



# One Earth Solar Farm

**Preliminary Environmental Information Report [EN010159]**

**Chapter 18: Socio-Economics**

May 2024

One Earth Solar Farm Ltd

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## 18. Socio-Economics

### Summary of Preliminary Likely Significant Effects

- 18.1. This Chapter concludes there are likely significant environmental effects of our Project on socio-economics during the construction, operation and decommissioning phases. These include significant positive effects on employment, both short-term during construction and long-term during operation, as a result of direct and indirect job creation. Additionally, there are likely significant positive effects on Public Rights of Way during operation, as a result of enhancements and new permissive routes.
- 18.2. As part of preparing our DCO application, further design development will enable a more detailed assessment of the significance of these effects. The results of this will be detailed in our Environmental Statement (ES) submitted as part of the application.

### Introduction

- 18.3. This Chapter of the PEIR has been prepared by Logika and presents the likely significant environmental socio-economic effects of our Project. Socio-economics is defined as effects on people arising from a combination of social and economic factors. Article 4(2) of Schedule 4 the Town and Country Planning (Environmental Impact Assessment) Regulation 2017 states:
- “The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on [...] population”.*
- 18.4. As such, this chapter provides this assessment, focussing on specific effects on populations at different spatial scales.
- 18.5. The experience of the consultants that have prepared this chapter, who are competent experts for the purpose of the EIA Regulations, is set out in Appendix 1-1. It is based on the environmental information to date (which is detailed in this Chapter), as well as the current description of our Project as set out in **Chapter 4: Our Project**.
- 18.6. This Chapter is supported by more detailed information in:
- > **Appendix 18-1: Legislation, Policy and Guidance.**
- 18.7. In addition, the Chapter is supported by the following chapters in Volume 1:
- > **Chapter 9: Land and Soils** (note this contains more detailed assessment of agricultural land uses and potential effects)
  - > **Chapter 15: Carbon and Climate Change**

## Current Socio-Economic Conditions

### Study Areas

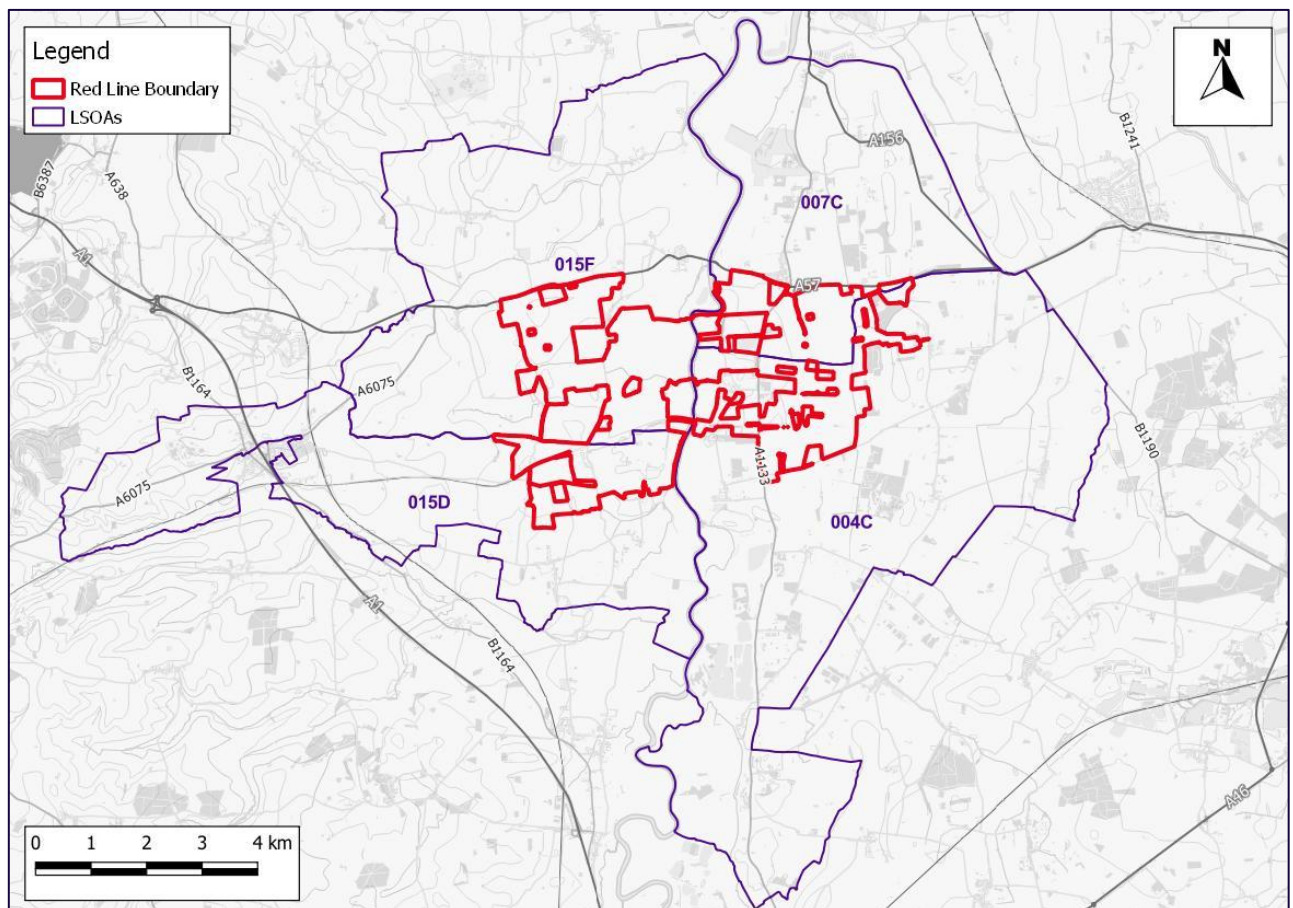
- 18.8. The Site of our Project comprises an area of approximately 1,500 Hectares (HA) to the east and west of a section of the River Trent which extends broadly between the A57 in the north, toward the villages of High Marnham and South Clifton to the south, Skegby to the west and toward Thorney to the east. Our Site is currently predominantly used for agriculture and comprises areas within both Nottinghamshire and Lincolnshire, in Bassetlaw, Newark and Sherwood and West Lindsey districts, within the East Midlands region.
- 18.9. The potential for likely significant effects of our Project (such as additional job creation) are assessed against a baseline that takes into account the social and economic conditions at the spatial level most relevant to the potential likely significant effect. These differ in each case and in the assessment below particular characteristics or trends in one area (i.e. the “local” area) are compared and contrasted with others (e.g. regional). The spatial levels are described below in **Table 18-1 and Figures 18-1 to 18-3**.

**Table 18-1: Spatial Levels**

Spatial Level	Study Area
Site	The area within the boundary of our Site (see the site boundary in <b>Figure 3-1 in Chapter 3: Description of the Site and Surrounding Area</b> ). Illustrated in <b>Figure 18-1</b> .
Local Area	An area comprising four Lower-Layer Super Output Areas (LSOA) that our Site intersects. Illustrated in <b>Figure 18-1</b> . Where baseline data is not available at this level, the combined area of the three electoral wards that our Site intersects will be used. Illustrated in Figure 18-2. Where this is not available, data for Districts (see below) will be used. Illustrated in <b>Figure 18-3</b> .  Note: LSOAs typically contain 400-1,200 households. Both LSOA and ward area cover a larger area than our Site, but are the closest areas for which published socio-economic data is available. At smaller areas, published socio-economic data is typically prone to a greater margin for error. As such it presents a broad approximation of socio-economic characteristics in and around the Site itself.
District Areas / Three Districts	Our Site falls within three District Council areas (Bassetlaw, Newark and Sherwood and West Lindsey).

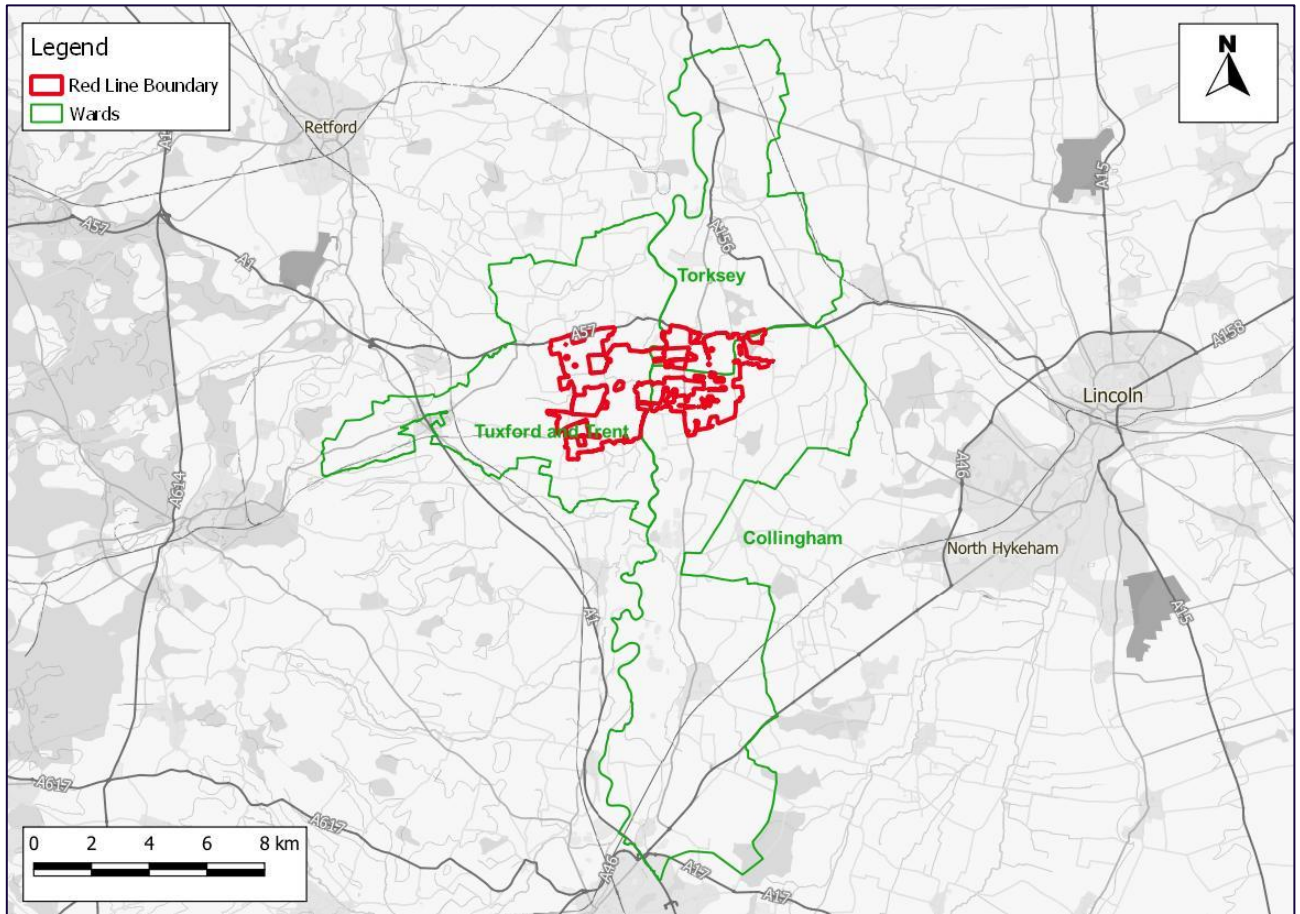
Spatial Level	Study Area
Labour catchment area	The area within which a majority of the existing workforce in the Local Area lives (i.e. the place of residence of those whose place of employment is within the Local Area). This indicates the approximate area within which new employees at the Site may be drawn this is investigated with reference to Census data in <b>Table 18-2</b> .
Region	East Midlands (illustrated in <b>Figure 18-1</b> ).
National	England

