widening of the A1 southbound, however these losses are not anticipated to impact the viability of the wider farm holdings. No significant adverse effects are anticipated once the Scheme is operational.
- 4.1.4. It is to be noted that these potential impacts have been identified in a worst-case scenario, as all access and compensation arrangements have not yet been agreed with all landowners. By identifying these impacts at this stage, there is the potential for the impacts of Scheme on these ALH to be further reduced.

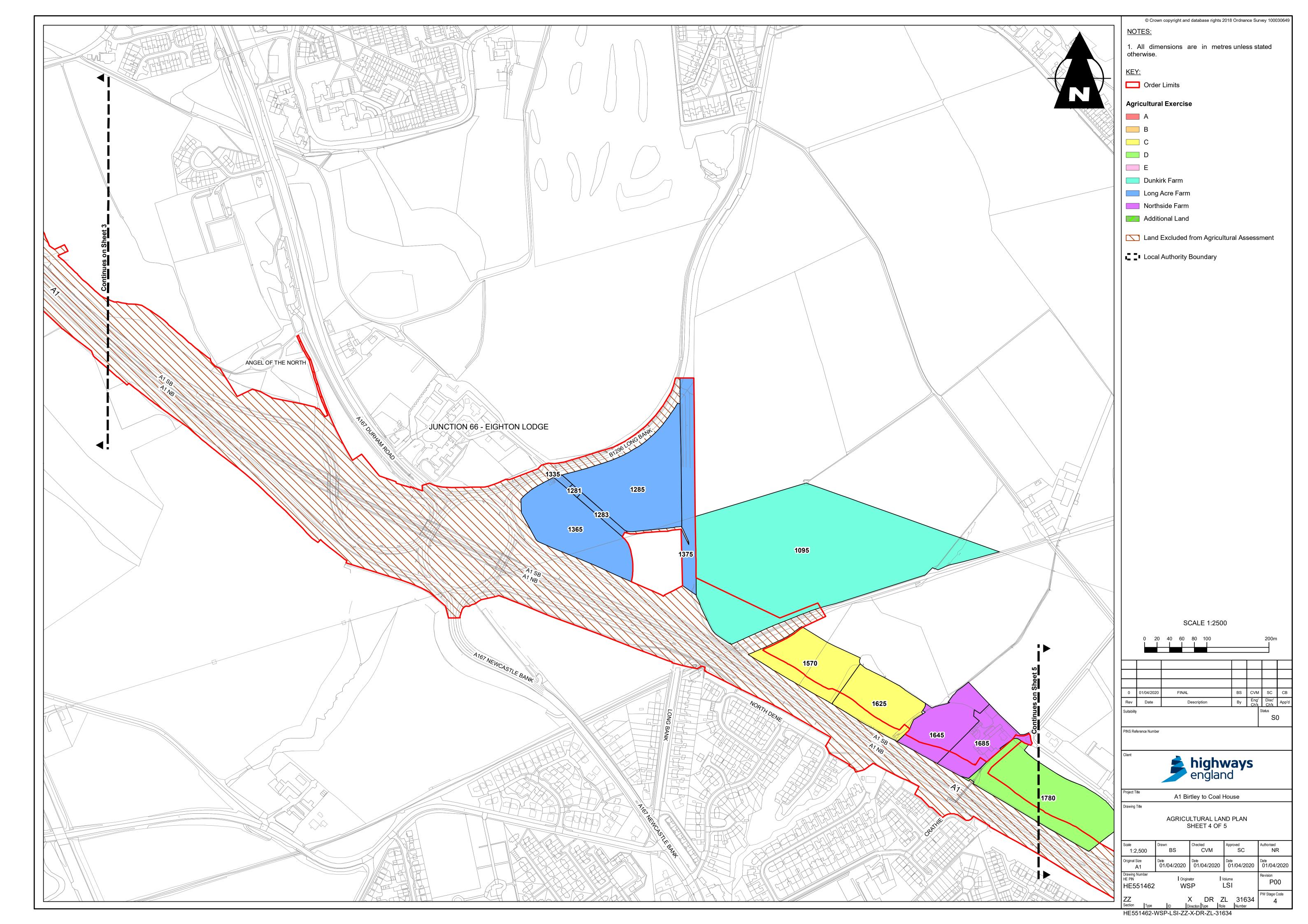
# **Appendix A**

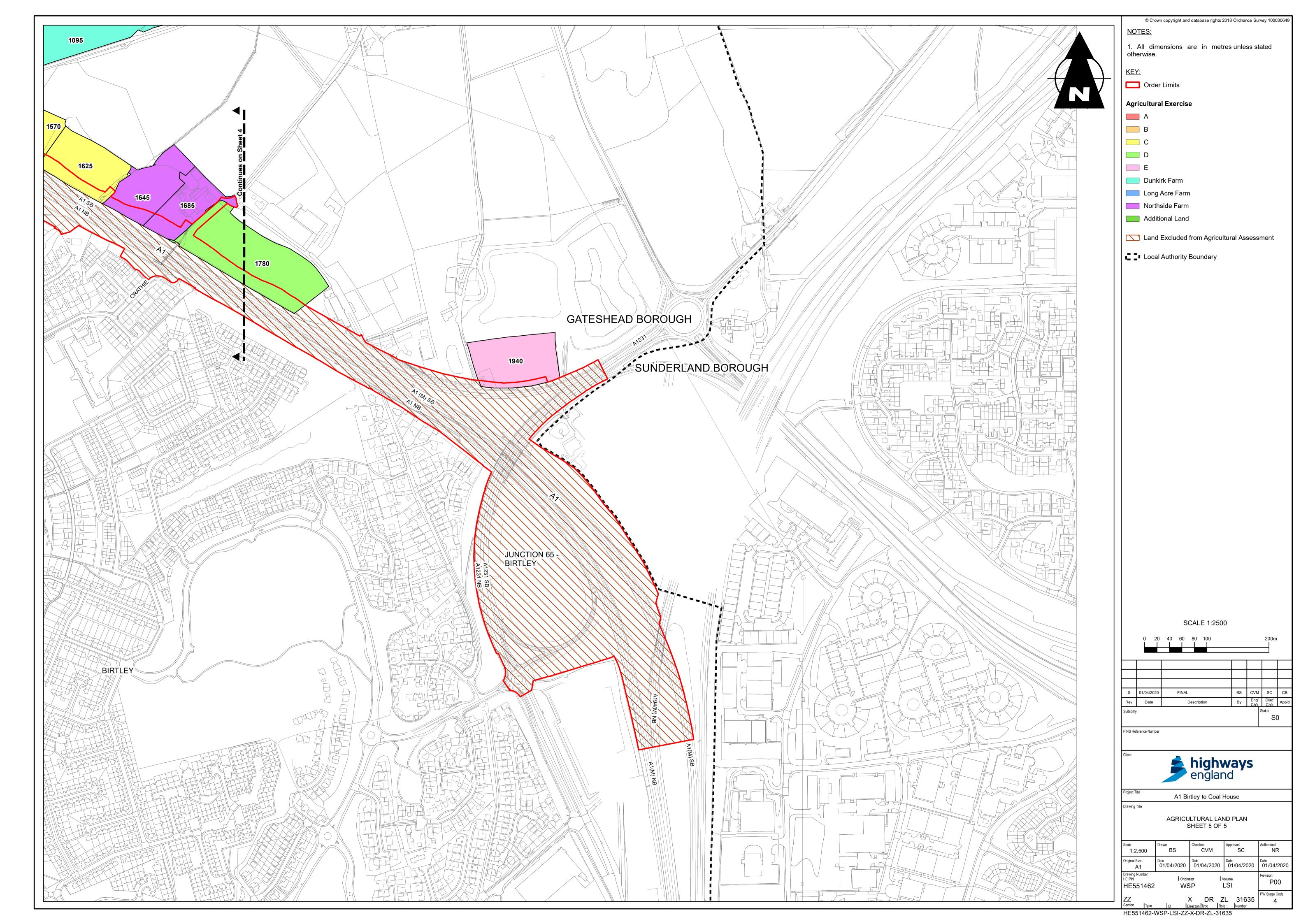
**AGRICULTURAL LAND PLAN** 











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