Figure 18-1: Site and LSOA Boundaries



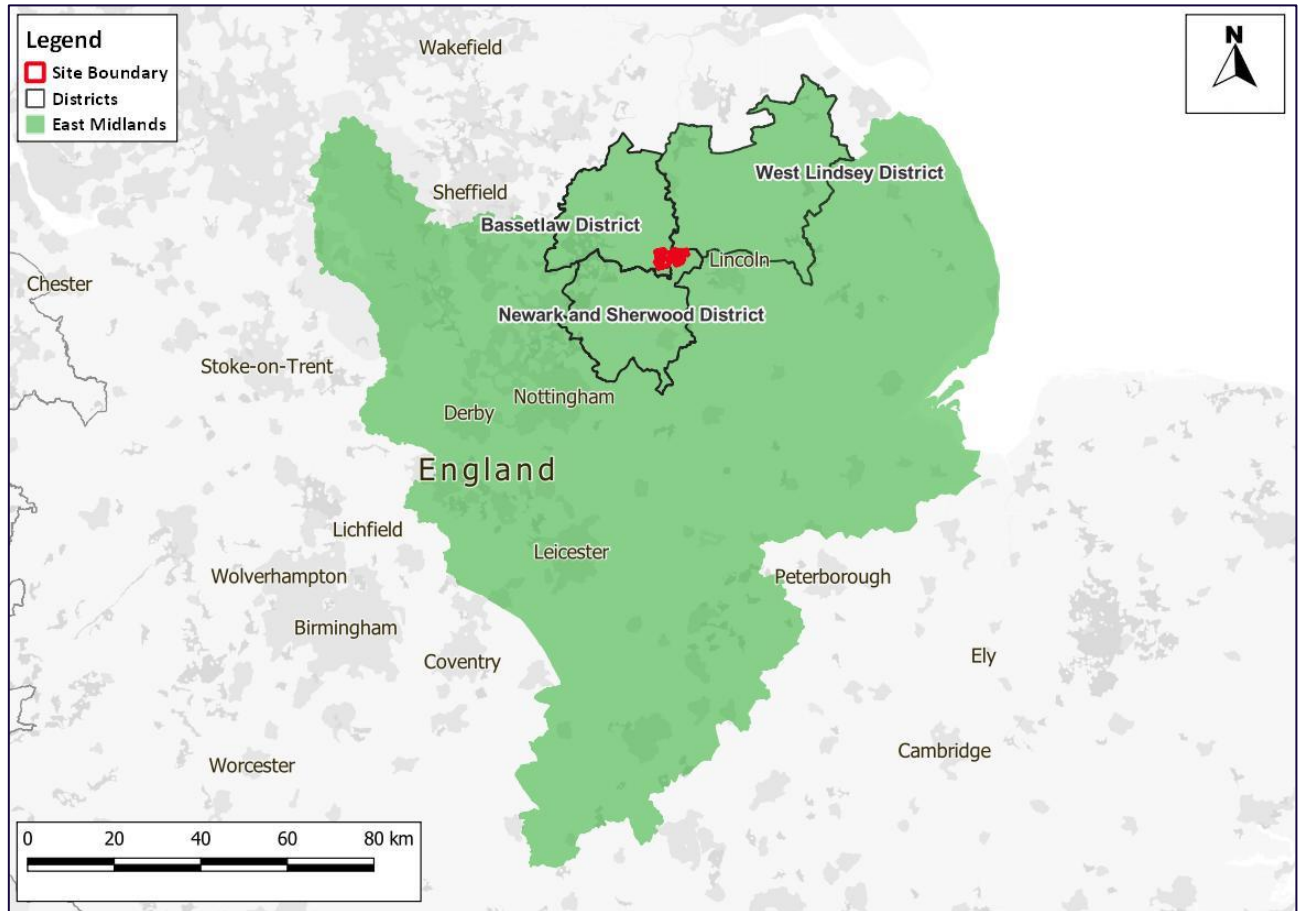
Contains Ordnance Survey data © Crown copyright and database right 2024. Ordnance Survey licence number 100046099. Additional data sourced from third parties, including public sector information licensed under the Open Government Licence v1.0. These are 2021 LSOAs. The four LSOAs are Bassetlaw 015D (E01028037), Bassetlaw 015F (E01028039), Newark and Sherwood 004C (E01028317) and West Lindsey 007C (E01026409). Note in some cases in the assessment below we use 2011 LSOA Boundaries, this reflects data available. A visual inspection of the boundaries suggests no substantive differences between the two that would impact the conclusions of this assessment.

Figure 18-2: Site and Ward Boundaries



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Figure 18-3: Site, District and Regional Boundaries



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18.10. The table below presents data from the 2011 Census on the usual place of residence of those whose place of work is the four LSOAs listed in **Figure 18-1** (i.e. the local area). The numbers related to those aged 16 and over in employment the week before the census. Note this data is not taken from the 2021 Census as this specific data source has been discontinued. Overall, it shows just over 2,000 people may be working in the local area. Of these, most live in the District of Bassetlaw (32%), a further 28% live in Newark and Sherwood and a further 10% in West Lindsey. Smaller numbers reside in Lincoln, North Kesteven and Mansfield. Together this area is referred to as the labour catchment area. Whilst the precise location of employees will differ based on the specific skills needs and labour supply (and more specialist roles may be required from further afield), it is likely that most employees would be drawn from within this area.

Table 18-2: Labour catchment area <sup>a</sup>

Currently residing in	Number	Cumulative %
Bassetlaw	649	32%

Currently residing in	Number	Cumulative %
Newark and Sherwood	569	59%
West Lindsay	198	69%
Lincoln	96	74%
North Kesteven	85	78%
Mansfield	84	82%
Total resident employees	2,055	100%

<sup>a</sup> WF01BEW – Location of usual residence and place of work 2011 Census

- 18.11. **Table 18-2** describes the study area considered for each of the socio-economic impacts considered in this assessment and the rationale for using these areas.

**Table 18-2: Study Area by Impact**

Impact	Study Area	Rationale
Contribution to net Zero and Greenhouse Gas (GHG) emission reduction	National	As detailed in <b>Chapter 15: Carbon and Climate Change</b> , our Project is expected to materially contribute toward GHG emission reductions with the associated benefits to current and future generations. Given the role of Nationally Determined Contributions (NDCs) under the Paris Agreement, such effects are considered at a national level <sup>1</sup> . Note this is assessed and reported in <b>Chapter 15: Carbon and Climate Change</b> .

<sup>1</sup> <https://www.gov.uk/government/publications/the-uks-nationally-determined-contribution-communication-to-the-unfccc>



Impact	Study Area	Rationale
Employment and investment	The Site, LSOA, District, labour catchment area and Regional levels.	Potential likely significant effects of our Project include changes in employment within our Site during construction, operation and decommissioning. This might result from changes in land use as well as additional jobs and training opportunities created via our Project. Such changes will also be considered at LSOA, District and Regional levels for context. We also consider indirect effects in supply chains the wider economy using economic multipliers.
Public Rights of Way (PRoW)	Area within 500m of the Site.	Potential likely significant effects relate to changes in the availability of PRoWs through temporary closures during construction and the benefits of new permissive paths. This will mainly be within the Site boundary, but usage of routes close to the site may also be indirectly impacted by any changes to PRoWs within the Site.
Demand for accommodation from construction workers	The local area, and labour catchment area	Potential likely significant effects on accommodation providers/business owners from increased demand for local accommodation during construction of the project.
Local amenity – recreational/leisure facilities and open space	Our Site	Potential likely significant effects relating to the change in use of recreation facilities within our Site will be considered.

### Collection of Socio-Economic Data

- 18.12. Baseline socio-economic data has been gathered to guide the assessment of socio-economic impacts described in **Table 18-2**. The following published data sources have been used to establish the existing socio-economic conditions within the relevant study areas:

- > 2011<sup>2</sup> and 2021<sup>3</sup> Census Data;
- > Labour Force Survey<sup>4</sup>;
- > Annual Population Survey<sup>5</sup>;
- > Business Register and Employment Survey<sup>6</sup> all available via Office for National Statistics Nomis<sup>7</sup>;
- > Land Use and Livestock<sup>8</sup>; and
- > English Indices of Deprivation<sup>9</sup>.

## Current Results

### Dwellings and Population

18.13. **Table 18-3** shows the number of dwellings at each spatial level in the current baseline, according to the 2021 Census.

**Table 18-3: Number of Dwellings<sup>a</sup>**

Area	Number of Dwellings
LSOAs	2,581
Bassetlaw	51,460
Newark and Sherwood	53,333

<sup>2</sup> Office for National Statistics (2011) 2011 Census. Available: <https://www.ons.gov.uk/census/2011census/2011censusdata>

<sup>3</sup> Office for National Statistics (2021) 2021 Census. Available: <https://www.ons.gov.uk/census>

<sup>4</sup> Office for National Statistics (2022) Labour Force Survey. Available: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi>

<sup>5</sup> Office for National Statistics (2022) Annual Population Survey. Available: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi>

<sup>6</sup> Office for National Statistics (2022) Business Register and Employment Survey. Available: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi>

<sup>7</sup> Office for National Statistics (2024) Nomis. Available: <https://www.nomisweb.co.uk/>

<sup>8</sup> Department for Environment, Food and Rural Affairs (2022) Structure of the agricultural industry in England and the UK at June 1 2022. Available: <https://assets.publishing.service.gov.uk/media/62c40b06e90e077485f509d5/structure-june-eng-localauthority-05jul22.ods>

<sup>9</sup> Ministry of Housing, Communities and Local Government (2019) English Indices of Deprivation. Available: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>

Area	Number of Dwellings
West Lindsey	42,345
Combined Districts	147,138
East Midlands	2,037,334
England	23,436,086

<sup>a</sup> 2021 Census dataset TS003 – Household composition. Total: All households.

- 18.14. The baseline resident population of the different areas (see **Table 18-1**) according to the 2011 and 2021 Census along with changes are presented in **Table 18-4**. The total population of the Local Area (note this is a much larger area than our Site itself) comprised just under 6,000 people in 2021, a 5% increase over 2011. This comprised about 2% of the combined District population, which amounted to just over 340,000 in 2021. The population of the Local Area grew at a slower rate than the three Districts, the regional or national averages between 2011 and 2021.

**Table 18-4: Population at Different Spatial Levels**

Area	2011 Population	2021 Population	Change
Combined LSOAs	5,631 (2% of combined District population)	5,911 (2% of combined District population)	+5.0%
Combined wards	- <sup>c</sup>	13,081 (4% of combined District population)	-
Bassetlaw	112,863 (3% of combined East Midland population)	119,533 (2% of combined East Midland population)	+5.9%
Newark and Sherwood	114,817 (3% of combined East Midland population)	124,452 (3% of combined East Midland population)	+8.4%
West Lindsey	89,250 (2% of combined East Midland population)	96,405 (2% of combined East Midland population)	+8.0%
Combined District Population	316,930 (7% of East Midland population)	340,390 (7% of East Midland population)	+7.4%

Area	2011 Population	2021 Population	Change
East Midlands	4,533,222 (9% of England population)	4,882,232 (9% of England population)	+7.7%
England	53,012,456	56,989,570	+7.5%

<sup>a</sup> 2011 Census dataset KS101EW – Usual resident population.

<sup>b</sup> 2021 Census dataset TS001 – Number of usual residents in households and communal establishments.

<sup>c</sup> The ward boundaries changed between 2011 and 2021, so the populations cannot be compared on a like for like basis.

- 18.15. **Table 18-5** provides a more granular breakdown of the local population by age. It shows the population in the Local Area is generally older than the regional and national average.

**Table 18-5: Age of Population in 2021<sup>a</sup>**

Area	0-19 years old	20-64 years old	65+ years old
Combined LSOAs	1,077 (18.3%)	3,150 (53.3%)	1,694 (28.7%)
Bassetlaw	24,921 (20.8%)	66,802 (55.9%)	26,081 (21.8%)
Newark and Sherwood	25,934 (20.8%)	69,355 (55.7%)	27,668 (22.2%)
West Lindsey	19,654 (20.4%)	51,514 (53.4%)	23,985 (24.9%)
Combined District Population	70,509 (20.7%)	187,671 (55.1%)	77,734 (22.8%)
East Midlands	1,114,116 (22.8%)	2,814,160 (57.6%)	951,775 (19.5%)
England	13,057,870 (22.9%)	33,030,875 (58.0%)	10,401,303 (18.3%)

<sup>a</sup> 2021 Census dataset TS007 – Age by single year.

- 18.16. **Table 18-6** summarises 2021 Census data on the self reported general health of the population.

**Table 18-6: General Health of Population in 2021<sup>a</sup>**

Area	Very Good Health (%)	Good Health	Fair Health	Bad Health	Very Bad Health
Combined LSOAs	2,673 (45.2%)	2,115 (35.9%)	795 (13.5%)	252 (4.2%)	77 (1.3%)

Area	Very Good Health (%)	Good Health	Fair Health	Bad Health	Very Bad Health
Bassetlaw	51,679 (43.9%)	40,938 (34.8%)	17,862 (15.2%)	5,618 (4.8%)	1,707 (1.4%)
Newark and Sherwood	54,954 (44.7%)	43,072 (35%)	17,806 (14.5%)	5,553 (4.5%)	1,571 (1.3%)
West Lindsey	41,693 (43.8%)	34,181 (35.9%)	13,948 (14.7%)	4,227 (4.4%)	1,104 (1.2%)
Combined District Population	148,326 (44.1%)	118,191 (35.2%)	49,616 (14.8%)	15,398 (4.6%)	4,382 (1.3%)
East Midlands	2,256,798 (46.2%)	1,699,659 (34.8%)	662,825 (13.6%)	202,774 (4.2%)	57,998 (1.2%)
England	27,390,829 (48.5%)	19,040,735 (33.7%)	7,147,346 (12.7%)	2,248,255 (4.0%)	662,881 (1.2%)

<sup>a</sup> 2021 Census dataset T037 – General Health of all usual residents. Note the percentages are unweighted averages of the rates in each of the four LSOAs/ three districts.

- 18.17. As shown in **Table 18-6**, 45.2% of the local population had very good health, marginally above the rates in the three Districts, but slightly below the regional and national rate. Rates of those reporting good health in the Local Area were very similar to the three Districts but slightly above regional and national rates. Rates of those in bad health locally were marginally below the combined District rates, but similar to regional and marginally above national. Rates of those in very bad health were low and similar in all areas.

#### Labour market and economy

- 18.18. Labour market statistics are presented in **Table 18-8**.

**Table 18-8: Working Age Population and Economic Activity (2021) <sup>a b</sup>**

Area	All usual residents age 16 and over	Economically Active	Economically Active (Unemployed)	Economically Inactive
Combined LSOAs	5,063	2,820 (55.6%)	<100 (1.9%)	2,159 (42.9%)
Bassetlaw	97,370	55,821 (57.3%)	2,044 (2.1%)	40,088 (41.2%)
Newark and Sherwood	101,968	58,015 (56.9%)	2,115 (2.1%)	42,406 (41.6%)

Area	All usual residents age 16 and over	Economically Active	Economically Active (Unemployed)	Economically Inactive
West Lindsey	79,120	43,080 (54.4%)	1,754 (2.2%)	34,961 (44.2%)
Combined Districts	278,458	156,916 (56.2%)	5,913 (2.1%)	117,455 (42.3%)
East Midlands	3,998,047	2,300,518 (57.5%)	96,090 (2.4%)	1,604,166 (40.1%)
England	46,006,957	29,945,252 (57.5%)	1,312,729 (2.9%)	18,005,455 (39.1%)

<sup>a</sup> 2021 Census dataset TS066 – Economic activity status. Unemployed excludes full time students

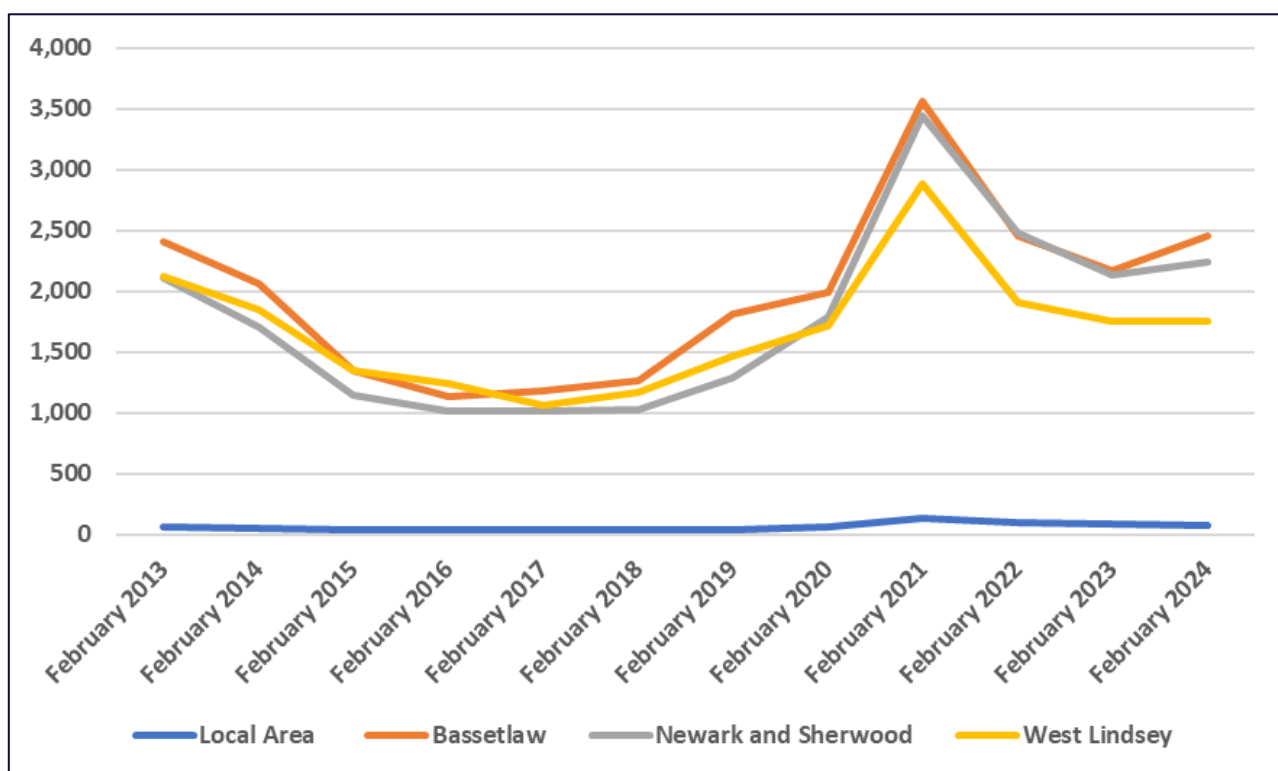
<sup>b</sup> Note the percentages are unweighted averages of the rates in each of the four LSOAs/ three districts

- 18.19. **Table 18-8** shows the economically active population in the Local Area, at around 56%, is marginally below the overall average for three Districts as well as the regional and national rates. The same patterns are reflected in economic inactivity rates. The table also shows data on those who are economically active but unemployed. Note this is a slightly different measure of unemployment to the claimant count data shown below as it includes all those looking for work but not necessarily in receipt of unemployment social security benefits. Hence the number is typically somewhat larger. Overall, these data suggest local unemployment rates were low in 2021 at less than 2%, similar to the three districts, but somewhat lower than regional and national unemployment rates.
- 18.20. In terms of skill levels, in 2021 the resident population of the local area had a similar proportion of with no formal qualifications (an average of 19.4%), to the three districts (an average of 19.6%) and the region (19.5%). This compares to 18.1% across England. Conversely, an average of 30.6% held qualifications at level 4 or above in the local area. This compares to an average of 27.9% in the three Districts, 29.1% in the region and 33.9% across England<sup>10</sup>.

<sup>10</sup> Source: 2021 Census TS067 – Highest level of qualification.  
<https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?theme=93>

- 18.21. **Figure 18-4** presents time series claimant count unemployment data between February 2013 and 2024 for the Local Area and Districts. These data show numbers who are unemployed and in receipt of social security benefit. Overall local unemployment is relatively low and stable, typically remaining under 100 people, the number increased over 2021 and 2022 as it did elsewhere, reflecting the disruption associated with COVID-19. There is some evidence that unemployment rates have increased recently (in Bassetlaw and Newark and Sherwood), and a similar pattern is evident nationally. Numbers have remained stable in West Lindsay, which reflects the picture in the region.
- 18.22. Claimant count rates are not available for the Local Area, but rates in the three Districts over the same period mirror national patterns. These show a steadily decreasing rate of unemployment to 2019, before increasing sharply over 2020 and 2021, declining thereafter. As of February 2024 claimant rates in the three districts stood at between 3.0% to 3.4%, somewhat lower than national (3.9%) and regional (3.5%).

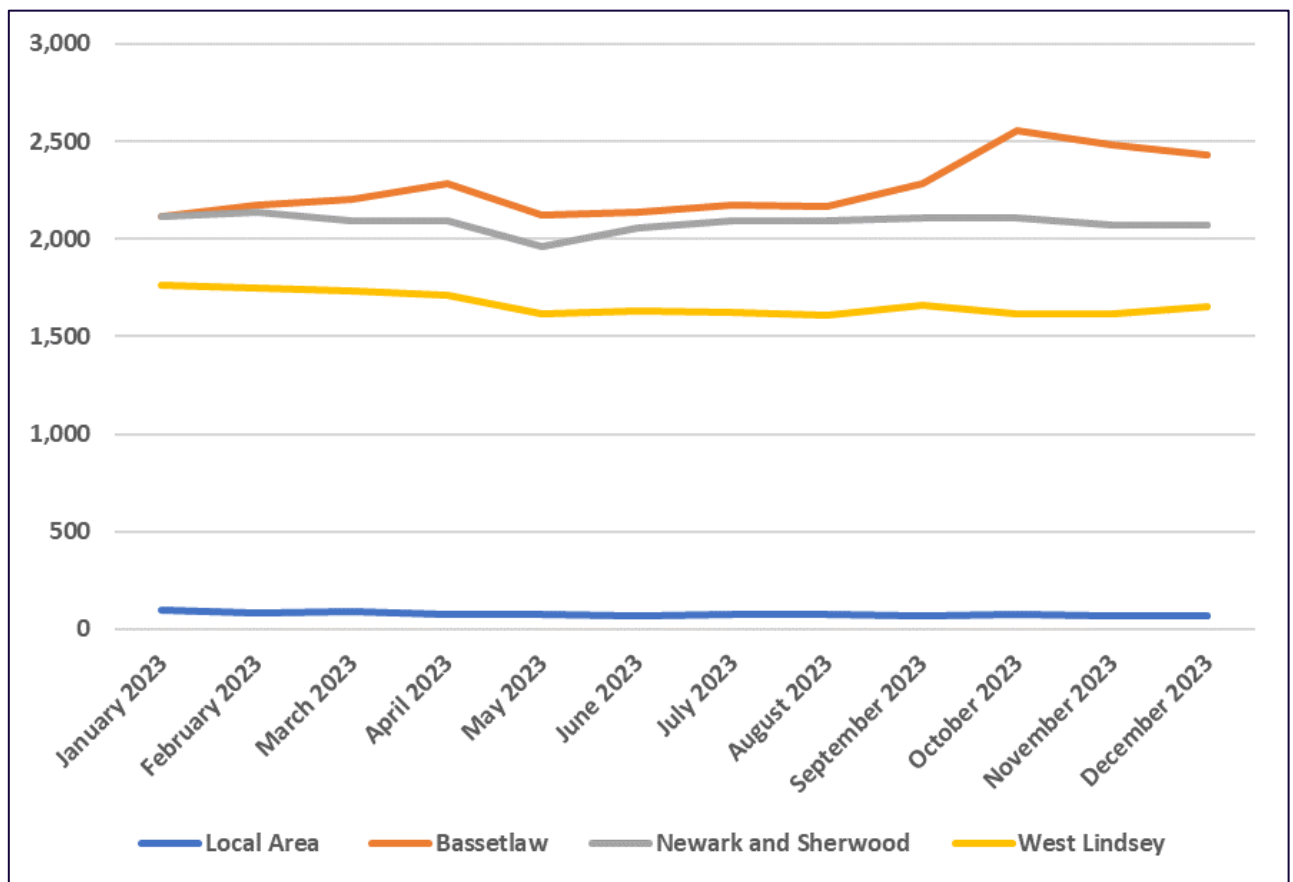
Figure 18-4: Claimant Count Unemployment Trends (2013 to 2024) (Absolute Numbers) <sup>a</sup>



<sup>a</sup> Claimant Count by Sex and Age, NOMIS All categories Age 16+. Note the Local Area comprises the same four LSOA but based on 2011 rather than 2021 LSOA Boundaries. A visual inspection of the boundaries suggests no substantive differences between the two that would impact the conclusions of this assessment.

18.23. **Figure 18.5** shows the same data, but over the course of a single year. This indicates the extent of seasonal unemployment (i.e. in some sectors, typically those with greater reliance on visitor expenditure such as food, accommodation or retail, unemployment tends to increase in the winter months and decrease in the summer). Employment in agriculture also often exhibits seasonality, around harvesting activity. The data suggest limited if any such trends in the Local Area and only modest changes in one District (Bassetlaw), which may reflect the wider economic context rather than any seasonal change in employment demand. Additional, data on seasonal employment will be reported in the ES.

Figure 18-5: Claimant Count Seasonal Trends (2023) (Absolute Numbers) <sup>a</sup>

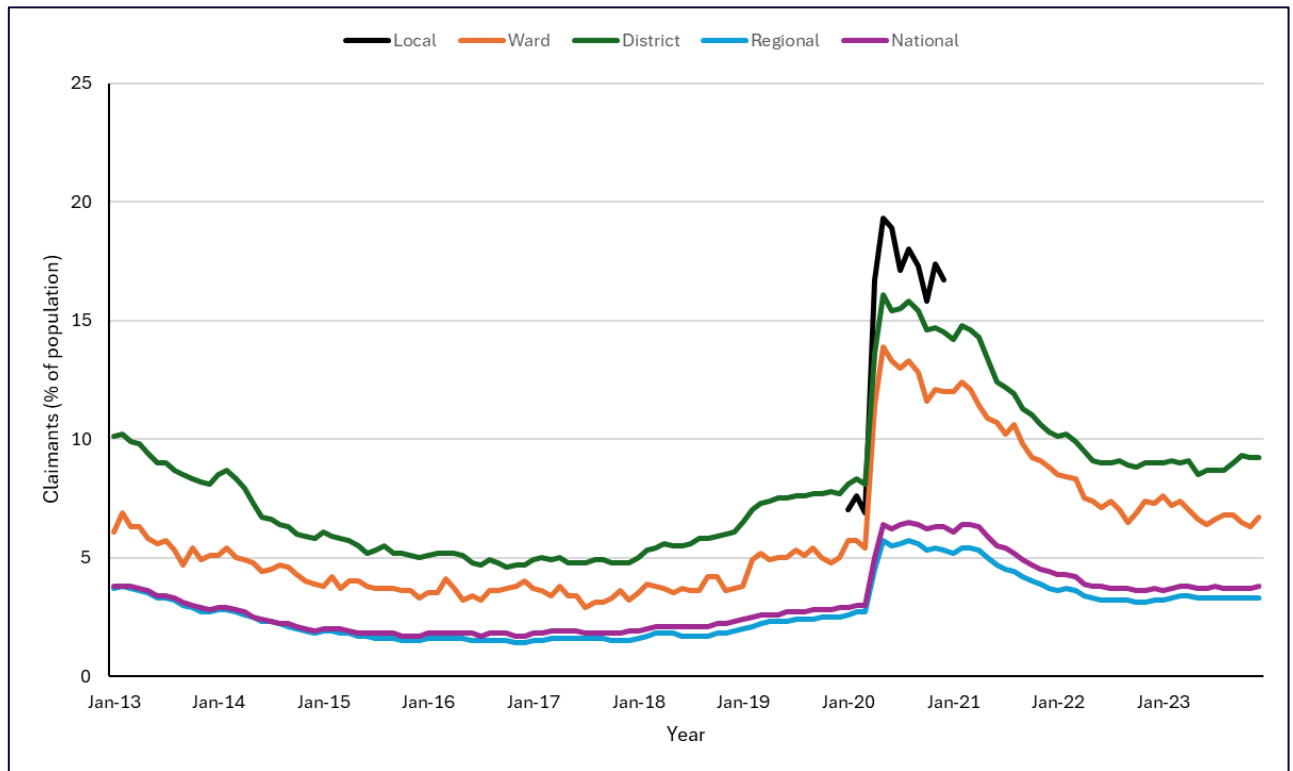


<sup>a</sup> Claimant Count by Sex and Age, NOMIS All categories Age 16+. Note the Local Area comprises 2011 rather than 2021 LSOA Boundaries. A visual inspection of the boundaries suggests no substantive differences between the two that would impact the conclusions of this assessment.

18.24. As presented in **Figure 18-6**, the benefit claimant rate (i.e. percentage of people aged 16 and over who claim benefits) at the ward level has remained higher than at the regional and national levels consistently since 2013, but is more comparable to (albeit still higher than) the district level average. Data for the Local Area (based on LSOA boundaries) is only available for the year 2020 to 2021 and suggest somewhat higher rates. The overall patterns mirror those for claimant unemployment described above.



Figure 18-6: Benefit Claimants (% of population)<sup>a</sup>



<sup>a</sup> 2021 Census dataset – Claimant count by sex and age.

18.25. **Table 18-9 and 18-10** set out data on employment by sector, taken from the Business Register and Employment Survey (BRES). **Table 18-9** shows data by sector for 2022 (latest data) in the Local Area, the three Districts, the region and nationally.

Table 18-9: Employment by sector (2022)<sup>a,b</sup>

	Local Area		Districts		East Midlands		England	
	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry & fishing	15	0.6%	5,500	4.0%	40,000	1.8%	362,000	1.3%
Mining, quarrying & utilities	30	1.1%	1,800	1.3%	31,000	1.4%	308,000	1.1%
Manufacturing	530	19.9%	17,500	12.8%	246,000	11.0%	2,057,000	7.4%
Construction	395	14.8%	10,000	7.3%	126,000	5.6%	1,381,000	4.9%

	Local Area		Districts		East Midlands		England	
Motor trades	145	5.5%	3,900	2.9%	63,000	2.8%	497,000	1.8%
Wholesale	180	6.8%	4,750	3.5%	98,000	4.4%	1,057,000	3.8%
Retail	45	1.7%	11,500	8.4%	185,000	8.3%	2,358,000	8.4%
Transport & storage (inc postal)	290	10.9%	9,800	7.2%	144,000	6.4%	1,423,000	5.1%
Accommodation & food services	155	5.8%	12,500	9.2%	168,000	7.5%	2,198,000	7.9%
Information & communication	45	1.7%	3,000	2.2%	60,000	2.7%	1,306,000	4.7%
Financial & insurance	0	0.0%	1,325	1.0%	36,000	1.6%	919,000	3.3%
Property	60	2.3%	2,300	1.7%	37,000	1.7%	571,000	2.0%
Professional, scientific & technical	130	4.9%	7,500	5.5%	154,000	6.9%	2,642,000	9.5%
Business administration & support services	250	9.4%	8,000	5.9%	196,000	8.7%	2,529,000	9.0%
Public administration & defence	0	0.0%	4,750	3.5%	87,000	3.9%	1,173,000	4.2%
Education	280	10.5%	9,000	6.6%	186,000	8.3%	2,322,000	8.3%
Health	75	2.8%	18,000	13.2%	299,000	13.3%	3,616,000	12.9%

	Local Area		Districts		East Midlands		England	
Arts, entertainment, recreation & other services	35	1.3%	5,250	3.8%	85,000	3.8%	1,234,000	4.4%
<b>Total</b>	<b>2,660</b>	100%	<b>136,375</b>	100%	<b>2,241,000</b>	100%	<b>27,953,000</b>	100%

<sup>a</sup> Business Register and Employment Survey – Open access. Employment Count and Percentage. Note the Local Area comprises 2011 rather than 2021 LSOA Boundaries. A visual inspection of the boundaries suggests no substantive differences between the two that would impact the conclusions of this assessment.

- 18.26. **Table 18-9** shows in 2022 there were some 2,660 people in employment in the Local Area. Of these, the majority were employed in Manufacturing (19.9%), followed by Construction (14.8%), Transport and Storage (10.9%) and Education (10.5%) respectively. Whilst Local Area data are only approximate, the data suggests Agriculture employs only a small number locally (0.6%).
- 18.27. **Table 18-10** shows the same employment data but captures change between 2015 and 2022.

**Table 18-10: Employment change by sector (2015- 2022)<sup>a</sup>**

	Local Area		Districts		East Midlands		England	
	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry & fishing	5	0.2	500	0.4	2,000	0.9	20,000	0.7
Mining, quarrying & utilities	30	1.1	-900	-0.7	-6,000	-2.7	31,000	1.1
Manufacturing	-205	-7.7	0	0.0	-24,000	-10.7	-4,000	-1.4
Construction	120	4.5	1,500	1.1	18,000	8.0	186,000	6.7
Motor trades	80	3.0	1,150	0.8	19,000	8.5	19,000	0.7
Wholesale	-55	-2.1	250	0.2	5,000	2.2	1,000	0.04

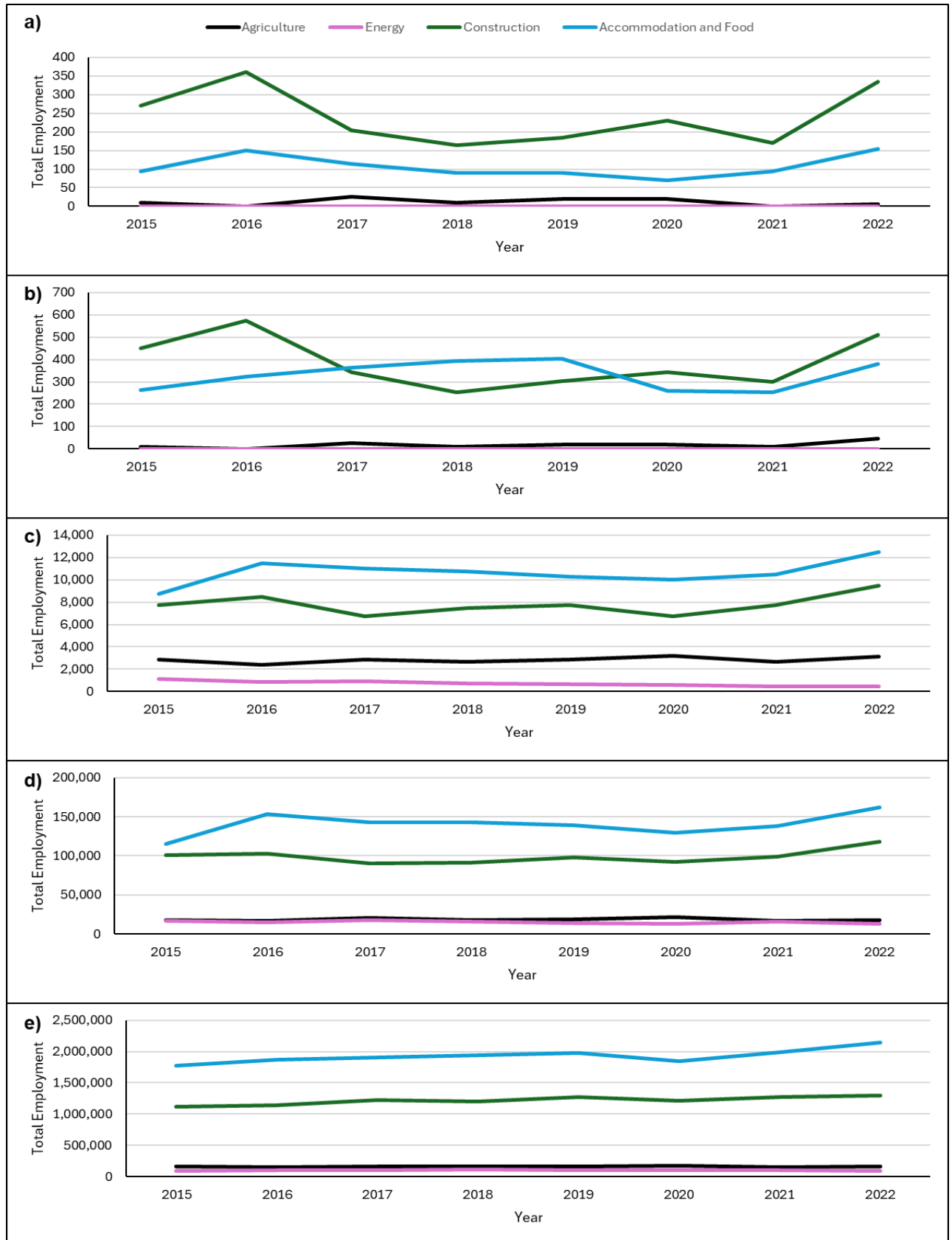
	Local Area	Districts		East Midlands		England	
Retail	-115	-4,500	- 28.1	-35,000	-15.9	-191,000	-7.5
Transport & storage (inc postal)	-55	3,550	56.8	40,000	38.5	213,000	17.6
Accommodation & food services	50	3,250	35.1	46,000	37.7	356,000	19.3
Information & communication	30	825	37.9	15,000	33.3	189,000	16.9
Financial & insurance	0	175	15.2	0	0.0	7,000	0.8
Property	-30	300	15.0	10,000	37.0	82,000	16.8
Professional, scientific & technical	60	500	7.1	25,000	19.4	350,000	15.3
Business administration & support services	75	-750	-8.6	-17,000	-8.0	179,000	7.6
Public administration & defence	0	750	18.8	12,000	16.0	144,000	14.0
Education	10	-1,000	- 10.0	-3,000	-1.6	20,000	0.9
Health	35	3,500	24.1	43,000	16.8	379,000	11.7
Arts, entertainment, recreation & other services	-15	-250	-4.5	0	0.0	40,000	3.4

	Local Area	Districts		East Midlands		England	
<b>Total</b>	20	8,850	6.9	150,000	7.2	2,021,000	7.8

<sup>a</sup> Business Register and Employment Survey – Open access. Employment Count and Percentage. Note the Local Area comprises 2011 rather than 2021 LSOA Boundaries. A visual inspection of the boundaries suggests no substantive differences between the two that would impact the conclusions of this assessment.

- 18.28. Shown in **Table 18-10**, employment in the Local Area increased by a small amount (less than 1%) in that time. This compared to growth of just under 7% in the three Districts, just over that in the region and 7.8% nationally. Percentage change by sector in the Local Area is not shown as data at smaller areas are prone to greater levels of error and may be misleading, however the numbers suggest growth in construction, accommodation and food services and declines in manufacturing and retail, which would mirror wider trends.
- 18.29. Trends between 2015 and 2022 (the most recent year for which data are available) in numbers employed in agriculture, construction and energy, gas, steam and air conditioning supply (energy), accommodation and food industries are shown in greater detail given these have the potential to be more directly affected by our Project (**Figure 18-7**). The number of people employed in the agriculture and energy industries have remained generally stable since 2015 at all spatial levels, and these represent smaller industries in terms of overall employment numbers than construction and accommodation. At the local level, construction is the largest industry of the four, whereas at district, regional and national levels accommodation and food is larger. At all spatial levels, employment numbers in both construction and accommodation and food have been increasing in recent years.

Figure 18-7: Employment Trends 2015 – 2022 by Industry at a) local, b) ward, c) district, d) regional and e) national levels <sup>6</sup>



<sup>a</sup> Business Register and Employment Survey – Open access. Industry by Section. Employment Count. Note “energy” is energy, gas, steam and air conditioning supply’.

18.30. **Table 18-11** shows the total Gross Value Added (GVA) per head in 2021. GVA is metric which measures the contribution of an individual, company, or economic sector to the economy. On average in 2021 GVA per head was lower in the three Districts than regional and national levels.

**Table 18-11: Gross Value Added Per Head <sup>a</sup>**

Area	GVA (£m)	GVA Per Head
Bassetlaw	2,505,000	£20,957
Newark and Sherwood	2,676,000	£21,502
West Lindsey	1,723,000	£17,873
Combined Districts	6,904,000	£20,283
East Midlands	118,398,000	£24,251
England	1,760,438,000	£30,891

<sup>a</sup> UK small area gross value added estimates disaggregated from the UK National Accounts. Total GVA for the district, region and national levels were divided by the populations from the 2021 Census (see Table 18-3).

### Socio-economic Deprivation

18.31. **Figure 18-8** presents the Index of Multiple Deprivation (IMD)<sup>9</sup> in the vicinity of the Site. The IMD is the official measure of relative deprivation in England. It defines deprivation to encompass a range of an individual’s living conditions<sup>11</sup>. The assessment is determined through a weighted combination of seven factors:

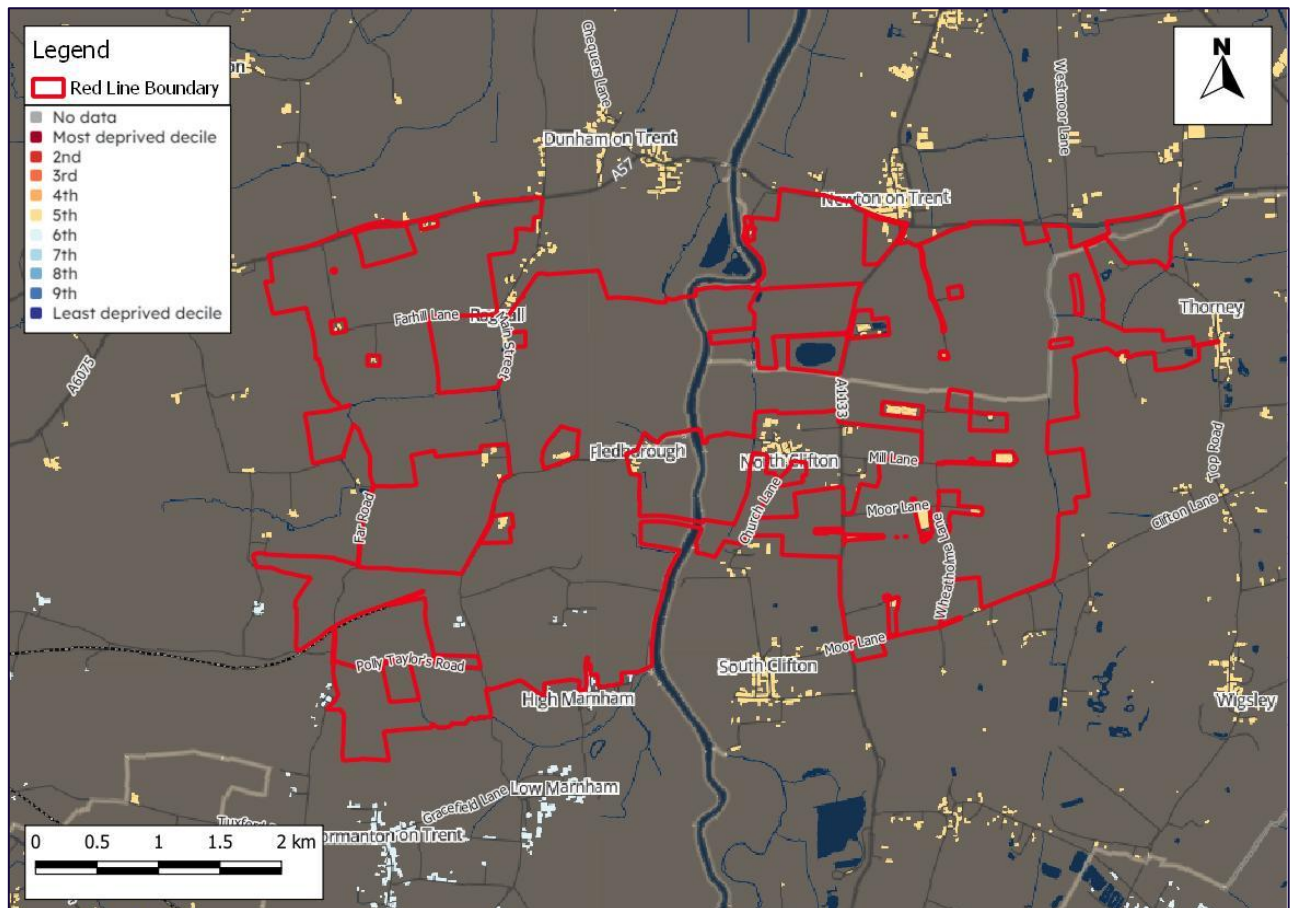
- > Income;
- > Employment;
- > Education, Skills and Training;
- > Health Deprivation and Disability;
- > Crime;
- > Barriers to Housing and Services; and
- > Living Environment Deprivation.

11

[https://assets.publishing.service.gov.uk/media/5d8e26f6ed915d5570c6cc55/loD2019\\_Statistical\\_Release.pdf](https://assets.publishing.service.gov.uk/media/5d8e26f6ed915d5570c6cc55/loD2019_Statistical_Release.pdf)

- 18.32. The areas in the vicinity of our Site generally fall within the 5<sup>th</sup> and 6<sup>th</sup> decile, indicating that the population experiences a level of deprivation that is approximately in line with the national average. According to the Index, Bassetlaw is the 108<sup>th</sup> most deprived out of the 316 national districts (3<sup>rd</sup> decile); Newark and Sherwood is the 148<sup>th</sup> most deprived (4<sup>th</sup> decile); and West Lindsey is the 146<sup>th</sup> (4<sup>th</sup> decile).

Figure 18-8: Index of Multiple Deprivation (2019) <sup>a</sup>



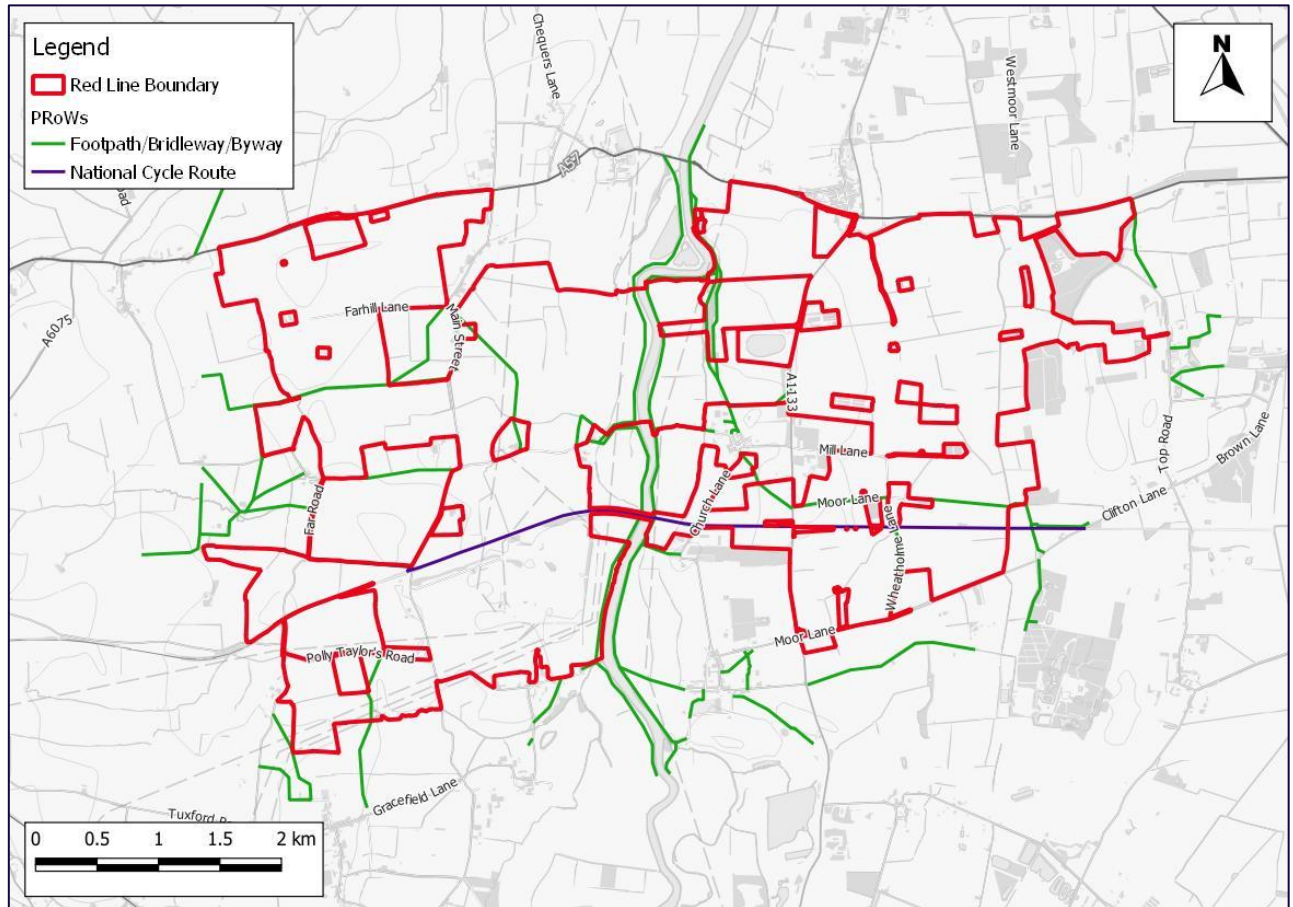
<sup>a</sup> The 2019 IMD overall index by district have been mapped by the Consumer Data Research Centre. Note the dark blue areas are waterbodies.

### Public Rights of Way

- 18.33. There are a number of PRoWs which pass through or are within 500m of our Site, as illustrated in **Figure 18-9**. These include routes along both the eastern and western banks of the River Trent, extending to the north of North Clifton, as well as several other, shorter routes that pass either through or close to our Site.
- 18.34. Route 647 on the National Cycle Network (part of the Sustans route) follows the route of the disused Lancashire, Derbyshire and East Coast Railway and passes from east to west across our Site, crossing the River Trent at the Fledborough Viaduct and following the northern site boundary of the former High Marnham Power Station.



Figure 18-9: Public Rights of Way



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### Local Amenity, Tourism and Leisure

- 18.35. The Culture and Sport Evidence (CASE) programme provides regional statistics on cultural and sporting attractions, use and visits. The 2010 report on the East Midlands notes that the regional “CASE economy” employs 119,000 people in 9,800 businesses. It contributed £2.3 billion in GVA and £1.1 billion per year in spend from domestic tourists. The regional was the destination for 13% of domestic tourist trips in 2008 and 4% of overseas visitors, who spent a total £386 million, some 3% of national expenditure<sup>12</sup>.

<sup>12</sup> [https://assets.publishing.service.gov.uk/media/5a756a1440f0b6360e473ef5/CASE-RREast\\_Midlands.pdf](https://assets.publishing.service.gov.uk/media/5a756a1440f0b6360e473ef5/CASE-RREast_Midlands.pdf)

- 18.36. Data from the Great Britain Tourism Survey provides further estimates of the volume and value of overnight trips taken by British residents in Great Britain. The latest data relates to Q3 2023. The East Midlands received 2.8 million visits in Q3 2022, which decreased to 2.2 million by Q3 2023. This comprised 8% of the total share of visits in England. Total spend from these visits amounted to £646 million, which had decreased to £459 million in Q3 2023. This comprised 6% of the total share of spend for England as a whole<sup>13</sup>.
- 18.37. The study area is sparsely populated, with the main residential areas being Dunham, Newton on Trent, North Clifton, South Clifton, High Marnham and Thorney. The main businesses are agricultural, with a small number of visitor attractions and other community facilities, as set out in **Figure 18-10** and **Table 18-12**. These have been identified using online mapping therefore does not represent an exhaustive list of all relevant receptors.

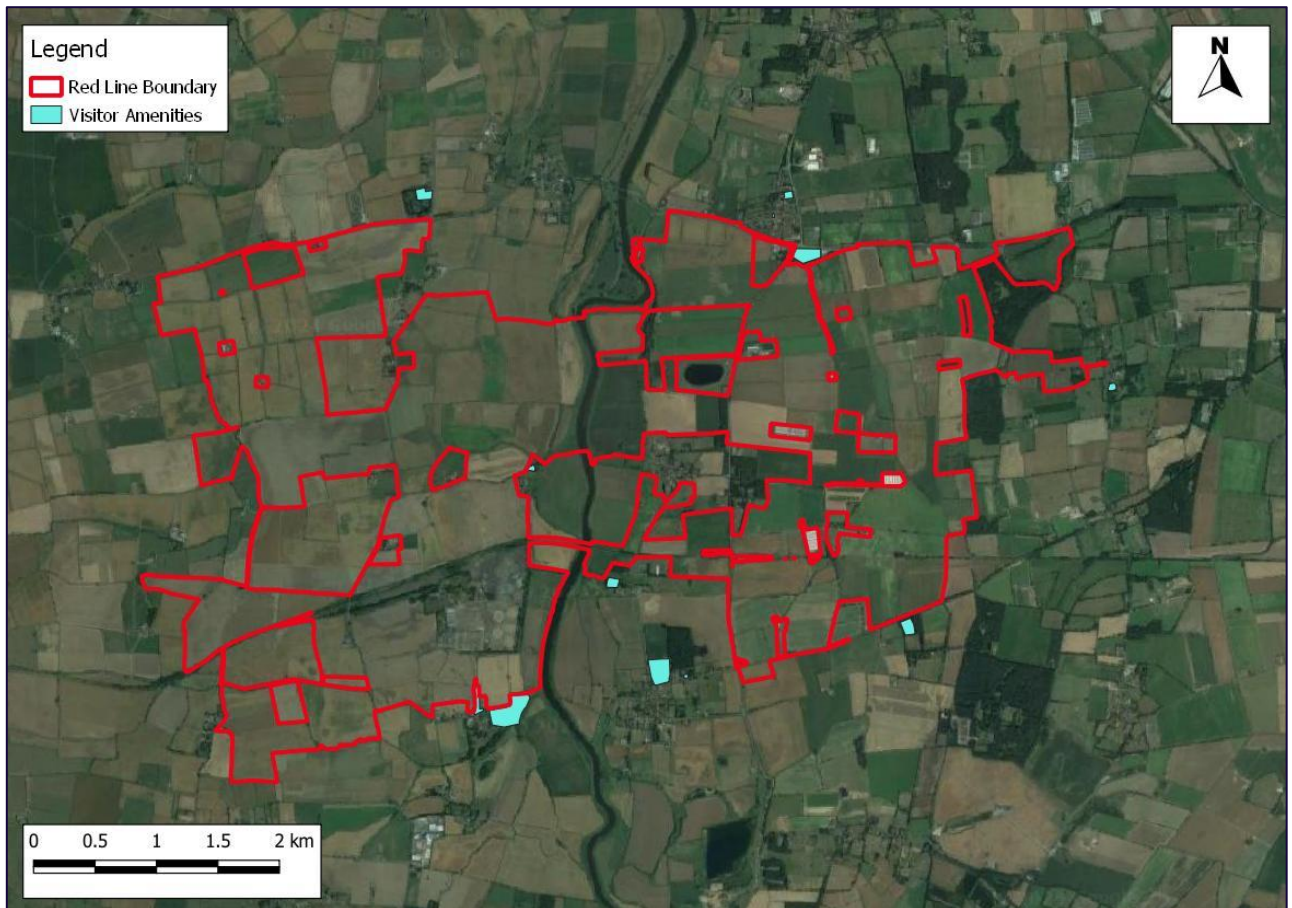
**Table 18-12: Community Facilities and Visitor Attractions**

Receptor	Description	Approximate distance from Site Boundary and Proposed Use
Dunham Primary School	School	160m (located on Laneham Road approx. 500m west of the village of Dunham). The field to the south, across the A57 potentially to be used for mitigation and enhancements, not PV panels.
Newton on Trent Wesleyan Church	Church	250m (located on Dunham Road in the centre of Newton on Trent). The field across the A57 to the west is not expected to be developed, however to the south it will potentially be used for PV panels and mitigation and enhancements.
Newton on Trent C of E Church	Church	430m (located on High Street in Newton on Trent). The field across the A57 to the south is potentially to be used for PV panels as well as mitigation and enhancements.
St Helen's Church	Church	100m (located on Main Street in Thorney). The nearest field to the west within our Site is potentially to be used for PV panels.

<sup>13</sup> <https://www.visitbritain.org/media/2973/download?attachment>

Receptor	Description	Approximate distance from Site Boundary and Proposed Use
St Gregory's Church	Church	<10m (located on Hollow Gate Lane in Fledborough). The field across Hollow Gate Lane to the west is potentially to be used for mitigation and enhancements, and the field to the south may be used for PV panels.
St George the Martyr	Church	60m (located on Church Lane). The fields to the west, north and east are potentially to be used for enhancements and mitigation, not PV panels.
Brownlow Arms	Pub	50m (located on Hollowgate Lane on the eastern edge of village of High Marnham near to the western bank of the River Trent). The field immediately to the north is potentially to be used for cable routing, not for PV panels.
Hall Farm	Camp site	25m (located on Southmoor Road). The field to the south is potentially to be used for PV panels as well as mitigation and enhancements.
Wildwood	Caravan park	30m (located on Moor Lane). The field to the north across Moor Lane is potentially to be used for PV panels.
South Clifton Coronation Hall	Community centre	100m (located on Moor Lane). The fields around South Clifton are not expected to be developed or used for PV panels.
Woodlands	Holiday homes	200m (located off Church Lane in South Clifton). The fields around South Clifton are not expected to be developed or used for PV panels.
Marnham Meadows	Caravan park	<5m (located off Hollowgate Lane in High Marnham). The field immediately to the north is potentially to be used for cable routing, not for PV panels.
Sparrow Lane	Holiday homes	<5m (located off Hollowgate Lane in High Marnham). The field immediately to the north is potentially to be used for cable routing, not for PV panels.

Figure 18-10: Visitor Amenities



Imagery ©2024 Google, Imagery ©2024 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, Map data ©2024.

- 18.38. As presented in **Figure 18-10**, there are only a small number of visitor amenities in proximity to our Site, the largest of which are caravan sites located close to the southern and northern boundaries. As discussed in **Table 18-12** most are located closest to parts of our Site where PV panels are not expected to be installed, with land instead being used for underground cabling or environmental mitigation and biodiversity enhancements.

- 18.39. There are no published data on visitor accommodation or vacancy rates in the local area. However, data in **Table 18-10** indicates some 155 employees in the accommodation and food services sector in 2022, which provides an approximate indication. UK business Count data also shows the numbers of hotels/guest houses businesses. These data are not available for the local area but are available for slightly larger “middle level” SOAs<sup>14</sup>. This suggests there may be some 55 business in the accommodation and food services sector as of 2023 in the three MSOAs that intersect our Site. The same data suggests 285 business in Bassetlaw; 300 in Newark and Sherwood and 210 in West Lindsay<sup>15</sup>.

### Ongoing Data Collection

- 18.40. In addition to the current baseline information presented above, where practicable the following will be collected and reported on in the ES:
- > Verification, alongside stakeholder consultation activities of other types of land use within the Site (e.g. commercial premises, tourist attractions);
  - > The amount and types of existing employment within the Site; and
  - > Baseline usage figures for the National Cycle Route 647.

### Future Socio-Economic Conditions

#### Collection of Future Predicted Data

- 18.41. Future baseline socio-economic conditions within the study area have also been considered. Below we set out future population projections from the ONS<sup>16</sup> and future significant developments in the Local Area via examination of the relevant local plans<sup>17 18 19</sup>.

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<sup>14</sup> The three 2011 MSOAs are E02005849: Bassetlaw 015; E02005896 : Newark and Sherwood 004 and E02005498 : West Lindsey 007.

<sup>15</sup> Source UK Business Counts - enterprises by industry and employment size band (2023) <https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?opt=3&theme=&subgrp=>

<sup>16</sup> Office for National Statistics (2020) Population projections for local authorities: Table 2. Available: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojection/s/datasets/localauthoritiesinenglandtable2>

<sup>17</sup> Bassetlaw District Council (2014) Bassetlaw Site Allocations Preferred Options. Available: <https://www.bassetlaw.gov.uk/media/2034/sapo.pdf>

<sup>18</sup> Newark & Sherwood District Council (2013) Allocations & Development Management Development Plan Document (DPD). Available: <https://www.newark-sherwooddc.gov.uk/media/newark-and-sherwood/images-and-files/planning-policy/pdfs/allocations-development-management-options-report/20161205AdoptedAllocationsDevelopmentManagementDPD.pdf>

<sup>19</sup> Central Lincolnshire Joint Strategic Planning Committee (2023) Adopted Central Lincolnshire Local Plan. Available: <https://www.n-kesteven.gov.uk/central-lincolnshire/adopted-policies-map-interactive-map>

### Future Predicted Results

- 18.42. The projected population in the current baseline year (2024), at anticipated start year of construction (2027) and expected year the Project will be operational (2029) are in **Table 18-13**, along with the percentage changes. These data are not published for the Local Area.

**Table 18-13: Projected Population Changes**

Area	2024 Population	2027 Population	2029 Population	2024- 2029 % Change	2027- 2029 %Change
Bassetlaw	121,951	124,055	125,335	+2.8	+1.0
Newark and Sherwood	127,064	129,346	130,720	+2.9	+1.1
West Lindsey	97,782	98,906	99,571	+1.8	+0.7
Nottinghamshire	861,494	877,006	886,461	+2.9	+1.1
Lincolnshire	787,372	800,687	808,585	+2.7	+1.0
East Midlands	5,017,013	5,109,145	5,165,842	+3.0	+1.1
England	57,816,890	58,527,723	58,969,496	+2.0	+0.8

- 18.43. Overall trends (2024 to 2029) in population growth in Bassetlaw and Newark and Sherwood are expected to be similar to regional levels, whilst West Lindsay is expected to be closer to national levels.
- 18.44. An examination of the relevant district local plans<sup>17</sup> identified that the largest site allocated for development in the Local Area is located in Tuxford, approximately 3.5 km to the west of our Site, and is allocated for up to 244 dwellings<sup>20</sup>. Although the timescales for the development of the Tuxford site are not known, the scale of this development (and other, smaller allocated sites) is not expected to significantly alter the socio-economic baseline set out above. Note this is considered in more detail in **Chapter 19: Cumulative Effects**.

### Environmental Measures

- 18.45. Consideration of good design principles, consultation and engagement with stakeholders, including the local community has sought to maximise benefits and ensure that adverse effects designed out or mitigated. The following measures are incorporated into the design of our Project:

<sup>20</sup> Policy H13: Lodge Lane, as set out in Bassetlaw's Site Allocation Preferred Options Consultation Paper<sup>17</sup>.

- > Employment opportunities for construction trades during construction. These opportunities will be available to local people, depending on the precise skill needs for our project and supply in the local labour market.
- > Employment opportunities during the scheme operation and – in time – its decommissioning. As above, these opportunities will be available to local people, depending on the precise skill needs for our project and supply in the local labour market.
- > Educational opportunities through apprenticeships and training, at construction, operation and decommissioning stages (we are committed to and working with local educational institutions to identify how our Project can invest and provide suitable skilled training opportunities). This would serve to increase the likelihood that the jobs can be filled by local people during its lifetime and/or for future schemes in the area
- > New permissive paths through our Project, creating routes connecting the villages;
- > Biodiversity enhancement, including provision of land for new grassland, wildflower meadow, hedgerow and tree planting;
- > Security of revenue alongside opportunities for diversification of revenue for owners of land within our project site; and
- > An increase in renewable energy production and supply and therefore resultant contributions towards achieving net zero targets reduction of generating GHG emissions and energy security.

18.46. Further consideration will be given to the optimisation of land use, with potential dual use of land for both our Project and agriculture where practicable. This will be considered in the ES.

### Potential Likely Significant Effects Scoped Out

18.47. **Table 18-14** presents the elements which have been scoped out as it is considered no likely significant effects will occur. This has been accepted in the EIA Scoping Opinion.

#### Table 18-14: Likely Significant Effects Scoped Out

Effects Scoped Out	Justification
School places	Our Project is not expected to result in a permanent increase in local population as the number of permanent, local jobs created during operation will be relatively low; thus, the demand for school places should not be affected. The construction period is expected to only last two years and the temporary employment created is also not expected to affect the demand for school places. More detail on the jobs created is provided in the assessment of employment effects.

Effects Scoped Out	Justification
Health services	Our Project is not expected to significantly increase demand for health services in the study area; construction and decommissioning works will be temporary and there is not expected to be a significant increase in local population during operation.
Severance	Our Project is not expected to hinder the ability of farmers and other landowners whose land are not part of our project to access their land which is continuing to be farmed; thus, significant severance effects are not expected.

## Preliminary Environmental Assessment

### Construction, Operation and Decommissioning Phases

#### Overall approach

- 18.48. There is no published guidance to define the significance of socio-economics effects in EIA, but there are more general best practice and guidance documents that the assessment follows, including the Additionality Guide<sup>21</sup>. This provides specific guidance on how to assess impact of a policy intervention (or a private sector investment) on the local, regional and national economy. Additionality is defined in the additionality guide as the ‘extent to which something happens as a result of an intervention that would have not occurred in the absence of intervention’.
- 18.49. In this document, effects are categorised based upon the relationship between the impact and the “receptors” (i.e. populations at the different spatial scales) in question (see **Table 18-1**). Based on baseline data we consider the sensitivity of the population(s) in question, with reference to the type, scale and duration of effect. For example, in an area with higher than average unemployment, the population may be more sensitive to net losses of employment than elsewhere. Given socio-economic characteristics are dynamic and change over time, where relevant we also compare effects against reported prevailing trends and examine the scale of change, in comparison with what that population has experienced before.
- 18.50. The significance of the effects of our Project on baseline conditions will therefore be determined by considering:
- > The likely scale and duration of impacts of our Project (Cumulative effects are considered in **Chapter 19: Cumulative Effects**); and
  - > The sensitivity of receptors to the impacts.

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18.51. The assessment aims to quantify effects where possible, although where this is not possible some effects have been assessed qualitatively. Effects are defined in **Table 18-15**.

**Table 18-15: Defining Effects**

Effect	Definition
Beneficial	Beneficial effects indicate an advantageous or positive effect on the defined receptors within the Study Area(s).
Negligible	Negligible effects indicate no perceived effects on the defined receptors within the Study Area(s).
Adverse	Adverse effects indicate a disadvantageous or negative effect on the defined receptors within the Study Area(s).
No effect	No effect indicates that there are no changes to baseline conditions(s).

18.52. Based on consideration of the above, where an effect is assessed as being adverse or beneficial, the scale of the effect has been categorised using the criteria in **Table 18-16**. Effects which are found to be moderate or major, whether adverse or beneficial, are considered to be 'significant'.

**Table 18-16: Defining Effects**

Scale	Definition
Minor	Our Project will cause a minor change in existing baseline conditions absolute terms and/or a small number of receptors will be affected.
Moderate	Our Project will cause a noticeable change in existing baseline conditions and/or a moderate number of receptors will be affected.
Major	Our Project will cause a large change in existing baseline conditions and/or the majority of receptors will be affected.

## Employment and Investment

### Approach

- 18.53. This assessment addresses direct and indirect employment and economic effects arising at different stages of our project and at different spatial scales. This assessment has been prepared in line with the Homes and Communities Agency (HCA) additionality guide<sup>22</sup>. It comprises several components:
- > First, temporary construction work will be created over the course of the two year construction period. This is based on an estimate of “peak” construction jobs, so the actual number of construction workers on the Site at any one time is typically likely to be less than this.
  - > Second, once operational our project will create new direct employment in a growing industry over the course of its 60 year operational life. These new jobs are expected to comprise land management and maintenance roles (for example land and environmental management and maintenance) as well as technicians, engineers, site/process managers and administration roles at a range of skill levels. These include specialist, skilled roles, given the direct current (DC) requirements of the infrastructure required for our Project.
  - > At the same time, existing agricultural employment on our Site will be affected, in line with changes in land use. The published data presented in the baseline (**Table 18-9**) suggests some 15 people are employed in “agriculture forestry and fishing” in the local area. However, data at smaller geographies are prone to greater margin for error. As such this will be further explored in a survey to determine the number of farm labourers currently employed. It is also noted that the ongoing use of existing agricultural land use will be sought alongside our Project (i.e. given the height of the panels it may be possible for some parts of our Site to be used for grazing and/or some crops).
  - > Similarly, there is a risk that there may be some adverse effects to local employment, for example in visitor related activities in the Local Area which may arise because of changes in perceptions of the attractiveness of the local area and/or perceptions (or actual) disruption during construction or operation. The baseline assessment suggests this risk is low and may be offset by increased demand for accommodation from construction employees.

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<sup>22</sup> Additionality is defined as the extent to which something happens as a result of an intervention (in this case our project) that would not have occurred in the absence of the intervention.  
[https://assets.publishing.service.gov.uk/media/5a7ec4b9e5274a2e87db1c92/additionality\\_guide\\_2014\\_full.pdf](https://assets.publishing.service.gov.uk/media/5a7ec4b9e5274a2e87db1c92/additionality_guide_2014_full.pdf)

- > Third, our Project represents a significant investment in the economy, both at construction and operational stages. As well as direct benefits, there are expected to be further indirect economic benefits for local, regional and national supply chains. These wider "indirect and included" effects are estimated using economic multipliers. Two types of multiplier effect are typically identified:
  - > a supply linkage (or indirect) multiplier. This reflects additional purchases made as a result of our Project, and the associated purchase along supply chains (for example purchases of fencing, or metal supports for the panels and the associated materials for these);
  - > an income (or induced) multiplier. This reflects local expenditure as a result of those who derive their incomes, directly and indirectly from our Project (for example via food and accommodation).
- > Additional construction employment will be supported at decommissioning stage, although no quantification of those anticipated jobs are included in the current assessment. At that point the operational jobs would be lost, or potentially relocated to alternative site(s).

#### *Receptors and Receptor Sensitivity*

- 18.54. The receptors in this case are economically active workers within the labour catchment area of our Project (see **Table 18-2**). They may benefit where there is an overall increase in employment opportunities associated with our Project. At the same time businesses and their employees in may benefit directly or indirectly from the expenditure and additional business opportunities along the supply chain associated with the investment the Project will provide.
- 18.55. The baseline assessment indicates that unemployment rates in the Local Area are low and stable, with unemployment rates in the three Districts lower than regional and national patterns. Skill levels in the local area are similar to the three Districts and the region. Hence receptor sensitivity is rated as low.

### *Preliminary Assessment – Investment*

- 18.56. The cost of constructing our Project represents a significant investment but an estimate of the total capital costs of construction is not yet available. A 2014 economic impact assessment prepared by CEBR<sup>23</sup> provides estimates of typical capital costs for the manufacturing and installation of large scale solar PV<sup>24</sup>.
- 18.57. Our Project will generate 740 MW of clean, renewable energy once fully operational. Using the CEBR estimates our Project represents a major capital investment, potentially up to some £500 million. CEBR estimated in 2014 that the average UK solar farm installation was 62% reliant on British components, operations and expertise and this was expected to increase to 71% by 2030<sup>25</sup>. This in turn suggests substantial economic opportunities in the supply chain a proportion of which is likely to be benefit, local, regional and national companies.
- 18.58. The CEBR assessment also examined economic and employment impacts. And estimated that 14,000 full-time equivalent (FTE) direct and indirect jobs were supported in the UK's solar sector in 2013. This reflected – at that time – a jobs intensity of around 7 FTEs/MW for large scale solar farms. They estimated this may decrease to around 5.6 FTE jobs per MW by 2030<sup>26</sup>. It is assumed this figure relates to the entire value chain, rather than just construction/installation and operation, which is the focus of this assessment. But based on an assumed installed capacity from our project of 740 MW, this figure suggests in total our Project may support in the order of 4,000 FTE jobs across the whole value chain.

### *Preliminary Assessment – Temporary Construction Employment*

- 18.59. Temporary construction employees are estimated to peak at 750 over the course of the two-year construction period. Average numbers may therefore be lower.

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<sup>23</sup> (CEBR (2014) Solar powered growth in the UK, The macroeconomic benefits for the UK of investment in solar PV Report for the Solar Trade Association, September 2014. Figure 8. Downloaded via <https://docplayer.net/7445226-Solar-powered-growth-in-the-uk-the-macroeconomic-benefits-for-the-uk-of-investment-in-solar-pv.html> It is recognised this is a somewhat dated source but provides a thorough economic assessment and no more recent information has been identified.

<sup>24</sup> These were 2014 estimates hence now somewhat dated, but the source also included projections on future unit costs. At the time these were expected to fall from about £1 million per installed MegaWatt (MW) in 2014, to some £700,000 by 2030. Note it is not uncommon for such unit costs to decrease at a faster rate than expected, and this is known to have occurred in the Solar industry (See CEBR (2014a). <https://cebr.com/reports/solar-powered-growth-in-the-uk/>) hence these may overstate the true cost, although a reliable, recent estimate has not been identified. The assessment above is intended to demonstrate an order of magnitude figure for the potential scale of the investment. It is common practice to adjust unit costs to the most recent year to reflect underlying inflation. Given the uncertainty in the precise decrease in unit costs we have not adjusted the costs per MW figure upwards to take account of inflation since 2014.

<sup>25</sup> See CEBR (2014a). <https://cebr.com/reports/solar-powered-growth-in-the-uk/>

<sup>26</sup> CEBR 2014 (Page 25). See also <https://www.edf-re.uk/wp-content/uploads/2022/07/East-Stour-Socio-Economic-and-Sustainability-Statement.pdf>

- 18.60. These jobs would include a range of trades and require different skill levels. For scale, an addition of 750 employment opportunities arising from the Project would constitute an increase of 190% in 2022 construction employment in the Local Area and an increase of 28% of *total employment* in the Local Area. Across the three districts, it would comprise an increase of just over 8% of employment in the construction sector. In practice, we would expect construction labour to be drawn from the existing labour catchment area, likely comprising the three Districts as well as others based on transport connections and the degree of specialism necessary in the construction work. On this basis, temporary, positive but minor likely significant effects are predicted.
- 18.61. Further indirect jobs would be supported along supply chains and can be estimated using multipliers described above. CEBR<sup>27</sup> estimate the employment multiplier from large scale solar PV investments to be 2.33. This means that for every additional direct Full Time Equivalent (FTE) job, a further 1.33 FTE jobs are generated along supply chains via indirect (0.78 of an FTE) and induced (0.55 of an FTE) effects. This suggests that there may be substantial indirect and induced employment opportunities arising at construction stage. Calculations will be undertaken when further details are known on the numbers of construction workers required over the two-year construction period. It is likely that these jobs would be filled by employees over a wider area. Overall, temporary, positive but minor likely significant effects are predicted.
- 18.62. Offsetting this are risks of adverse effects to local visitor/tourism related activity -and hence employment- associated with perceived or actual disturbance during the construction phase. During the *construction* stage such risks are mitigated by several factors. First, the overall construction duration is relatively short (2 years). Second construction activity will concentrate at different specific locations over our Site, meaning that any localised effects may be shorter in duration. Third, the analysis in **Table 18-12** indicates limited visitor related facilities in proximity to our Site. Fourth, access to the Sustrans cycle route as well as PRoW will remain during the construction period. Fifth, any adverse effects may be offset by increased demand for accommodation in the local area from temporary construction employees. Sixth, any effects depend on adverse effects on amenity, which are examined – along with relevant mitigation in **Chapter 13: Transport and Access; Chapter 14: Air Quality; and Chapter 16; Noise and Vibration**. However, as noted above, some temporary localised effects on current land uses may occur during construction for instance when laying cables over accesses. These will be examined in greater detail once the construction activity is developed.

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<sup>27</sup> (CEBR (2014) Solar powered growth in the UK, The macroeconomic benefits for the UK of investment in solar PV Report for the Solar Trade Association, September 2014. Figure 20. Downloaded via <https://docplayer.net/7445226-Solar-powered-growth-in-the-uk-the-macroeconomic-benefits-for-the-uk-of-investment-in-solar-pv.html> <https://docplayer.net/7445226-Solar-powered-growth-in-the-uk-the-macroeconomic-benefits-for-the-uk-of-investment-in-solar-pv.html> Figure 20.

*Preliminary Assessment – Demand for accommodation amongst construction workers*

- 18.63. The additional construction employees may create further demand for temporary accommodation in the local area with the associated economic benefits. For such demand to materialise it would be necessary for construction employees to reside beyond reasonable (or affordable) commuting distance and/or the nature of their role require intensive work over a specific period(s). This additional demand may be met with accommodation in the local area, or further afield. If vacancies in nearby accommodation is or becomes limited, then this demand would be met further afield and/or prices might increase with the associated benefits to local accommodation owners. Any such demand would offset the risks identified above during construction to existing visitor accommodation. This will be examined in greater detail once more detailed information on construction employment demand over the course of the 2-year construction period is developed.

*Preliminary Assessment – Operational Employment*

- 18.64. Further employment effects are expected once our Project becomes operational. These are expected to arise in a number of ways.
- 18.65. First, existing employment in agriculture may be affected in line with changes in land use. Existing employment numbers are not certain and we are still gathering this data. However using data from the BRES survey, it is considered 15 people are employed in the sector in the Local Area. This is uncertain and more detailed survey work will be undertaken to confirm these data. As a conservative estimate for the preset report, it is – hypothetically - assumed all will be displaced.

- 18.66. Second, as during construction stage, there is a risk of adverse effects from adverse perceptions of the local area amongst potential visitors with knock on effects on businesses and employment. It is extremely difficult to estimate this with any certainty given it reflects perceptions and judgements of future visitors. However, any such risk is likely to be driven by the amenity effects assessed in **Chapter 13: Transport and Access; Chapter 14: Air Quality; and Chapter 16; Noise and Vibration**. This risk is also mitigated by the biodiversity enhancements proposed as part of the scheme, the installation of permissive paths connecting the villages alongside the retention of the Sustrans cycle path. Research published in 2013 by the Good Energy project also examined the impact of renewable energy farms (Solar and Wind) in Cornwall, which is illustrative. The research indicated that, Cornish visitors at least, had generally positive opinions toward solar farms and that many were used to seeing them where they live. Overall whilst recognising uncertainties, the report suggested that some 2% of visitors may have been less likely to visit the county again in the future as a result of the presence of wind and solar farms, but this was offset by 4% stating they were more likely to visit. The report concluded that other factors, such as weather and costs are more significant<sup>28</sup>. Third,, additional employment is expected to arise from management, maintenance and oversight of our Project once operational. The number are currently uncertain but are estimated at between 15 and 20 Full Time, permanent jobs on Site for the duration of its operational life. Note this excludes additional non local jobs in the developer companies (such as administrative roles including HR and Health and Safety) that are supported from the income from our Project.
- 18.67. Fourth, as above further indirect jobs would be supported along supply chains. Using the same multiplier above suggests an additional 1.33 FTE jobs are generated along supply chains via indirect and induced effects. This amounts to up to a further 7 additional FTE jobs that may be created along supply chains. Taken together the net additional number of jobs expected to arise from our project once operational is up to 12 additional jobs. On this basis, positive but minor likely significant effects are predicted.

**Table 18-18: Net additional employment estimates**

	Jobs
Direct Employment (Solar PV)	15 – 20
<i>Less Potential Displacement</i>	15
Net change in direct employment	0 – 5
Indirect Employment (Solar PV)	0 – 7

<sup>28</sup> The South West Research Company for Good Energy The Impact of Renewable Energy Farms on Visitors to Cornwall. November 2013 <https://www.deg.wales/wp-content/uploads/2015/09/TheimpactofrenewableenergyfarmsonvisitorstoCornwall-FINALREPORT-November13.pdf>

	Jobs
Net additional direct and indirect employment	0 – 12

### *Preliminary Assessment – Decommissioning Employment*

- 18.68. Additional construction jobs would be supported at decommissioning stage. Quantitative estimates of employment are not available, but it is assumed that whilst the quantum of labour required may be a similar order of magnitude, it would be lower than at construction stage. The operational jobs would then be lost, or moved to another site, although new jobs will be created (such as agricultural jobs, when the land is returned to the land owners). On this basis the effect is considered not significant.

### *Cumulative Employment Effects*

- 18.69. The construction, operation and decommissioning phases of a number of cumulative schemes are expected to overlap with those of our Project and therefore the number of jobs in the study area that are directly and indirectly supported may increase further when considered cumulatively.
- 18.70. It is noted that the likely environmental effects from the cumulative effect of our Project with other schemes (including other National Significant Infrastructure projects) is considered in more detail in **Chapter 19: Cumulative Effects**.

### *Next Steps*

- 18.71. The preliminary effects identified above will be examined and assessed in greater detail, once more specific data is available on the net change in employment likely to result from our Project.

### *Public Rights of Way*

#### *Approach*

- 18.72. There are several PRowS which pass through or are close to our Site, along with Route 647 of the National Cycle network (the Sustrans route). We have not implemented a usage survey of the existing PRowS as part of the baseline. In our view such surveys pose several methodological challenges which may mean the usage data may not be reliable. The results reflect prevailing weather conditions, time of year, whether they are undertaken during school holidays etc.
- 18.73. The assessment in **Chapter 13: Transport and Access** adopted reasonable worst case assumptions on usage, that all footpaths are regularly used (daily) by a high volume of local residents. Similarly, for the Sustrans route, it was assumed that transient tourists (i.e. cyclists/ramblers) also utilise the path.

### *Receptors and Receptor Sensitivity*

- 18.74. The receptors in this case are primarily local residents who use the PRow and cycling route for leisure and recreation. A smaller proportion of users may travel into the Local Area for this purpose, to walk or cycle.



### Preliminary Assessment

18.75. All PRowWs will be retained, although there may be the need for very temporary closures as construction activity crosses PRowWs, but this is not anticipated to be for more than a few days at a time and will be minimised as much as practicable. The construction period is 2 years and activity will move across our Site within that time. The impacts on users of the PRowW in terms of changes to views and the landscape is considered in **Chapter 12: Landscape and Visual**. Mitigation measures included within our Project include temporary re-routing of existing PRowWs (see **Appendix 4-2 in Chapters 1-6** for the environmental measures to be included during the construction phase). Usage of the existing cycle route is also not expected to be significantly affected during construction, as the route will not be directly disrupted. Once operational our Project includes enhancement measures including permissive paths to create new routes connecting the villages. The effects during construction and decommissioning on PRowWs is considered to be not significant. During operation, due to the environmental measures, the effects are considered positive and likely significant.

### Next Steps

18.76. More detailed analysis of the specific PRowWs affected will be reported within the ES.

### Other Amenity Effects

18.77. Our Project has the potential to impact amenity in other ways, such as through landscape changes, air quality, noise effects and transport access, as reported in **Chapter 17: Human Health**. In addition, the contribution of our Project to reductions in GHG emissions, to achieving net zero and contributions to UK energy security, with the associated benefits for price stability for UK consumers is set out in **Chapter 15: Carbon and Climate Change**.

### Conclusions

18.78. **Table 18-19** presents a summary of the preliminary likely significant effects, with further information. It also includes the next steps to be undertaken as part of the Environmental Impact Assessment.

**Table 18-19: Summary of Likely Significant Effects**

Element	Preliminary Likely Significant Effect	Further Information	Next Steps
Employment and investment	<ul style="list-style-type: none"> <li>- Temporary Employment at Construction – positive but minor</li> <li>- Employment at operational stage – positive but minor</li> </ul>	A significant number of jobs will be supported, directly and indirectly from the Project.	A detailed assessment of the significance of effects will be presented in our ES.

Element	Preliminary Likely Significant Effect	Further Information	Next Steps
PRoWs	Significant Positive	New permissive paths to create new routes connecting villages.	A detailed assessment of the significance of effects will be presented in our ES.

# Appendices

## Appendix 18-1 Legislation and Policy

## Appendix 18-1 Legislation and Policy

### Review of Policy, Legislation and Relevant Guidance

Legislation, planning policy and guidance relating to socio-economics, and pertinent to the Proposed Development comprises:

#### National Planning Policy

##### Overarching National Policy Statement for Energy (EN-1) (2023)

This provides overarching government policy on energy NSIPs, and the way in which any impacts and mitigation measures will be considered. Part 5, section 5.13 of this policy statement specifically relates to socio-economics.

Paragraph 5.13.4 states that *“The applicant’s assessment should consider all relevant socio-economic impacts, which may include:*

- *the creation of jobs and training opportunities. Applicants may wish to provide information on the sustainability of the jobs created, including where they will help to develop the skills needed for the UK’s transition to Net Zero;*
- *the contribution to the development of low-carbon industries at the local and regional level as well as nationally;*
- *the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;*
- *any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains;*
- *effects (positive and negative) on tourism and other users of the area impacted;*
- *the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development; and*
- *cumulative effects - if development consent were to be granted for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region.”*

##### National Policy Statement for Renewable Energy Infrastructure (EN-3) (2023)

This provides specific policy on how renewable energy NSIPs, should be assessed and determined, and the way in which any impacts and mitigation measures will be considered. This NPS provides the primary basis for decisions on renewable energy DCO applications.

Paragraph 2.10.69 states that *“Applicants should set out what would be decommissioned and removed from the site at the end of the operational life of the generating station, considering instances where it may be less harmful for the ecology of the site to keep or retain certain types of infrastructure, for example underground cabling, and where there may be socio-economic benefits in retaining site infrastructure after the operational life, such as retaining pathways through the site or a site substation.”*

### National Planning Policy Framework (NPPF) (2023)

The National Planning Policy Framework (NPPF) is an overarching document which sets out government planning policy for development outside of the NSP regime in England, and how this is expected to be applied by local authorities and developers. The NPPF can be an important and relevant consideration for NSIPs as well, but in the event of any conflict, the NPS policy prevails. The NPPF provides a framework for local sustainable development via local plans. Specific extracts relating to this Proposed Development are as follows:

Within section 6 *“Building a strong, competitive economy,”* paragraph 85 states that *“Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.”*

Within section 12 *“Achieving well designed and beautiful places,”* paragraph 132 states that *“Plans should, at the most appropriate level, set out a clear design vision and expectations, so that applicants have as much certainty as possible about what is likely to be acceptable. Design policies should be developed with local communities so they reflect local aspirations, and are grounded in an understanding and evaluation of each area’s defining characteristics. Neighbourhood planning groups can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development, both through their own plans and by engaging in the production of design policy, guidance and codes by local planning authorities and developers.”*

Within section 15 *“conserving and enhancing the natural environment,”* paragraph 180 states that *“Planning policies and decisions should contribute to and enhance the natural and local environment by:*

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*

*c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*

*d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

*f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

### Local Planning Policy

Local planning policy relevant to our Site is set out below. Local policies can be an important and relevant consideration for NSIPs as well, but in the event of any conflict, the NPS policy prevails.

### Central Lincolnshire Local Plan (2023)

The Local Plan for the central Lincolnshire area sets out the approach to planning policy and overarching development allocations to drive growth in the area over a 20-year period. The Local Plan is contextualised into a wider vision, series of objectives and core policies toward delivery.

Specific policies detailed in the Local Plan and are relevant to the Proposed Development, as below.

Policy S10 “Supporting a Circular Economy” states that:

*“The Joint Committee is aware of the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy. Accordingly, and to complement any policies set out in the Minerals and Waste Development Plan, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area (which could include cross-border activity elsewhere in Lincolnshire).”*

Policy S5 “Development in the Countryside” states that:

*“Part A: Re-use and conversion of non-residential buildings for residential use in the countryside*

*Where a change of use proposal to residential use requires permission, and where the proposal is outside the developed footprint of a settlement listed in the Settlement Hierarchy or the developed footprint of a hamlet, then the proposal will be supported provided that the following criteria are met:*

*a) Comprehensive and proportionate evidence is provided to justify either that the building can no longer be used for the purpose for which it was originally built, or the purpose for which it was last used, or that there is no demand (as demonstrated through a thorough and robust marketing exercise) for the use of the building for business purposes.*

*b) The building is capable of conversion with minimal alteration, including no need for inappropriate new openings and additional features; and*

*c) The building is of notable architectural or historic merit and intrinsically worthy of retention in its setting.*

#### *Part B: Replacement of a dwelling in the countryside*

*The replacement of an existing dwelling outside the developed footprint of a settlement will be supported provided that:*

*a) The residential use of the original dwelling has not been abandoned;*

*b) The original dwelling is not of any architectural or historic merit and it is not valuable to the character of the settlement or wider landscape;*

*c) The original dwelling is a permanent structure, not a temporary or mobile structure;*

*d) The replacement dwelling is of a similar size and scale to the original dwelling;*

*e) It is located on the footprint of the original dwelling unless an alternative position within the existing residential curtilage would provide notable benefits and have no adverse impact on the wider setting; and*

*f) It satisfies the requirements of Policy S11: Embodied Carbon.*

#### *Part C: Mobile homes within the countryside*

*Applications for temporary and mobile homes will be considered in the same way as applications for permanent dwellings. The exception to this is cases when a temporary or mobile home is needed during the construction of a permanent dwelling on site or on a nearby site: in such cases more flexibility will be applied. Permission granted in such instances will be subject to time restrictions.*

#### *Part D: New dwellings in the countryside*

*Applications for new dwellings will only be acceptable where they are essential to the effective operation of existing rural operations listed in tier 8 of Policy S1. Applications should be accompanied by evidence of:*

*a) Details of the rural operation that will be supported by the dwelling;*

*b) The need for the dwelling;*

*c) The number of workers (full and part time) that will occupy the dwelling;*

*d) The length of time the enterprise the dwelling will support has been established;*

- e) *The commercial viability of the associated rural enterprise through the submission of business accounts or a detailed business plan;*
- f) *The availability of other suitable accommodation on site or in the area; and*
- g) *Details of how the proposed size of the dwelling relates to the needs of the enterprise.*

*Any such development will be subject to a restrictive occupancy condition.*

#### *Part E: Non-residential development in the countryside*

*Proposals for non-residential development will be supported provided that:*

- a) *The rural location of the enterprise is justifiable to maintain or enhance the rural economy or the location is justified by means of proximity to existing established businesses or natural features;*
- b) *The location of the enterprise is suitable in terms of accessibility;*
- c) *The location of the enterprise would not result in conflict with neighbouring uses; and*
- d) *The development is of a size and scale commensurate with the proposed use and with the rural character of the location.*

#### *Part F: Agricultural diversification*

*Proposals involving farm based diversification to non-agricultural activities or operations will be permitted, provided that the proposal will support farm enterprises and providing that the development is:*

- a) *In an appropriate location for the proposed use;*
- b) *Of a scale appropriate to its location; and*
- c) *Of a scale appropriate to the business need.”*

**Policy S28 “Spatial Strategy for Employment”** states that:

*“In principle, employment related development proposals should be consistent with meeting the following overall spatial strategy for employment.*

*The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy (see Policy S1).*

*Aligned to the Greater Lincolnshire Local Industrial Strategy, and as a key component of the Midlands Engine, there will be significant growth in a number of sectors, most notably agri-food, manufacturing, business services and the visitor economy, including accommodation and food services.*



*Land has been made available in appropriate locations in this plan to meet the strategic needs identified in Central Lincolnshire. Strategic Employment Sites (SES), and existing Important Established Employment Areas (IEEA) will be protected for their importance to the economy. Employment development will mainly be directed to these SES and IEEA and at Sustainable Urban Extensions (SUEs) as part of mixed use communities being created.*

*Elsewhere, policies will seek to protect Local Employment Areas (LEA) to help ensure there are jobs and services available to meet the local needs of the community and to allow enterprises to flourish at suitable sites across Central Lincolnshire.*

*Outside of existing employment areas and allocated sites, economic development will typically be limited to small-scale proposals which satisfy the requirements of Policy S33 or Policy S34.*

*Part G: Agricultural, forestry, horticultural or other rural land-based development*

*Proposals which will help farms modernise and/or adapt to funding changes or climate change will be supported in principle and any such proposals will be considered against relevant design, landscape and natural environment policies in this plan.*

*Where permission is required, development proposals for buildings required for agriculture or other rural land based development purposes will be supported where:*

- a) It is demonstrated that there is a functional need for the building which cannot be met by an existing, or recently disposed of, building;*
- b) the building is of a scale that is proportionate to the proposed functional need;*
- c) the building is designed specifically to meet the functional need identified;*
- d) the site is well related to existing buildings in terms of both physical and functional location, design and does not introduce isolated structures away from existing buildings; and*
- e) significant earthworks are not required, and there will be no harm to natural drainage and will not result in pollution of soils, water or air.”*

### **Bassetlaw District Council (2011) Local Development Framework, Publication Core Strategy and Development Management Policies**

The Core Strategy for the Bassetlaw District sets out the overarching vision for the area up until 2026, including the policy approach to deliver this.

Policy DM10 “Renewable and Low Carbon Energy” is related to the Proposed Development and states:

*“The Council will be supportive of proposals that seek to utilize renewable and low-carbon energy to minimize CO2 emissions. Proposals for renewable and low-carbon energy infrastructure will need to demonstrate that they:*

- *Are compatible with policies to safeguard the built and natural environment, including heritage assets and their setting;*
- *Will not lead to the loss of or damage to high-grade agricultural land;*
- *Are compatible with tourism and recreational facilities;*
- *Will not result in unacceptable impacts in terms of visual appearance, landscape character, noise, shadow-flicker, watercourse engineering and hydrological impacts, pollution, traffic generation, or loss of features of recognized importance for biodiversity;*
- *Will not result in an unacceptable cumulative impact in relation to the factors above.*

*Large-scale renewable and low-carbon energy proposals must provide full details of arrangements for decommissioning and reinstatement of the site if/when it ceases to operate.*

#### *B. District Heating and Co-location*

*Proposals for new development in District Heating Opportunity Areas (as identified on the Energy Opportunities Diagram) will, where the scale of the proposal permits, be expected to demonstrate consideration of District Heating as a means of achieving carbon compliance. District Heating opportunities include those supplied by heat from waste management sites, power stations, coal mine methane facilities or new standalone infrastructure. Applicants will be expected to engage with the Council at pre-application stage to assess the feasibility of achieving this objective.*

*Where District Heating Networks are established, all subsequent new development close enough to connect to such a network will be expected to do so where there are no barriers to this connection.*

*Proposals for heat-producing development will be expected to demonstrate consideration of the feasibility of utilizing its waste heat for heat-consuming development. Support will be given to proposals that will ensure the co-location of compatible heat-producing and heat-consuming development.*

#### *C. Major Development*

*Major development proposals will be expected to deliver specific low-carbon and renewable energy infrastructure in line with assessments of feasibility and overall viability.*

#### *D. Community Energy Schemes*

*Support will be given to community-led energy schemes in line with the Council's Renewable and Low Carbon Energy Study (or subsequent replacement), on exception sites, if necessary, where strong local support is demonstrated."*

## Draft Bassetlaw Local Plan (2023) 2020-2038: Main Modifications Version, August 2023

This Local Plan sets out Bassetlaw District's planning and policy framework, development strategy and site allocations to inform effective delivery of the overall vision up until 2038.

Policies set out in the Local Plan relate to the Proposed Development.

Policy ST51 "*Renewable Energy Generation*" states that:

*"Development that generates, shares, transmits and/or stores zero carbon and/or low carbon renewable energy including community energy schemes will be supported subject to the satisfactory resolution of all relevant site specific and cumulative impacts upon:*

- a) Location, setting and position in the wider landscape, resulting from its siting and scale;*
- b) Natural and heritage assets and their settings;*
- c) Air and water quality;*
- d) Hydrology and hydrogeology;*
- e) The best and most versatile agricultural land;*
- f) Existing highway capacity and highway safety;*
- g) Noise, light, glare, smell, dust, emissions or flicker;*
- h) Aviation and radar; and*
- i) Recreation and local amenity.*

*Proposals must take into account operational and approved developments, as well as any proposed intensification to operational or approved proposals. Proposals involving one or more wind turbines will be supported where:*

- a) the site is located within an area defined as being suitable for wind energy in a made neighbourhood plan or development plan document; and*
- b) following consultation, it can be satisfactorily demonstrated that all potential adverse planning impacts identified by affected local communities have been fully addressed, including cumulative impacts identified in Part 1 above.*

*All renewable energy development will be expected to provide details of the expected power generation based upon expected yield or local self-consumption to enable effective monitoring of the district's contribution to the national zero carbon targets.*

*A decommissioning programme applied by a Condition to any planning permission granted will be required to demonstrate that the site can be returned to an acceptable state, three years after cessation of operations."*

## National Guidance

### HM Treasury (2022) The Green Book: Central Government Guidance on Appraisal and Evaluation.

This guidance document is an outline of how a practitioner should appraise policies, programmes and projects. This guidance also sets out a model which encourages the holistic development of projects to ensure social value. This green book covers a wide range of development themes including policy, major projects and all proposal concerning public spending.

### Institute of Environmental Management and Assessment (2015) Environmental Impact Assessment Guide to Shaping Quality Development.

This IEMA guidance encourages developers and practitioners to deliver proportionate assessments within EIA, drives understanding in ensuring EIA as a process intertwines with other pre-application activities, bringing together environment and design factors to bring about better outcomes. The overarching aims are to bring about better decision making within projects and coming together to achieve better project solutions, thereby reducing a number of different risk factors.



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